

IN TEST WE TRUST

TEST BENCHES
FOR VALVES, PIPES
& ACTUATORS



think **PC PROGETTI**





IN TEST WE TRUST

Dear customer,
Given the demands of the global market and the cost of raw materials, European valve producers must ensure the absolute quality of their product if they are to keep their market share. For this reason, your investment in control & testing equipment is critical. THINK[®] PC PROGETTI offers a complete range of rigs capable of testing your products according to the most rigorous

international standards. The skill of our technical staff, our flexibility in production, and our quick turnaround on new projects make PC PROGETTI a reliable partner, trusted by the biggest manufacturers in Italy and international groups. Our technicians have years of background and experience specifically in high pressure equipment, allowing them to quickly install and set up the plant.

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Horizontal test benches

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56	BV-PMC/650	1	650 TON	VALVES test rig, with PROPORTIONAL PRESS CLAMPING
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Automatic pressurization SKID

Page	Model	Description
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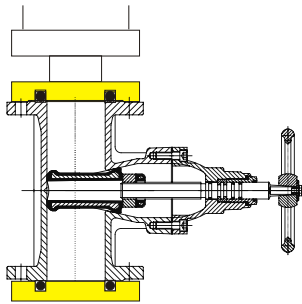


Clamping styles

CLAMP
TYPE
1

Pressing:

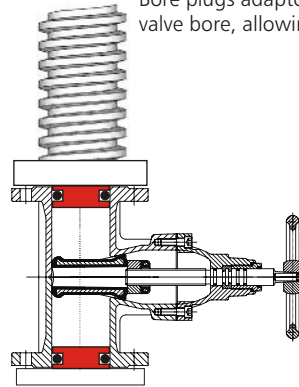
Proportionally controlled or On/Off
The reaction against water hydrostatic force inside the valve, is made by an hydraulic cylinder. It can be controlled by a proportional oil regulation loop, to the effective water pressure inside the valve or simply with a ON/OFF control to the total amount of force needed.
Proportional press block, allows the system to strongly reduce mechanical effort on valve body.



CLAMP
TYPE
2

Inner radial:

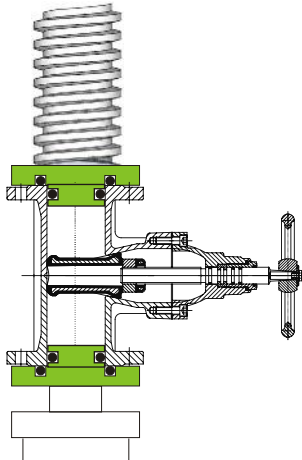
No external forces applied on valve body.
The tightness is made by a O-Ring seal the work on the inner side of valve body. Also called "Bore Plugs" style.
This clamping style allows the valve to expand itself under the pressure test solicitation. It is the test style suggested by all most diffused test standards.
Bore plugs adaptors need a low roughness grade on valve bore, allowing O-Ring to make the tightness.



CLAMP
TYPE
3

Combined:

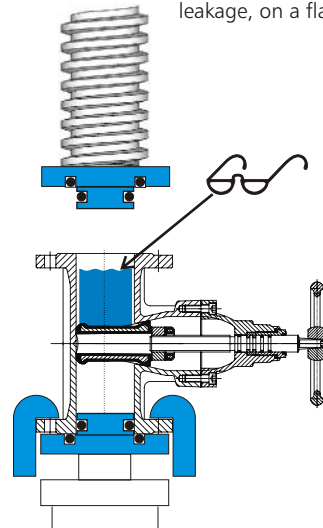
Suitable for all valves termination kind.
It is a combination of style "1" and "2".
In one test rig there are both clamping possibilities.
Operator can select the best one according to the valve kind under test.

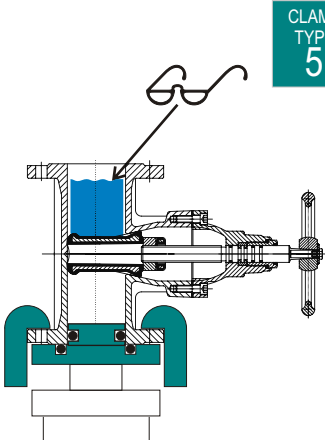


CLAMP
TYPE
4

Universal:

Visual leak test.
It has the same block ability of clamping style "3", plus the claws added to one clamping side.
This allows the user to make a visual check of seat leakage, on a flanged valve not machined in the bore.

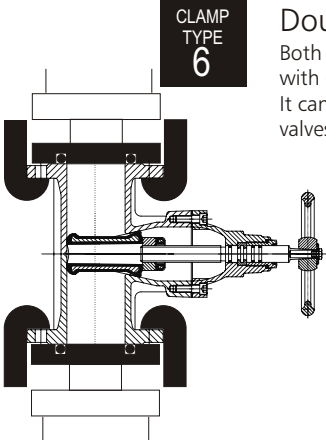




CLAMP
TYPE
5

Claws only:

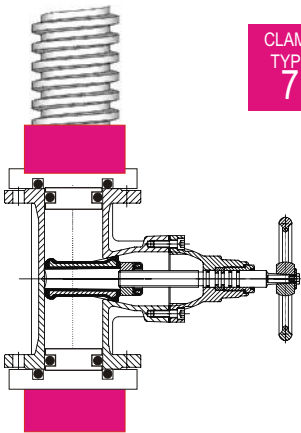
Visual leak test.
It has the same block ability of tightness type "4", without upper side Closing device.
This makes it the most suitable clamping style for 90° angle valves or PSV.
It can be used only for flanged valves.



CLAMP
TYPE
6

Double Claws:

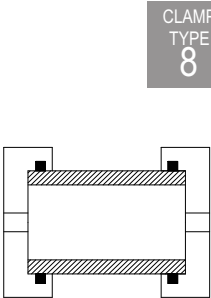
Both valve sides are clamped with claws clamping style .
It can be used only for flanged valves.



CLAMP
TYPE
7

P.E.A. Adaptors:

Automatic proportional press clamping.
Useful for flange surface O-Ring seal, developing a natural accurate proportional press clamping applied to a clamping style Nr. 2 test benches or bolts clamping table.



CLAMP
TYPE
8

Auto-Adaptive seals

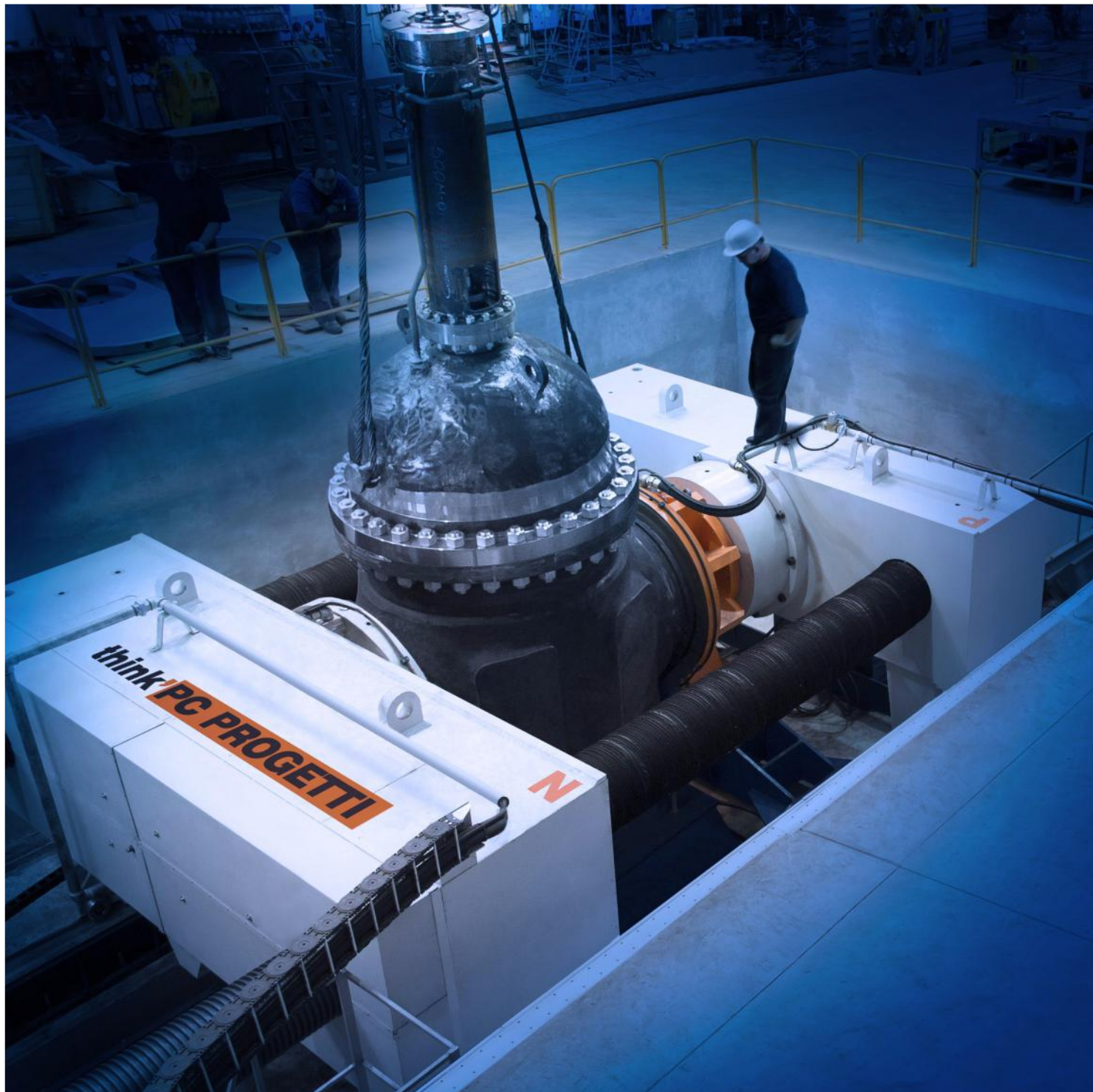
Special automatic overpressure adaptive seals able to perform perfect tightness on pipes/pubs not perfectly round, with elliptical deformation up to 2% of nominal diameter. Especially suggested for pipes testing rigs.

Reation power calculation table

Table below allow to identify standard nominal test benches reations power according valve size and pressure class

	½"	1"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"	50"	52"	54"	56"	60"	66"	72"
cl 150	10	10	10	10	10	10	10	20	20	30	30	50	50	100	100	100	150	150	150	200	200	200	250	450	450	450	450	600	600	850	850	1200
cl 300	10	10	10	10	10	10	20	30	50	100	100	100	150	150	250	250	250	450	450	450	600	600	600	850	850	1200	1200	1200	1200	1600	1800	2500
cl 600	10	10	10	10	20	20	30	100	100	150	150	200	250	450	450	450	600	600	850	850	850	1200	1200	1600	1800	2500	2500	2500	2500	3500	4000	
cl 900	10	10	10	20	20	30	50	100	150	200	200	450	450	450	600	600	850	850	1200	1200	1200	1600	1800	2500	2500	2800	3500	3500	3500	4000		
cl 1500	10	10	10	20	50	50	100	150	200	450	450	450	600	850	850	1200	1200	1600	1600	1800	2500	2500	3500	3500	4000							
cl 2500	10	10	10	20	50	50	100	200	450	450	450	600	850	1200	1600	1600	2500	2500	2800	3500	3500	4000										
cl 4500	10	10	20	30	50	100	150	200	450	450	850	1200																				

! *Note: Showed data has been calculated considering Shell test pressure according to API-6D, nominal bore size, and bore plugs clamping style.
For further details please contact our technical office.





Horizontal test benches for valves

BO-2CV/4000

Horizontal test benches
DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL
+ PROPORTIONAL PRESS CONTROL.

CLAMP
TYPE
3



Horizontal test rig with COMBINED clamping style. Both style are available: Bore plugs & Proportional press clamping. Max reaction power 4000 TON. Basement is equipped with two special low profile lifters able to support valve up to 120 TON. The mobile reaction bridge is moved by two screwed columns that assure the complete absence of external forces on valve body in case of “bore plugs” clamping style. An hydraulic cylinder installed on fixed bridge allow test on flanged valves, using proportional modulation of clamping effort. This prerogatives makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by SKA-1000 / SKM-1000 pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories.

- Reaction force : 4000 TON
(See working limits table)
- Length max : 3800 mm
- Length min : 0 mm
- Column inner clearance : 2800 mm
- Flow axes height : 2000 mm
- Basement water vessel : Optional
- Lifter : 2x30 TON (standard asset)
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 3 – Combined
- Dimensions : 5900 (L) x 3560 (D) x 2950 (H)



★ Working limits for PRESS CLAMPING and INNER RADIAL SEAL:

DN	20"	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"	50"	52"	56"	60"	64"	68"	72"
ANSI-150	TON																	
ANSI-300	TON																	
ANSI-600	TON																	
ANSI-900	TON																	
ANSI-1500	TON																	
ANSI-2500	TON																	

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.



BO-2V/2800

DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards.

In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by SKA-1000 pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



- Reaction force
- :
- 2800 TON
- (See working limits table)
- Length max
- :
- 3600 mm
- Length min
- :
- 600 mm
- Column inner clearance
- :
- 2400 mm
- Flow axes height
- :
- 2000 mm
- Basement water vessel
- :
- Optional
- Lifter
- :
- 2x30 TON
- Terminations allowed
- :
- BW, SW, RF, RJ
- Clamping style
- :
- Type 2 – Inner radial
- Dimensions
- :
- 5900 (L) x 3560 (D) x 2950 (H)



★Working limits INNER RADIAL SEAL, ANSI CLASS VALVE, SHELL TEST:

	DN	20"	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"	56"	60"
ANSI-150	TON													
ANSI-300	TON													
ANSI-600	TON													
ANSI-900	TON													
ANSI-1500	TON													
ANSI-2500	TON													

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.


[Patent Pending]

BO-2V/2500

Horizontal test benches
DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. The rig is controlled by “SKA or SKM class” pressurization skid; to have more information about please consult dedicated technical data sheets. In the basement, a water vessel is installed as water reservoir for test procedures. The rig could be completed with several options and accessories, please contact our sales office to have more information.

 Note: Clamp 3 available on request

Reaction force	:	2500 TON (See working limits table)
Length max	:	5400 mm
Length min	:	800 mm
Column inner clearance	:	2500 mm
Flow axes height	:	2200 mm
Basement water vessel	:	optional
Lifters	:	2x30 TON
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 2 – Inner radial
Dimensions	:	7800 (L) x 3610 (D) x 2910 (H)



★Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

DN	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"	56"
ANSI-150 TON											
ANSI-300 TON											
ANSI-600 TON											
ANSI-900 TON											
ANSI-1500 TON											
ANSI-2500 TON											

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.



BO-2V/2400

DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

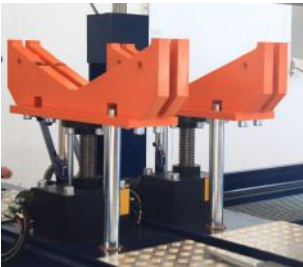


Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by “SKA or SKM class” pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



! Note: Clamp 3 and Safety perimetral protection available on request

- Reaction force
- :
- 2400 TON
- (See working limits table)
- Length max
- :
- 3900 mm
- Length min
- :
- 800 mm
- Column inner clearance
- :
- 2250 mm
- Flow axes height
- :
- 1700 mm
- Basement water vessel
- :
- 2900 Liters ca.
- Lifter
- :
- 2x30 TON
- Terminations allowed
- :
- BW, SW, RF, RJ
- Clamping style
- :
- Type 2 – Inner radial
- Dimensions
- :
- 5800 (L) x 3360 (D) x 2950 (H)



*Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

	DN	20"	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"
ANSI-150	TON											
ANSI-300	TON											
ANSI-600	TON											
ANSI-900	TON											
ANSI-1500	TON											
ANSI-2500	TON											

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.

[Patent Pending]

BO-2V/1800L

Horizontal test benches
DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by SKA 1000 pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

! Note: Clamp 3 and Safety perimetral protection available on request

Reaction force	:	1800 TON
		(See working limits table)
Length max	:	4000 mm
Length min	:	600 mm
Column inner clearance	:	2400 mm
Flow axes height	:	2100 mm
Basement water vessel	:	2900 Liters ca.
Lifters	:	2x30 TON
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 2 – Inner radial
Dimensions	:	6500 (L) x 3700 (D) x 2600 (H)

★Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

DN	18"	20"	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"	56"
ANSI-150 TON													
ANSI-300 TON													
ANSI-600 TON													
ANSI-900 TON													
ANSI-1500 TON													
ANSI-2500 TON													

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.



BO-2V/1600

BO-2CV/1600

DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS) or
COMBINED CLAMPING



Horizontal test rig with inner radial seal or combined clamping style.

The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards.

In the basement, a water vessel is installed as water reservoir for test procedures.

The rig is controlled by “SKM or SKA class” pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



		BO-2V/I 600	2	BO-2CV/I 600	3
Reaction force	:	1600 TON		1600 TON	
		(See working limits table)		(See working limits table)	
Length max	:	4000 mm		3200 mm	
Length min	:	600 mm		0 mm	
Column inner clearance	:	1700 mm		1700 mm	
Flow axes height	:	1900 mm		1900 mm	
Basement water vessel	:	optional		optional	
Lifters	:	2x20 TON		2x20 TON	
Terminations allowed	:	BW, SW, RF, RJ		BW, SW, RF, RJ	
Clamping style	:	Type 2 – Inner radial		Type 3 - Combined	
Dimensions	:	6237 (L) x 2989 (D) x 2150 (H)		6237 (L) x 2989 (D) x 2150 (H)	

*Working limits INNER RADIAL SEAL and INNER RADIAL SEAL
ANSI VALVE, SHELL TEST

		DN	16"	18"	20"	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"
ANSI-150	TON														
ANSI-300	TON														
ANSI-600	TON														
ANSI-900	TON														
ANSI-1500	TON														
ANSI-2500	TON														

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D, added by 80 mm in case of press clamping. For further details please contact our technical office.

BO-2V/1200

Horizontal test benches
DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKA-500** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

- Reaction force : **1200 TON**
(See working limits table)
- Length max : 3000 mm
- Length min : 200 mm
- Column inner clearance : 1700 mm
- Flow axes height : 1400 mm
- Lifters : 2x20TON
- Basement water vessel : 2000 Liters ca.
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 2 – Inner radial
- Dimensions : 5100 (L) x 2650 (D) x 1760 (H)



Pit assembly option.

★Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

DN	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	34"	36"	40"
ANSI-150	TON															
ANSI-300	TON															
ANSI-600	TON															
ANSI-900	TON															
ANSI-1500	TON															
ANSI-2500	TON															

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.



BO-2CV/750
BO-2CV/750L

DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Note: Safety perimetral protection available on request

Model	:	BO-2CV/750	BO-2CV/750L
Reaction force	:	750 TON	750 TON
Lenght max	:	1800 mm	3000 mm
Lenght min	:	150 mm	150 mm
Column inner clearance	:	1200 mm	1200 mm
Flow axes height	:	1200 mm	1200 mm
Basement water vessel	:	900 L	1200 L
Lifters	:	2 x 10 TON	2 x 10 TON
Termination allowed	:	BW, SW, RF, RJ	BW, SW, RF, RJ
Clamping style	:	Type 3 - Combined	Type 3 - Combined
Dimensions	:	4350 (L) x 2000 (D) x 2000 (H)	5550 (L) x 2000 (D) x 2000 (H)



Pressing cylinder with proportional control.

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
ANSI-150	TON												
ANSI-300	TON												
ANSI-600	TON												
ANSI-900	TON												
ANSI-1500	TON												
ANSI-2500	TON												

*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only. Press clamping style limits are based on bore size increased by 50 mm. For more accurate information please contact our technical office or consult instructions book delivered along the rig.

[Patent Pending]

BO-2V/600


BO-2V/600L

DOUBLE SCREWED COLUMN

INNER RADIAL SEAL (BORE PLUGS)

Horizontal test benches



 Note: Safety perimetral protection available on request

	BO-2V/600	BO-2V/600L
Reaction force	600 TON (See working limits table)	600 TON (See working limits table)
Length max	2000 mm	3200 mm
Length min	250 mm	250 mm
Column inner clearance	1350 mm	1500 mm
Flow axes height	1500 mm	1500 mm
Basement water vessel	1100 liters	2500 liters
Lifter	1x10 TON	2x10TON
Terminations allowed	BW, SW, RF, RJ	BW, SW, RF, RJ
Clamping style	Type 2 – Inner radial	Type 2 – Inner radial
Dimensions	3600 (L) x 2110 (D) x 2000 (H)	4900 (L) x 2260 (D) x 2600 (H)

★Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
ANSI-150	TON												
ANSI-300	TON												
ANSI-600	TON												
ANSI-900	TON												
ANSI-1500	TON												
ANSI-2500	TON												
ANSI-4500	TON												

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.

Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Pit assembly option.



BO-2CV/500

DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



Note: Safety perimetral protection available on request

- Reaction force : **500 TON**
(See working limits table)
- Length max : 1300 mm
- Length min : 0 mm
- Column inner clearance : 1060
- Flow axes height : 1040 mm from soil
- Basement water vessel : 470 Litres
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 3 – Combined
Inner radial clamping & Pressing clamping with Proportional control.
- Dimensions : 3270 (L) x 1650 (D) x 1400 (H) (Mechanical structure)

Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities.
The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Bunker asset option.

*Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST

DN	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150	TON								
ANSI-300	TON								
ANSI-600	TON								
ANSI-900	TON								
ANSI-1500	TON								
ANSI-2500	TON								

*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only.
Press clamping style limits are based on bore size increased by 50 mm.
For more accurate information please contact our technical office or consult instructions book delivered along the rig.

[Patent Pending]

BO-2V/450
BO-2V/450SH

Horizontal test benches
DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

! Note: Lifter trolleys and Safety perimetral protection available on request

Reaction force	:	450 TON (See working limits table)
Length max	:	2000 mm
Length min	:	0 mm
Column inner clearance	:	1100 mm
Flow axes height	:	950 mm
Basement water vessel	:	400 Liters
Screw bellows	:	See Option
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 2 – Inner radial
Dimensions	:	3570 (L) x 1690 (D) x 1280 (H) (Mechanical stand only)



BO-2V/450SH



BO-2V/450

***Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:**

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									
ANSI-4500	TON									

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.

[Patent Pending]



BO-2CV/250

DOUBLE SCREWED COLUMN
INNER RADIAL SEAL
(BORE PLUGS)

CLAMP
TYPE
2



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

Note: Safety perimetral protection available on request

- Reaction force
- :
- 250 TON
- (See working limits table)
- Length max
- :
- 1300 mm
- Length min
- :
- 50 mm
- Column inner clearance
- :
- 1100 mm
- Flow axes height
- :
- 1100 mm
- Basement water vessel
- :
- 400 Liters
- Lifter
- :
- See Option
- Screw dust protection
- :
- See Option
- Terminations allowed
- :
- BW, SW, RF, RJ
- Clamping style
- :
- Type 2 – Inner radial
- Dimensions
- :
- 2650 (L) x 1310 (D) x 1130 (H)
- (Mechanical stand)

*Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									
ANSI-4500	TON									

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.

[Patent Pending]

BO-2V/250

Horizontal test benches
DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities.
The mobile reaction bridge is moved by two screwed columns that assure the complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

! Note: Safety perimetral protection available on request

Reaction force	:	250 TON (See working limits table)
Valve length max	:	1500 mm
Valve length min	:	0 mm
Column inner clearance	:	900
Flow axes height	:	950 mm from soil
Basement water vessel	:	370 Litres
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 3 – Combined Inner radial clamping & Pressing clamping with Proportional control.
Dimensions	:	2880 (L) x 1310 (D) x 1400 (H) (Mechanical structure)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

DN	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150 TON												
ANSI-300 TON												
ANSI-600 TON												
ANSI-900 TON												
ANSI-1500 TON												
ANSI-2500 TON												

*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only.
Press clamping style limits are based on bore size increased by 50 mm.
For more accurate information please contact our technical office or consult instructions book delivered along the rig.



BO-2V/150

DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel could be installed as water reservoir for test procedures. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

Note: Safety perimetral protection available on request

- Reaction force
- :
- 150 TON
(See working limits table)
- Length max
- :
- 1300 mm
- Length min
- :
- 50 mm
- Column inner clearance
- :
- 700 mm
- Flow axes height
- :
- 990 mm
- Basement water vessel
- :
- 200 Liters
- Lifter
- :
- Available as option
- Terminations allowed
- :
- BW, SW, RF, RJ
- Clamping style
- :
- Type 2 – Inner radial
- Dimensions
- :
- 2545 (L) x 1110 (D) x 1170 (H)
(Mechanical stand)

*Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

	DN	1/2"	1"	2"	3"	4"	5"	6"	8"	10"	12"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										
ANSI-4500	TON										

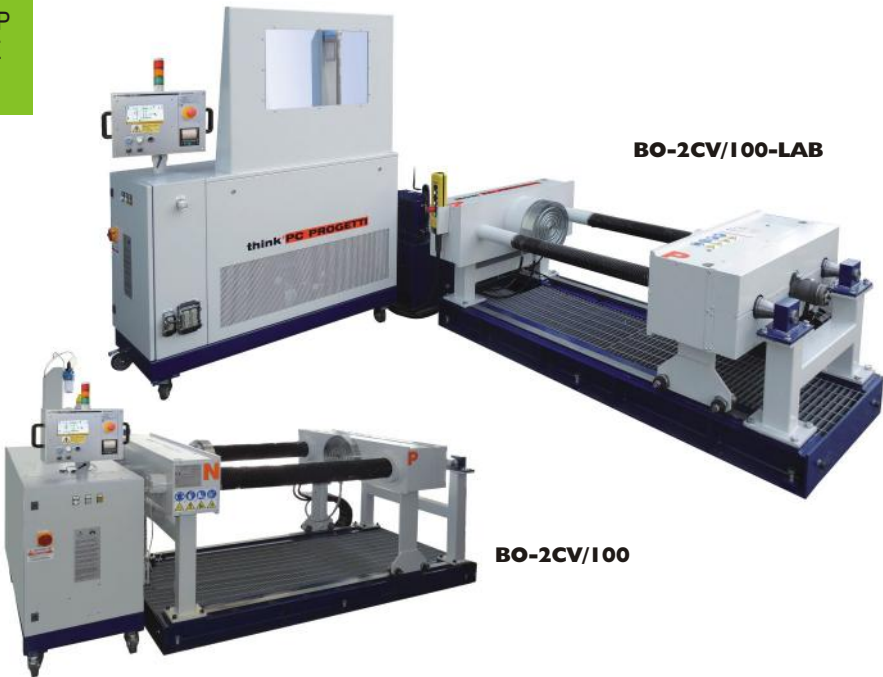
*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.

[Patent Pending]

Horizontal test benches

BO-2CV/100 DOUBLE SCREWED COLUMN + CYLINDER
BO-2CV/100-LAB COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



! Note: Safety perimetral protection available on request

	BO-2CV/100	BO-2CV/100-LAB
Reaction force	: 100 TON (See working limits table)	: 100 TON (See working limits table)
Valve length max	: 1300 mm	: 1300 mm
Valve length min	: 0 mm	: 0 mm
Column inner clearance	: 900	: 900
Flow axes height	: 1140 mm from soil	: 650 mm from soil
Basement water vessel	: 170 Liters	: 170 Liters
Terminations allowed	: BW, SW, RF, RJ	: BW, SW, RF, RJ
Clamping style	: Type 3 – Combined Inner radial clamping & Pressing clamping with Proportional control.	: Type 3 – Combined Inner radial clamping & Pressing clamping with Proportional control.
Dimensions	: 2600 (L) x 1290 (D) x 1400 (H) (Mechanical structure)	: 2600 (L) x 1290 (D) x 910 (H) (Mechanical structure)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

	DN	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										

*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only.
Press clamping style limits are based on bore size increased by 50 mm.
For more accurate informations please contact our technical office or consult instructions book delivered along the rig.

Horizontal test rig with
combined clamping style: inner
radial seal + press clamping
facilities.
The mobile reaction bridge is moved
by two screwed columns that assure
complete absence of external forces
on valve body and an hydraulic
cylinder can make pressing clamping
with or without proportional control.
This prerogative makes it conform to
the most diffuse international test
standards.
The rig is controlled by **SKA-100**
pressurization skid;
to have more information about
please consult dedicated technical
data sheets. The rig could be
completed with several options and
accessories, please contact our
sales office to have more
information.

[Patent Pending]



BO-CC/40

DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
1



Horizontal test rig with press clamping facilities.
The particular “C” shape allows the accommodation of valve completed by “Control panel” that may increase valve shape dimension in large terms (i.e. Control valves)
An hydraulic cylinder can make pressing clamping with or without proportional control.
SKM or SKA class pressurization skid.
The rig could be completed with several options and accessories, please contact our sales office to have more information.



Note: Safety perimetral protection available on request

- Reaction force
- :
- 40 TON
(See working limits table)
- Length max
- :
- 850 mm
- Length min
- :
- 0 mm
- Flow axes height
- :
- 1180 mm
- Terminations allowed
- :
- RF, RJ
- Clamping style
- :
- Type 1 – Press Clamping
- Dimensions
- :
- 3000 (L) x 300/700 (D) x 1350 (H)
(Mechanical stand)

★Working limits for PRESS CLAMPING ANSI VALVES, SHELL TEST

	DN	1/2"	1"	2"	3"	4"	6"	8"	10"	12"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

*Note: Indicated values has been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only.
Press clamping style limits are based on bore size increased by 50 mm.
For more accurate information please contact our technical office or consult instructions book delivered along the rig.

[Patent Pending]

BO30-2V/850
with 30°column disposal

Horizontal test benches / 30°
DOUBLE SCREWED COLUMN,
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



! Note: Safety perimetral protection available on request

- Reaction force : **850 TON**
(See working limits table)
- Valve length max : 2890 mm
- Valve length min : 400 mm
- Column inner clearance : 1580 mm
- Flow axes height : 1230 mm
- Lifters : 2x10 TON
- Basement water vessel : 1600 Liters
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 2 – Bore plugs
- Dimensions : 5140 (L) x 1974 (D) x 1984 (H)
(Mechanical structure)

★Working limits for INNER RADIAL SEA, ANSI VALVE, SHELL TEST :

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	34"	36"
ANSI-150	TON															
ANSI-300	TON															
ANSI-600	TON															
ANSI-900	TON															
ANSI-1500	TON															
ANSI-2500	TON															
ANSI-4500	TON															

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.

Horizontal test rig with inner radial seal clamping style.
The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body.
This prerogative makes it conform to the most diffuse international test standards. The rig is controlled by SKA-100 class pressurization skid; to have more information about please consult dedicated technical data sheets.
The rig could be completed with several options and accessories, please contact our sales office to have more information.



Bridge stair option.



BO30-2CV/750
with 30° column disposal

DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



Note: Safety perimetral protection available on request

Reaction force	:	750 TON (See working limits table)
Valve length max	:	2200 mm
Valve length min	:	0 mm
Column inner clearance	:	1500
Flow axes height	:	1350 mm from soil
Basement water vessel	:	950 Liters
Lifter	:	2x10 TON
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 3 – Combined Inner radial clamping & Pressing clamping with Proportional control.
Dimensions	:	4630 (L) x 2300 (D) x 2170 (H) (Mechanical structure)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"
ANSI-150	TON													
ANSI-300	TON													
ANSI-600	TON													
ANSI-900	TON													
ANSI-1500	TON													
ANSI-2500	TON													

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 50mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. Designed to test control valve up to 32" according to FCI 70-2 and DIN EN 12266 standards. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKA-100** pressurization skid with control valve asset devices. Please contact our sales office to have more information.



Water jets sliding protection panels.

[Patent Pending]

BO30-2CV/500
with 30°column disposal

Horizontal test benches / 30°
DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



 Note: Safety perimetral protection available on request

Reaction force	:	500 TON (See working limits table)
Valve length max	:	1760 mm
Valve length min	:	0 mm
Column inner clearance	:	1160
Flow axes height	:	1000mm
Basement water vessel	:	470 Liters
Lifters	:	2x5 TON
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 3 – Combined Inner radial clamping & Pressing clamping with Proportional control.
Dimensions	:	3441 (L) x 1817 (D) x 1980 (H) (Mechanical structure)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 50mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. Complete flow meters set could be installed (See option) to perform seat leakage test on control valves. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



BO30-2CV/250L
with 30°column disposal

DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. Complete flow meters set could be installed (see option) to perform seat leakage test on control valves. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Note: Safety perimetral protection available on request

- Reaction Power : **250 TON**
(See working limits table)
- Columns disposal : 30°
- Valve lenght max : 1600mm
- Valve lenght min : 0 mm
- Column clearance : 1150mm
- Flow axes height : 950mm
- Basement water vessel : 400 Liters
- Lifters : 2x5 TON
- Valve kind : BW, SW, RF, RJ
- Clamping Style : Inner radial & Pressing
- Dimensions. : 3375 (L) x 1625 (D) x 1627 (H)

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

DN	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"
ANSI-150 TON													
ANSI-300 TON													
ANSI-600 TON													
ANSI-900 TON													
ANSI-1500 TON													
ANSI-2500 TON													

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore **size + 50mm** and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

[Patent Pending]

BO30-CV/50P
with 30°column disposal

CLAMP
TYPE
3

Horizontal test benches / 30°
SINGLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING
AUTOMATIC OPENING FRONTAL PROTECTION
CONTROL VALVE ASSET



Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by one screwed column that assures the complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. A Spacer of 600mm is placed on fixed bridge side to accommodate large actuator. The unit has a control panel for control pneumatic / electrical actuators. In the basement, a water vessel is installed as water reservoir for test procedures. Test process is controlled by electronic PLC & LCD touch screen. Test data can be printed out on 24cIn thermal printer directly in test area or be downloaded by serial connection (standard) to Windows based PC with TestREC certification software. Operator safety is granted by front protection with automatic opening.

- Reaction force : **50 TON** (see working limits table)
- Valve length max : 620 mm
- Valve length min : 0 mm
- Columns inner clearance : 590 mm
- Flow axes height : 885 mm
- Basement water vessel : 100 Liters
- Termination allowed : RF, RTJ, BW, SW
- Clamping style : Type 3 - combined clamping
- Clamping force control : On/off & proportional (option)
- Reference standards : ISO, DIN, API, ANSI, ASTM, FCI, BS (Other on request).
- Filling Flow : 50L/min
- Vacuum pump : 36m /h (Option)
- Standard flow meter : See table (other flowmeter asset on request)
- Max pressure : 700 bar (water) - 6 bar (AIR)
- Pneumatic supply : 7 bar @ 2000 NI/min
- Electric supply : 3PH + T, 400V@50Hz, 5KW (other on request)
- Dimensions : 3670 (L) x 600 (D) x 1700 (H)

TEST KIND	Fluid	MEASURE TYPE	INSTRUMENTATION*
Cl. II to IV Seat leakage	WATER	Digital flow meters	Turbine flow meters: 300 - 3000 ml/min res. 2.5 cc 20L
Cl. IV Seat leakage	AIR	Digital flow meters	Mass flow meters: 1) 0,1 SLPM 2) 1 SLPM 3) 10 SLPM 4) 100 SLPM
Cl. V Seat leakage test	WATER	Water column digital flow meter	Digital water column Max height: 700 mm Resolution: 1mm (0.01 ml)
Cl. VI Seat leakage test	AIR	Bubbles counter	Digital bubbles counter: Max 3 bubbles/sec

*Other on request

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

DN	1/2"	1"	2"	3"	4"	5"	6"	8"	10"	12"
ANSI-150 TON										
ANSI-300 TON										
ANSI-600 TON										
ANSI-900 TON										
ANSI-1500 TON										
ANSI-2500 TON										

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore **size + 30mm** and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig



[Patent Pending]



BO30-CV/40P
with 30° column disposal

CLAMP
TYPE
3

SINGLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING
AUTOMATIC OPENING FRONTAL PROTECTION
SHUT-OFF VALVE ASSET



Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by one screwed column that assures the complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. Test process is controlled by electronic PLC & LCD touch screen. Test data can be printed out on 24cln thermal printer directly in test area or be downloaded by serial connection (standard) to Windows based PC with TestREC certification software. Operator safety is granted by front protection with automatic opening.



Reaction force	:	40 TON (see working limits table)
Valve length max	:	650 mm
Valve length min	:	50 mm
Columns inner clearance	:	460 mm
Flow axes height	:	830 mm
Basement water vessel	:	100 Liters
Terminations allowed	:	RF, RTJ, BW, SW
Clamping style	:	Type 3 - combinated clamping
Clamping force control	:	On/off & proportional (option)
Filling Flow	:	50L/min
Vacuum pump	:	36m³/h (Option)
Standard flow meter	:	See table
Max pressure	:	700 - 1380 - 2000 - 4000 bar (water) 450 - 700 - bar (gas)
Pneumatic supply	:	6.5 bar @ 1100 NI/min
Electric supply	:	3PH + T, 400V@50Hz, 5KW (other on request)
Dimensions	:	2810 (L) x 600 (D) x 1670 (H)

TEST KIND	Fluid	MEASURE TYPE	INSTRUMENTATION*
Cl. V Seat leakage test	WATER	Water column digital flow meter	Digital water column Max height: 700 mm Resolution: 1mm (0.01 ml)
Cl. VI Seat leakage test	AIR	Bubbles counter	Digital bubbles counter: Max 3 bubbles/sec

*Other on request

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

	DN	1/2"	1"	2"	3"	4"	5"	6"	8"
ANSI-150	TON								
ANSI-300	TON								
ANSI-600	TON								
ANSI-900	TON								
ANSI-1500	TON								
ANSI-2500	TON								
ANSI-4500	TON								

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 30mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

[Patent Pending]

Horizontal test benches / 30°

BO30-1V/40SH BORE PLUGS OR COMBINED CLAMPING STYLES AVAILABLE.
BO30-2CV/40SH FULL PROTECTION SHIELD DOUBLE ACCESS SIDE
with 30° column disposal

CLAMP
TYPE
2

CLAMP
TYPE
3



	BO30-1V/40SH
Reaction force	: 40 TON (see working limits table)
Length min - max	: 50 - 680 mm
Max valve height	: 900 mm
Columns inner clearance	: 550 mm
Flow axes height	: 830 mm
Basement water vessel	: 100 Liters
Termination allowed	: RF, RTJ (bore machined), BW, SW
Clamping style	: Type 2 – bore plugs, type
Reference standards	: ISO, DIN, API, ANSI, ASTM, FCI, BS (Other on request).
Filling Flow	: 70L/min
Vacuum pump	: 40m /h (Option)
Standard flow meter	: Digital Bubbles Counter & Digital water column
Max pressure	: 4000 bar (water) - 1050 bar (gas)
Pneumatic supply	: 6.5 bar @ 1100 NI/min
Electric supply	: 3PH + T, 400V@50Hz, 5KW (other on request)
Dimensions	: 3500 (L) x 1100 (D) x 1600 (H)

	BO30-2CV/40SH
Reaction force	: 40 TON (see working limits table)
Length min - max	: 0 - 550 mm
Max valve height	: 900 mm
Columns inner clearance	: 550 mm
Flow axes height	: 830 mm
Basement water vessel	: 100 Liters
Termination allowed	: RF, RTJ, BW, SW
Clamping style	: Type 3 – combined
Reference standards	: ISO, DIN, API, ANSI, ASTM, FCI, BS (Other on request).
Filling Flow	: 70L/min
Vacuum pump	: 40m /h (Option)
Standard flow meter	: Digital Bubbles Counter & Digital water column
Max pressure	: 4000 bar (water) - 1050 bar (gas)
Pneumatic supply	: 6.5 bar @ 1100 NI/min
Electric supply	: 3PH + T, 400V@50Hz, 5KW (other on request)
Dimensions	: 3500 (L) x 1100 (D) x 1600 (H)

Horizontal test benches available in two different clamping style: Bore plugs or combined. The mobile reaction bridge is moved by one screwed column that assures the complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards (bore plugs). A BULLETS PROOF full protection is foreseen to perform high pressure gas/water test in high safety conditions. Door opening is conditioned by visual inspection rules (automatic pressure reducing before inspection) and normal pressure discharge procedure. In the basement, a water vessel is installed as water reservoir for test procedures. Test process is controlled by electronic PLC & LCD touch screen. Double control AUTO / MAN software is foreseen to give maximum flexibility to operator. Test data can be printed out on 24cln thermal printer directly in test area or be downloaded by serial connection (standard) to Windows based PC with TestREC certification software.

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL ANSI VALVES, SHELL TEST**

	DN	1/2"	1"	2"	3"	4"	5"	6"	8"
ANSI-150	TON								
ANSI-300	TON								
ANSI-600	TON								
ANSI-900	TON								
ANSI-1500	TON								
ANSI-2500	TON								
ANSI-4500	TON								

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 30mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig.



BO45-2CV/3000
with 45° column disposal

CLAMP
TYPE
3

Horizontal test benches / 45°
SINGLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING
AUTOMATIC OPENING FRONTAL PROTECTION
CONTROL VALVE ASSET



Test rig for valve with combined clamping style. Both pressing & bore plugs sealing styles are available. It has two screwed reaction columns to set up maximum pipe length. Reaction bridge is moved by hydraulic command. Valve load is made vertically with over head travelling crane, and final positioning is made by TWQ lifter. In the basement there is water vessel protected by a step able grate. Pressurization skid control clamping with proportional pressing to ensure minimum mechanical effort on valve castings. The rig is controlled by **SKA-2000** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



! Note: Safety perimetral protection available on request

- Reaction force : **3000 TON**
(See working limits table)
- Valve length max : 6400 mm
- Valve length min : 1750 mm
- Column inner clearance : 2900 mm
- Flow axes height : 2800 mm
- Basement water vessel : 5000 L
- Lifters : 2x30 TON
- Clamping style : Type 3: Combined
- Dimensions : 11500 (L) x 4500 (D) x 5500 (H)

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

	DN	20"	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"	56"	60"	66"
ANSI-150	TON														
ANSI-300	TON														
ANSI-600	TON														
ANSI-900	TON														
ANSI-1500	TON														
ANSI-2500	TON														

[Patent Pending]

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore **size + 80mm** and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig.

Horizontal test benches / 45°

BO45-2CV/2000
with 45°column disposal

DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL



Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. Complete flow meters set could be installed (See option) to performs seat leakage test on control valves. The rig is controlled by **SKA-1000** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

Reaction force	:	2000 TON (See working limits table)
Valve length max	:	2900 mm
Valve length min	:	0 mm
Column inner clearance	:	2100
Flow axes height	:	2070 mm from soil - 45° inclination from soil
Basement water vessel	:	2000 Liters
Lifters	:	2x20 TON
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 3 – Combined
		Inner radial clamping & Pressing clamping with Proportional control.
Dimensions	:	6000 (L) x 3000 (D) x 3570 (H) (Mechanical structure)

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

DN	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	34"	36"	40"	42"	48"
ANSI-150	TON														
ANSI-300	TON														
ANSI-600	TON														
ANSI-900	TON														
ANSI-1500	TON														
ANSI-2500	TON														

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 80mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig



BO45-2V/1600
with 45° column disposal

DOUBLE SCREWED COLUMN,
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. The rig is controlled by SKA-500 class pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information. Reaction bridges can be prepared for articulated camera insertion, for seat inspection during test.



! Note: Safety perimetral protection available on request

- Reaction force : **1600 TON**
- Valve Length max : 2350
- Valve Length min : 200
- Column inner clearance : 1600 mm
- Flow Axes Height : 1900
- Basement water vessel : 1500 L
- Lifters : 2x20 TON
- Terminations allowed : RF, RJ, BW, SW
- Clamping style : Type 2 – Bore Plugs
- Dimensions : 4790 (L) x 2290 (D) x 3125 (H)

★Working limits for INNER RADIAL SEA, ANSI VALVE, SHELL TEST :

DN	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	38"	40"	42"	44"	46"	48"
ANSI-150	TON																		
ANSI-300	TON																		
ANSI-600	TON																		
ANSI-900	TON																		
ANSI-1500	TON																		
ANSI-2500	TON																		

[Patent Pending]

BO45-2V/850
with 45°column disposal

Horizontal test benches / 45°
DOUBLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



! Note: Safety perimetral protection available on request

Reaction force	:	850 TON (See working limits table)
Valve length max	:	3000 mm
Valve length min	:	200 mm
Column inner clearance	:	1300 mm
Flow axes height	:	900 mm
Basement water vessel	:	1100 Liters
Lifter	:	See Option
Screw dust protection	:	See Option
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 2 – Inner radial
Reference standard	:	ISO, DIN, API, ANSI, ASTM, FCI, BS (Other on request).
Electric supply	:	3PH + T, 380V@50Hz, 7,5KW
Dimensions	:	4700 (L) x 2340 (D) x 2300 (H)

***Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:**

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	32"	34"	36"
ANSI-150	TON														
ANSI-300	TON														
ANSI-600	TON														
ANSI-900	TON														
ANSI-1500	TON														
ANSI-2500	TON														
ANSI-4500	TON														

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.

Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. The 45° columns disposal, allows the vertical loading of the valve to be tested by crane or horizontal loading by fork lifter. Besides, the vertical loading height is reduced. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKM** or **SKA** class pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

[Patent Pending]



BO45-2V/600
with 45° column disposal

DOUBLE SCREWED COLUMN
INNER RADIAL SEAL

CLAMP
TYPE
2



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. The 45° columns disposal, allows the vertical loading of the valve to be tested by crane or horizontal loading by fork lifter. Besides, the vertical loading height is reduced. In the basement, a water vessel is installed as water reservoir for test procedures. The rig is controlled by **SKA-100** or **SKM-100** class pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



! Note: Safety perimetral protection available on request

- Reaction force : **600 TON** (See working limits table)
- Valve length max : 2500 mm
- Valve length min : 600 mm
- Column inner clearance : 1300 mm
- Flow axes height : 1400 mm
- Basement water vessel : 1000 Liters
- Lifter : See Option
- Screw dust protection : See Option
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 2 – Inner radial
- Dimensions : 4200 (L) x 2340 (D) x 2300 (H)

***Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:**

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	32"
ANSI-150	TON												
ANSI-300	TON												
ANSI-600	TON												
ANSI-900	TON												
ANSI-1500	TON												
ANSI-2500	TON												
ANSI-4500	TON												

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.

BO45-2CV/500
with 45° column disposal

Horizontal test benches / 45°
DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



! Note: Safety perimetral protection available on request

- Reaction force : **500 TON**
(See working limits table)
- Valve length max : 1760 mm
- Valve length min : 0 mm
- Column inner clearance : 1160
- Flow axes height : 1000mm from soil
- Basement water vessel : 470 Liters
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 3 – Combined
Inner radial clamping & Pressing clamping with Proportional control.
- Dimensions : 3450 (L) x 2000 (D) x 2000 (H)
(Mechanical structure)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

DN	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150 TON									
ANSI-300 TON									
ANSI-600 TON									
ANSI-900 TON									
ANSI-1500 TON									
ANSI-2500 TON									

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 50mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. Complete flow meters set could be installed (See option) to perform Seat leakage test on control valves. The rig is controlled by **SKA-500** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



BO45-2CV/400
with 45° column disposal

DOUBLE SCREWED COLUMN
INNER RADIAL SEAL

CLAMP
TYPE
3



Note: Safety perimetral protection available on request

- Reaction force : **400 TON**
(See working limits table)
- Valve length max : 1600 mm
- Valve length min : 0 mm
- Column inner clearance : 1400
- Flow axes height : 1320 mm from soil
- Basement water vessel : 900 Liters
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 3 – Combined
Inner radial clamping & Pressing clamping with Proportional control.
- Dimensions : 3450 (L) x 2000 (D) x 2000 (H) (Mechanical structure)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

DN	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150 TON									
ANSI-300 TON									
ANSI-600 TON									
ANSI-900 TON									
ANSI-1500 TON									
ANSI-2500 TON									

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore **size + 50mm** and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel is installed as water reservoir for test procedures. Complete flow meters set could be installed (see option) to perform seat leakage test on control valves. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



B045-2CV/250
with 45°column disposal

Horizontal test benches / 45°
DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



Horizontal test rig with combined clamping style: inner radial seal + proportional press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. The rig is controlled by SKA-100 pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories.

! Note: Safety perimetral protection available on request

Reaction force	:	250 TON
Length max	:	1750 mm
Length min	:	0 mm
Column inner clearance	:	1100 mm
Flow Axis Height	:	980 mm
Basement water vessel	:	400 Liters ca.
Lifter	:	Optional
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 3 – Combined Clamping
Dimensions	:	3500 (L) x 1300 (D) x 1600 (H)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

	DN	1"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
ANSI-150	TON														
ANSI-300	TON														
ANSI-600	TON														
ANSI-900	TON														
ANSI-1500	TON														
ANSI-2500	TON														

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 50mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig



**BO45-2CV/100
LAB**

with 45° column disposal

CLAMP
TYPE
3

DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL



Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. The rig is controlled by SKA-100 pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories.



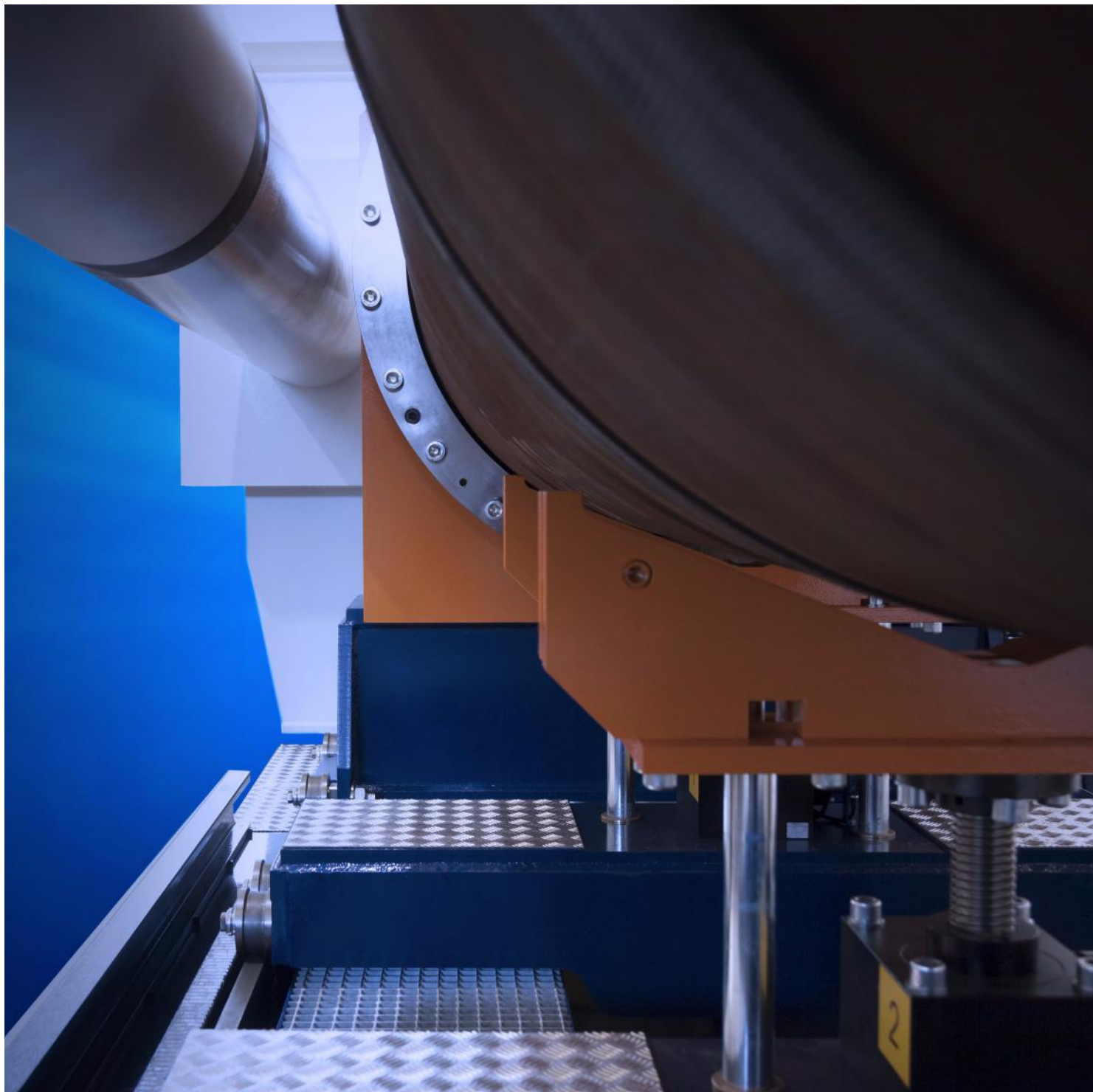
! Note: Safety perimetral protection available on request

Reaction force	:	100 TON
Length max	:	1300 mm
Length min	:	0 mm
Column inner clearance	:	900 mm
Flow Axis Height	:	700 mm
Basement water vessel	:	170 Liters ca.
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 3 – Combined
Dimensions	:	2250 (L) x 1016 (D) x 1200 (H)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

	DN	1"	2"	3"	4"	6"	8"	10"	12"	14"	16"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore **size + 50mm** and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig





Horizontal test benches for pipes

BOT-2CSV/3000

Horizontal test benches for pipes

DOUBLE SECTORIZED COLUMNS

EXTERNAL RADIAL

AUTOADAPTIVE SEALS

CLAMP
TYPE
8

Test rigs for pipes. Different clamping style available: Proportional pressing, External radial seals, overpressure auto adaptive seals for elliptical shape error. They have two reaction columns with sector to set up maximum pipe length. Reaction bridge is moved by hydraulic command. Pipe load is made vertically with over head travelling crane, and final positioning is made by lifters with centering/calibrating device included. In the basement there is a water vessel protected by a step able grate. The rig is controlled by SKA class pressurization skid up to 4000 L/min.; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

Reaction power	:	3000 TON
Clamping style	:	Type 8 - External radial with Overpressure Auto-Adaptive seals
Max Pipe lenght	:	12,5m
Max pipe Ø	:	1420mm
Allowed elliptical error	:	1,5%
Flow Axes height	:	2500 mm
Basemnt water wessel	:	25000 L
Max test pressure	:	700 / 1380 bar
Filling flow	:	4000 L/min
Pneumatic supply	:	7 bar @ 4000 L/min
Dimension	:	21000 (L) x 3500 (D) x 3700 (H)




BOT-2CV/2000

DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING INNER RADIAL SEAL+
PROPORTIONAL PRESS CONTROL

CLAMP
TYPE
3



 Note: Safety perimetral protection available on request

Test rig for valve with combined clamping style. Both pressing & bore plugs sealing styles are available. It has two screwed reaction columns to set up maximum pipe length. Reaction bridge is moved by hydraulic command. Valve load is made vertically with over head travelling crane, and final positioning is made by two lifters. In the basement there is water vessel protected by a step able grate. Pressurization skid controls clamping with proportional pressing to ensure minimum mechanical effort on valve castings. The rig is controlled by **SKA-2000** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

Reaction force	:	2000 TON
Clamping style	:	Type 3 - Combined clamping
Max pipe length	:	5400 mm
Min pipe length	:	750 mm
Column inner clearance	:	2710 mm
Max pipe Ø	:	2600 mm
Allowed elliptical error	:	0.5%
Flow Axes Height	:	2530 mm
Basement water vessel	:	3000L
Electrical supply	:	3PH + T, 380V@50Hz, 12KW
Dimensions	:	10500 (L) x 3500 (D) x 4300 (H)

Horizontal test benches for pipes

BOT-2CSC/1200DOUBLE SECTORIZED COLUMNS
PROPORTIONAL PRESS CLAMPINGCLAMP
TYPE
1UP TO
12.5 m
LENGHT

! Note: Safety perimetral protection available on request

Test rigs for pipes. Different clamping style available: Proportional pressing, External radial seals, overpressure auto adaptive seals for elliptical shape error. They have two reaction columns with sector to set up maximum pipe length. Reaction bridge is moved by hydraulic command. Pipe load is made vertically with over head travelling crane, and final positioning is made by lifters with centering/calibrating device included. In the basement there is a water vessel protected by a step able grate. The rig is controlled by SKA class pressurization skid up to 4000 L/min.; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

Reaction power	:	1200 TON
Clamping style	:	Type 1 - Proportional pressing
Max pipe length	:	12500 mm
Min pipe length	:	2000 mm
Max pipe Ø	:	1250 mm
Allowed elliptical error	:	0.5%
Flow Axes Height	:	1770 mm
Basement water vessel	:	14000 L
Max Test pressure	:	700 / 1050 bar
Filling Flow	:	1000 L/min
Pneumatic supply	:	6.5 bar @ 1500 NI/min Dry air not lubricated
Dimensions	:	15000 (L) x 2720 (D) x 2650 (H)



BOT-2CSV/600

DOUBLE SECTORIZED COLUMNS
EXTERNAL RADIAL SEALS

CLAMP
TYPE
2



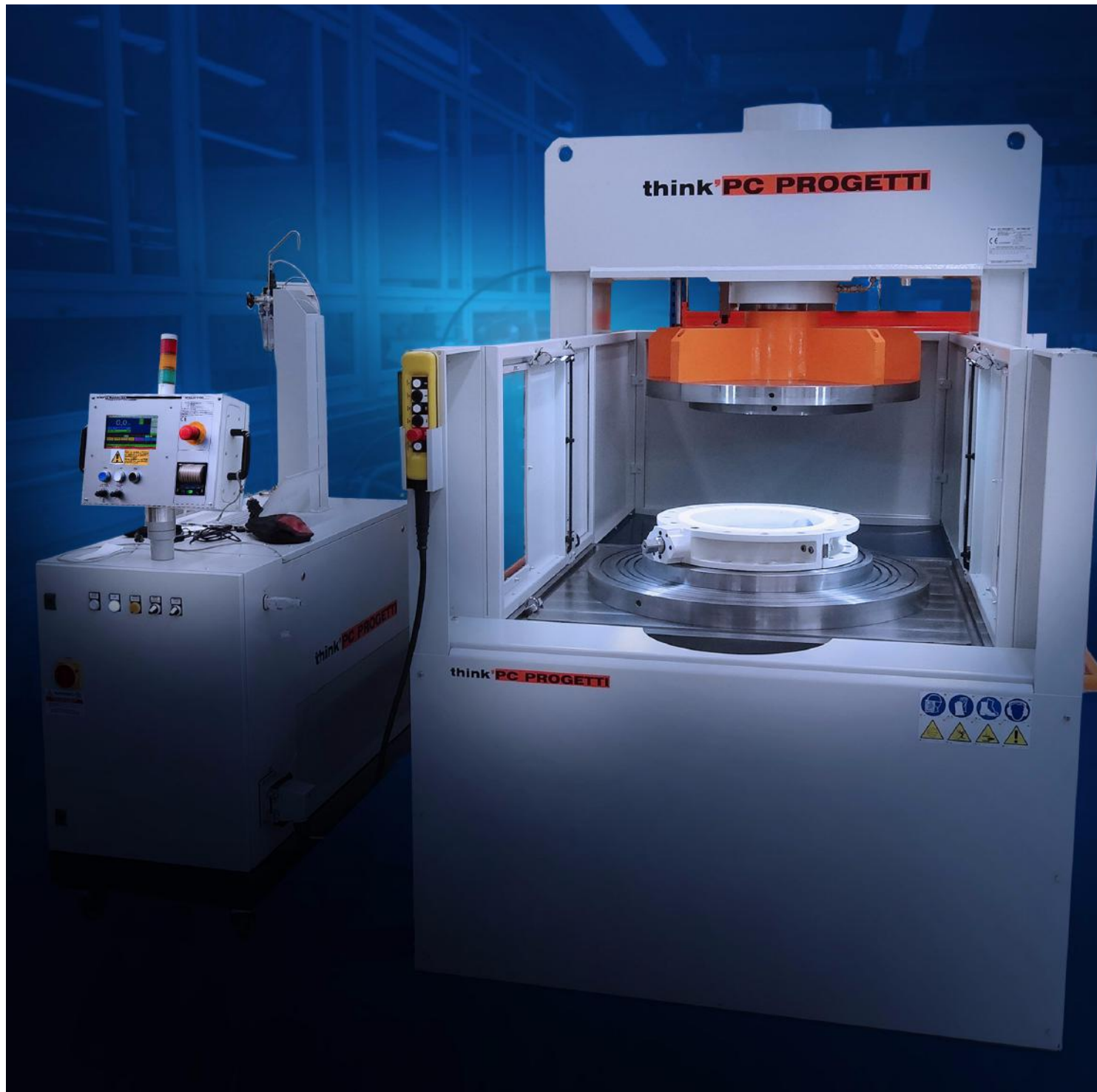
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Note: Safety perimetral protection available on request

Test rigs for pipes. Different clamping style available: Proportional pressing, External radial seals, overpressure auto adaptive seals for elliptical shape error. They have two reaction columns with sector to set up maximum pipe length. Reaction bridge is moved by hydraulic command. Pipe load is made vertically with over head travelling crane, and final positioning is made by lifters with centering/calibrating device included. In the basement there is a water vessel protected by a step able grate. The rig is controlled by SKA class pressurization skid up to 4000 L/min.; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

Reaction power	:	600 TON
Clamping style	:	Type 2 -External radial seals
Max pipe length	:	7100 mm
Min pipe length	:	1500 mm
Max pipe Ø	:	1020 mm
Allowed elliptical error	:	0.5%
Flow Axes Height	:	1550 mm
Basement water vessel	:	6000 L
Max Test pressure	:	700 / 1050 bar
Filling Flow	:	500 L/min
Pneumatic supply	:	6.5 bar @ 1100 NI/min Dry air not lubricated
Dimensions	:	9700 (L) x 2500 (D) x 2180 (H)

[Patent Pending]





Vertical test benches for valves

BV-PMC/1200

Vertical test benches for valves
MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



! Note: Safety perimetral protection available on request

Reaction force	:	1200 TON (see working limits table)
Working stands	:	1 (two on request)
Valve lenght max	:	1265 mm
Valve lenght min	:	265 mm
Columns inner clearance	:	2900 mm
Flow axes height	:	1200 mm
Bridge course	:	2200 mm
Basement water vessel	:	350 L (Only for spilled water not for storage)
Terminations allowed	:	RF, RJ
Clamping style	:	Type 1 – Proportional Compression (flange surface).
Clamping force control	:	Automatic within 5-100% interval, proportional to the hydrostatic pressure inside the valve under test. Reg. gain controlled by the operator.
Dimensions	:	3900 (L) x 3700 (D) x 4920 (H)

★Working limits for PRESS Clamping, DIN VALVES, SHELL TEST

	DN	1000	1200	1300	1400	1500	1600	1700	1800	1900	2000	2200	2400
PN-10	TON												
PN-16	TON												
PN-25	TON												
PN-40	TON												
PN-64	TON												

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 80mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal therms. Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test. The rig is controlled by SKA-500 pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more informations.



BV-PMC/900

MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.

Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece.

In the basement there is a water vessel and an external water vessel could be added as option.

The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test.

The rig is controlled by **SKA-500** pressurization skid; to have more information about please consult dedicated technical data sheets.

The rig could be completed with several options and accessories, please contact our sales office to have more informations.



Note: Safety perimetral protection available on request

Reaction force	:	900 TON
Working stand	:	1 (2 on request)
Length max	:	1000 mm
Length min	:	250 mm
Column inner clearance	:	2400 mm
Loading Height	:	1100 mm
Bridge course	:	1600 mm
Basement water vessel	:	350 Liters ca.
Terminations allowed	:	RF, RJ
Clamping style	:	Type 1 – Proportional Compression (flange surface).
Clamping force control	:	Automatic within 5-100% interval, proportional to the hydrostatic pressure inside the valve under test. Reg. gain controlled by the operator.
Dimensions	:	3260 (L) x 3100 (D) x 5200 (H)

★Working limits for PRESS Clamping, DIN VALVES, SHELL TEST

	DN	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
PN-10	TON												
PN-16	TON												
PN-25	TON												
PN-40	TON												
PN-64	TON												
PN-100	TON												

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 100 mm.
For further details please contact our technical office.


[Patent Pending]

BV-PMC/800

Vertical test benches for valves
MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



 Note: Safety perimetral protection available on request

Reaction force	:	800 TON
Working stand	:	1 (2 on request)
Length max	:	1500 mm
Length min	:	200 mm
Column inner clearance	:	1040 mm
Flow axes height	:	1050 mm
Bridge course	:	800 mm
Basement water vessel	:	350 Liters ca.
Terminations allowed	:	RF, RJ
Clamping style	:	Type 1 – Proportional Compression
Clamping force control	:	Automatic within 5..100% interval, proportional to hydrostatic pressure inside the valve under test. Regulation gain can be controlled by the operator
Dimensions	:	1800 (L) x 2060 (D) x 4500 (H)

★Working limits for PRESS CLAMPING, ANSI VALVE, SHELL TEST:

DN	2"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
ANSI-150	TON											
ANSI-300	TON											
ANSI-600	TON											
ANSI-900	TON											
ANSI-1500	TON											
ANSI-2500	TON											
ANSI-4500	TON											

*Note: Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 60 mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.

Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece.

In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test.

The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets.

The rig could be completed with several options and accessories, please contact our sales office to have more informations.



BV-PMC/650W

MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



Note: Safety perimetral protection available on request

Reaction force	:	650 TON (see working limits table)
Working stands	:	1 (2 on request)
Allowed sizes	:	DN700/DN2000, PN16/PN64
Valve length max	:	750 mm
Valve length min	:	250 mm
Columns inner clearance	:	2400 mm
Flow axes height	:	1000 mm
Bridge course	:	1600 mm
Basement water vessel	:	220 Liter (Only for spilled water not for storage)
Terminations allowed	:	RF, RJ
Clamping style	:	Type 1 – Proportional Compression (flange surface).
Clamping force control	:	Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
Dimensions	:	3100 (L) x 3260 (D) x 3500 (H)

★Working limits for PRESS Clamping, DIN VALVES, SHELL TEST

	DN	700	800	900	1000	1200	1300	1400	1500	1600	1800	2000
PN-10	TON											
PN-16	TON											
PN-25	TON											
PN-40	TON											
PN-64	TON											

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 80mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.
Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece.
In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test.
The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more informations.



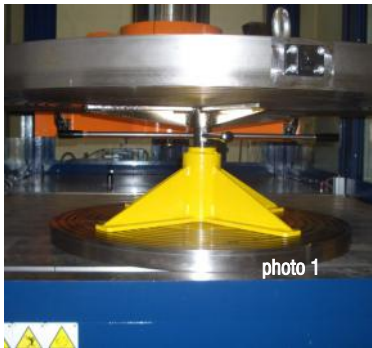
[Patent Pending]

Vertical test benches for valves

BV-PMC/650

MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



! Note: Safety perimetral protection available on request

- Reaction force : **650 TON** (see working limits table)
- Working stands : 1 (2 on request)
- Allowed sizes : DN700/DN2000, PN16/PN64
- Valve length max : 1250 mm
- Valve length min : 200 mm
- Columns inner clearance : 1600 mm
- Flow axes height : (D) 1000 mm
- Bridge course : (E) 1300 mm
- Basement water vessel : 220 Liter (Only for spilled water not for storage)
- Terminations allowed : RF, RJ
- Clamping style : Type 1 – Proportional Compression (flange surface).
- Clamping force control : Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
- Protection against water jet : Armoured glass on 3 side + front door on request
- Dimensions : 2350 (L) x 2900 (D) x 4240 (H)

***Working limits for PRESS Clamping, DIN VALVES, SHELL TEST**

DN	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"	40"	42"	48"
ANSI-150 TON														
ANSI-300 TON														
ANSI-600 TON														
ANSI-900 TON														
ANSI-1500 TON														
ANSI-2500 TON														

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 50mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms. Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure (see picture), allows the user to make visual inspection of valve seat during the test. The rig has a armoured glass protection on 3 sides. Frontal side can be closed by mobile horizontal sliding gate (optional). Upper side crociera is equipped with fast connection (photo 2) for sealing plateau, and mounting tool is included as well (photo 1). The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicate technical data sheet. The rig could be completed with several options and accessories, please contact our sales office to have more information.



BV-PMV/600

SINGLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



Vertical test rig with inner radial seal clamping style. The mobile reaction bridge is moved by one screwed column that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel could be installed as water reservoir for test procedures (see Option). The rig is controlled by **SKM-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



- Reaction force
- :
- 600 TON
(See working limits table)
- Valve length max
- :
- 3000 mm
- Valve length min
- :
- 700 mm
- Column inner clearance
- :
- 1720 mm
- Flow axes height
- :
- floor ground
- Basement water vessel
- :
- 300 Liters ca.
- Terminations allowed
- :
- BW, SW, RF, RJ
- Clamping style
- :
- Type 2 – Inner radial
- Reference standard
- :
- ISO, DIN, API, ANSI, ASTM, FCI, BS (Other on request).
- Electric supply
- :
- 3PH + T, 380V@50Hz, 10KW
- Dimensions
- :
- 2420 (L) x 3250 (D) x 7350 (H)

★EXAMPLE for Operative limits with BORE PLUG CLAMPING STYLE

DN	10"	12"	14"	16"	18"	20"	24"	28"	30"	32"	36"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.

BV-PMC/550

Vertical test benches for valves
MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



! Note: Safety perimetral protection available on request

- Reaction force : **550 TON** (see working limits table)
- Working stands : 1 (2 on request)
- Valve length max : 1500 mm
- Valve length min : 700 mm
- Columns inner clearance : 2200 mm
- Loading height : 1000 mm
- Bridge course : 1250 mm
- Basement water vessel : 220 Liters (only for spilled water)
- Terminations allowed : RF, RJ
- Clamping style : Type 1 – Proportional Compression (flange surface).
- Clamping force control : Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test. Reg. gain controlled by the operator.
- Dimensions : 3020 (L) x 2200 (D) x 4200 (H)

★Working limits for PRESS Clamping, DIN VALVES, SHELL TEST

	DN	600	700	800	900	1000	1200	1300	1400	1500	1600	1800	2000
PN-10	TON												
PN-16	TON												
PN-25	TON												
PN-40	TON												
PN-64	TON												

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 80mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.

Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece.

In the basement there is a water vessel and an external water vessel could be added as option.

The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test.

The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets.

The rig could be completed with several options and accessories, please contact our sales office to have more informations.



BV-PMC/500

MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



Note: Safety perimetral protection available on request

- Reaction force
- :
- 500 TON (see working limits table)
- Working stands
- :
- 1 (2 on request)
- Valve length max
- :
- 1140 mm
- Valve length min
- :
- 200 mm
- Columns inner clearance
- :
- 1750 mm
- Loading plate height
- :
- 1000 mm
- Bridge course
- :
- 850 mm
- Basement water vessel
- :
- 220 Liters
- Terminations allowed
- :
- RF, RJ
- Clamping style
- :
- Type 1 – Proportional Compression (flange surface).
- Clamping force control
- :
- Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
- Dimensions
- :
- 2300 (L) x 2000 (D) x 2800 (H)

★Working limits for PRESS Clamping, DIN VALVES, SHELL TEST

	DN	600	700	800	900	1000	1200	1300	1400
PN-10	TON								
PN-16	TON								
PN-25	TON								
PN-40	TON								
PN-64	TON								

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 50mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.

Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece.

In the basement there is a water vessel and an external water vessel could be added as option.

The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test.

The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets.

The rig could be completed with several options and accessories, please contact our sales office to have more informations.



Vertical test benches for valves

BV-PMC/500S
PV-PMC/100SP

MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



BV-PMC/500S

! Note: Safety perimetral protection available on request

Reaction force	:	BV-PMC/500SP 500 TON (see working limits table)
Working stands	:	1 (2 on request)
Valve length max	:	700 mm
Valve length min	:	200 mm
Columns inner clearance	:	1000 mm
Loading plate height	:	1000 mm
Bridge course	:	850 mm
Basement water vessel	:	150 Liters
Terminations allowed	:	RF, RJ
Clamping style	:	Type 1 – Proportional Compression (flange surface).
Clamping force control	:	Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
Protection against water jet	:	Armoured steel on 3 side + mobile front door
Dimensions	:	1460 (L) x 2360 (D) x 2600 (H)

BV-PMC/500SP

★Working limits for PRESS Clamping, ANSI VALVES, SHELL TEST

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 50mm.
For further details please contact our technical office.



PV-PMC/100SP

Reaction force	:	PV-PMC/100SP 100 TON (see working limits table)
Working stands	:	1 (2 on request)
Valve length max	:	900 mm
Valve length min	:	100 mm
Columns inner clearance	:	1000 mm
Loading plate height	:	800 mm
Bridge course	:	600 mm
Basement water vessel	:	120 Liters
Terminations allowed	:	RF, RJ
Clamping style	:	Type 1 – Proportional Compression (flange surface).
Clamping force control	:	Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
Protection against water jet	:	Armoured steel on 3 side + mobile front door
Dimensions	:	1460 (L) x 2360 (D) x 2600 (H)

PV-PMC/100SP

★Working limits for PRESS Clamping, ANSI VALVES, SHELL TEST

	DN	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms. Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure (see picture), allows the user to make visual inspection of valve seat during the test. The rig has a armoured steel protection on 3 sides. Frontal side can be closed by mobile horizontal sliding gate (optional). The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicate technical data sheet. The rig could be completed with several options and accessories, please contact our sales office to have more information.



[Patent Pending]



BV-PMC/350

MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



Note: Safety perimetral protection available on request

- Reaction force
- :
- 350 TON
(see working limits table)
- Working stands
- :
- 1 (2 on request)
- Valve lenght max
- :
- 1280 mm
- Valve lenght min
- :
- 180 mm
- Columns inner clearance
- :
- 1620 mm
- Loading height
- :
- 900 mm
- Bridge course
- :
- 780 mm
- Basement water vessel
- :
- 200 Liters
- Terminations allowed
- :
- RF, RJ
- Clamping style
- :
- Type 1 – Proportional Compression (flange surface).
- Clamping force control
- :
- Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
- Dimensionis
- :
- 2140 (L) x 1700 (D) x 4050 (H)

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minumal terms. Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first one is working, the second one could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



★Working limits for PRESS Clamping, DIN VALVES, SHELL TEST

	DN	300	350	400	450	500	600	700	800	900	1000	1200
PN-10	TON											
PN-16	TON											
PN-25	TON											
PN-40	TON											

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 50mm. For further details please contact our technical office.

[Patent Pending]


BV-PMV/350

Vertical test benches for valves
SINGLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2



Vertical test rig with inner radial seal clamping style. The mobile reaction bridge is moved by one screwed column that assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel could be installed as water reservoir for test procedures (see Option). The rig is controlled by **SKM-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

 Note: Safety perimetral protection available on request

- Reaction force : **350 TON**
(See working limits table)
- Working stands : 1 (2 on request)
- Valve length max : 1200 mm
- Valve length min : 0 mm
- Column inner clearance : 650 mm
- Loading hight : 1000 mm
- Bridge course : 650 mm
- Basement water vessel : 300 Liters ca.
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 2 – Inner radial
- Dimensions : 1140 (L) x 1880 (D) x 4100 (H)

★Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

	DN	2"	3"	4"	5"	6"	8"	10"	12"
ANSI-150	TON								
ANSI-300	TON								
ANSI-600	TON								
ANSI-900	TON								
ANSI-1500	TON								
ANSI-2500	TON								

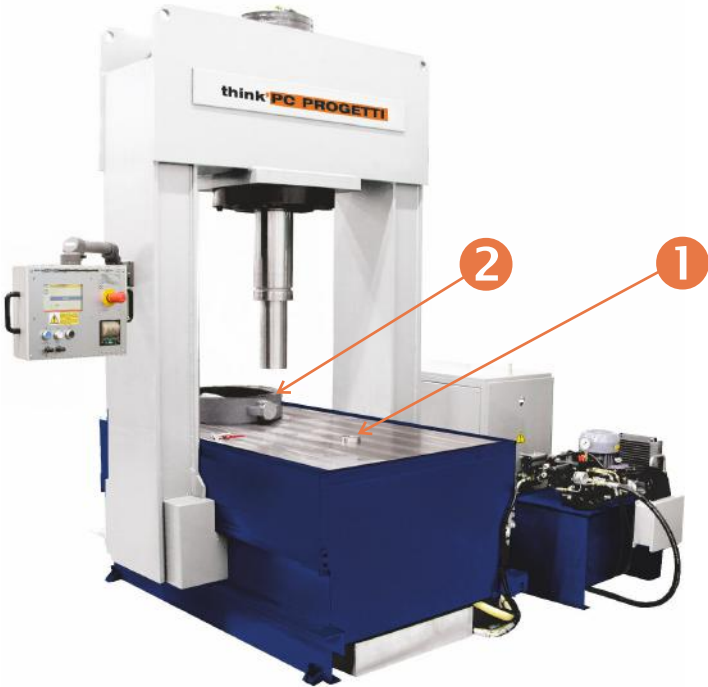
*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.



BV-PMC/200-2

DOUBLE LOADING PLACES
MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms. Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Note: Safety perimetral protection available on request

- Reaction force : **200 TON**
(see working limits table)
- Working stands : 2
- Valve lenght max : 970 mm
- Valve lenght min : 100 mm
- Columns inner clearance : 1200 mm
- Loading height : 900 mm
- Bridge course : 900 mm
- Basement water vessel : 200 Liters
- Terminations allowed : RF, RJ
- Clamping style : Type 1 – Proportional Compression (flange surface).
- Clamping force control : Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
- Dimensions : 1600 (L) x 1900 (D) x 3000 (H)

★Working limits for PRESS Clamping, DIN VALVES, SHELL TEST

	DN	100	150	200	250	300	350	400	450	500	600	700	800	900
PN-10	TON													
PN-16	TON													
PN-20	TON													
PN-25	TON													
PN-40	TON													
PN-64	TON													
PN-100	TON													

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 50mm. For further details please contact our technical office.

Vertical test benches for valves

BV-PMC/200SP

MOBILE BRIDGE PROPORTIONAL PRESS CLAMPING
WITH AUTOMATIC VALVE MARKING MICRO-PERCUSSION

CLAMP
TYPE
1



! Note: Safety perimetral protection available on request

- Reaction force : **200 TON**
(See working limits table)
- Valve length max : 450 mm
- Valve length Min : 50mm
- Columns inner clearance : 650 mm
- Loading height : 900mm
- Bridge course : 600 mm
- Basement water vessel : 100 Liters
- Terminations allowed : RF, RTJ
- Clamping style : Type: 1 - Proportional pressing
- Clamping force control : Automatic within 5%-100% interval, proportional to hydrostatic pressure inside the valve under test.
- Protection against water jet : Armored steel 3 side + mobile front door
- Dimension : 1100 (L) x 1325 (D) x 2020 (H)

***Working limits for PRESS Clamping, ANSI VALVES, SHELL TEST**

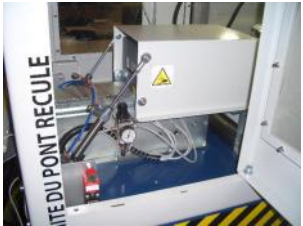
	DN	4"	6"	8"	10"	12"	14"	16"	18"	20"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 50mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.

Mobile upper side bridge allows vertical loading of the valve. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure (see picture), allows the user to make visual inspection of valve seat during the test.

The rig has a armored steel protection on 3 sides. Frontal side can be closed by mobile horizontal sliding gate (optional). A marking machine is connected directly to control PLC to mark serial number on tested pieces. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicate technical data sheet. The rig could be completed with several options and accessories, please contact our sales office to have more information.





BV-1V/200

SINGLE SCREWED COLUMN
INNER RADIAL SEAL (BORE PLUGS)

CLAMP
TYPE
2

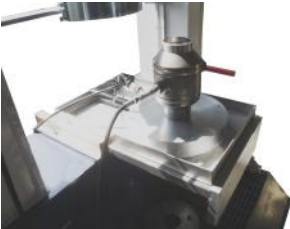


Vertical test rig with inner radial seal clamping style. The mobile reaction bridge is moved by one screwed column that assures the complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel could be installed as water reservoir for test procedures (see Option). The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Note: Safety perimetral protection and loading tray available on request

- Reaction force : **200 TON**
(See working limits table)
- Valve length max : 1000 mm
- Valve length min : 100 mm
- Column inner clearance : 900 mm
- Loading height : 800 mm
- Basement water vessel : 200 Liters
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 2 – Inner radial
- Dimensions : 1340 (L) x 1790 (D) x 3240 (H)



Loading tray available as option

*Working limits INNER RADIAL SEAL, ANSI VALVE, SHELL TEST:

	DN	2"	4"	6"	8"	10"	12"	14"	16"	20"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.

[Patent Pending]

BV-PMV/200

Vertical test benches for valves
MOBILE BRIDGE,
BORE PLUGS CLAMPING

CLAMP
TYPE
2



Vertical test rig with bore plugs clamping style; mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test. The rig is controlled by SKA/SKM classes pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

! Note: Safety perimetral protection available on request

- Reaction force : 200 TON
- Workig stand : 1 (2 on request)
- Length max : 1300 mm
- Length min : 200 mm
- Column inner clearance : 1100 mm
- Loading Height : 1010 mm
- Bridge course : 900 mm
- Basement water vessel : 350 Liters ca.
- Terminations allowed : RF, RJ, BW, SW (Bore machined)
- Clamping style : Type 2 – Bore Plugs
- Dimensions : 1610 (L) x 2440 (D) x 3450/4150 (H)

★Working limits for BORE PLUGS CLAMPING, ANSI VALVE, SHELL TEST:

	DN	2"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
ANSI-150	TON												
ANSI-300	TON												
ANSI-600	TON												
ANSI-900	TON												
ANSI-1500	TON												
ANSI-2500	TON												
ANSI-4500	TON												

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D. For further details please contact our technical office.



BV-PMC/200SH MOBILE BRIDGE PROPORTIONAL
PRESS CLAMPING

CLAMP
TYPE
1



Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.

Mobile upper side bridge allows vertical loading of the valve. In the basement there is a water vessel and an external water vessel could be added as option.

The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test.

A full surrounding FAIRING protection (Roof included) ensure best operator protection.

The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets.

The rig could be completed with several options and accessories, please contact our sales office to have more informations



Note: Safety perimetral protection available on request

Reaction force	:	200 TON (see working limits table)
Working stands	:	1
Valve length max	:	950 mm
Valve length min	:	250 mm
Columns inner clearance	:	1200 mm
Bridge course	:	1000 mm
Basement water vessel	:	220 Liter (Only for spilled water not for storage)
Terminations allowed	:	RF, RJ
Clamping style	:	Type 1 – Proportional Compression (flange surface).
Clamping force control	:	Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
Dimensions	:	1680 (L) x 2665 (D) x 3250 (H)

***Working limits for PRESS CLAMPING ANSI VALVES, SHELL TEST**

DN	1/2"	1"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
ANSI-150	TON																	
ANSI-300	TON																	
ANSI-600	TON																	
ANSI-900	TON																	
ANSI-1500	TON																	
ANSI-2500	TON																	

(*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size added by 50mm in case of press clamping.
For further details please contact our technical office.

[Patent Pending]

Vertical test benches for valves

BV-PMC/200LP MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



- Reaction force : **200 TON**
(See working limits table)
- Valve length max : 450 mm
- Valve length Min : 50mm
- Column inner clearance : 1290mm
- Loading height : 850mm
- Basement water vessel : 200L
- Termination allowed : RF, RTJ
- Clamping style: Type : 1 –Proportional pressing
- Clamping force control : Automatic within 5%-100% interval, proportional to hydrostatic pressure inside the valve under test.
- Protection against water jet : armored steel 3 side + mobile front door
- Dimensions : 1730 (L) x 2450 (D) x 2380 (H)

★Working limits PRESS CLAMPING, ANSI VALVES SHELL TEST

DN	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"
ANSI-150	TON													
ANSI-300	TON													
ANSI-600	TON													
ANSI-900	TON													
ANSI-1500	TON													
ANSI-2500	TON													
ANSI-4500	TON													

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 50mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.

Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure (see picture), allows the user to make visual inspection of valve seat during the test.

The rig has a armoured steel protection on 3 sides. Frontal side can be closed by mobile horizontal sliding gate (optional). A marking machine is connected directly to control PLC to mark serial number on tested pieces. The rig is controlled by SKA-100 pressurization skid; to have more information about please consult dedicate technical data sheet. The rig could be completed with several options and accessories, please contact our sales office to have more information



BV-PMC/100-2P

DOUBLE LOADING PLACES MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms. Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure, allows the user to make visual inspection of valve seat during the test. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Reaction force	:	100 TON (See working limits table)
Working stands	:	2
Valve length max	:	650 mm
Valve length min	:	150 mm
Columns inner clearance	:	800 mm
Loading height	:	750 mm
Bridge course	:	900 mm
Basement water vessel	:	220 Liters
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 1 – Proportional Compression (flange surface).
Clamping force control	:	Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test.
Dimensions	:	1360 (L) x 2842 (D) x 2770 (H)

*Working limits PRESS CLAMPING, ANSI VALVES SHELL TEST

	DN	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									
ANSI-4500	TON									

*Working limits PRESS CLAMPING, DIN VALVES SHELL TEST

	DN	50	100	150	200	250	300	350	400	450	500	600
PN-10	TON											
PN-16	TON											
PN-25	TON											
PN-40	TON											
PN-64	TON											
PN-100	TON											

*Note: Showed data has been calculated considering SHELL test pressure and nominal bore size increased by 50mm. For further details please contact our technical office.

Vertical test benches for valves

BV-PMC/100S

MOBILE BRIDGE
PROPORTIONAL PRESS CLAMPING

CLAMP
TYPE
1



! Note: Safety perimetral protection available on request

Reaction force	:	100 TON (See working limits table)
Valve length max	:	270 mm
Valve length Min	:	0mm
DN min-max	:	DN2" – DN 24"
Column inner clearance	:	750 mm
Loading height	:	910 mm
Basement water vessel	:	300L
Termination allowed	:	RF, RTJ, Wafer
Clamping style	:	Type: 1 - Proportional pressing
Clamping force control	:	Automatic within 10%-100% interval, proportional to hydrostatic pressure inside the valve under test.
Protection against water jet	:	available on request.
Dimension	:	1260 (L) x 1925 (D) x 2110 (H)

***Working limits for PRESS Clamping, ANSI VALVES, SHELL TEST**

	DN	4"	6"	8"	10"	12"	14"	16"	18"	20"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size increased by 50mm.
For further details please contact our technical office.

Vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms.

Mobile upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option.

The use of a opened castle as upper side reaction structure (see picture), allows the user to make visual inspection of valve seat during the test.

The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicate technical data sheet. The rig could be completed with several options and accessories, please contact our sales office to have more information.



BV-PMMV/100SH MOBILE BRIDGE
UNIVERSAL CLAMPING

CLAMP
TYPE
4



Vertical test rig with universal clamping system; all valve termination kind & 90° shape valve can be clamped. In case of press clamping, the force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms. Mobile upper side bridge allows vertical loading of the valve. In the basement there is a water vessel and an external water vessel could be added as option. The use of a opened castle as upper side reaction structure (see picture), allows the user to make visual inspection of valve seat during the test. Full surrounding armoured fairing system ensure operator safety. Process equipment can be self-contained with control console only or any standard pressurization skid. (SKA, SKM)



- Reaction force : 100 TON (See working limits table)
- Valve length max : 700 mm
- Valve length Min : 0 mm
- DN min-max : DN ½” – DN 12” (on request up to 24”)
- Max valve flange : Ø 530 mm
- Loading height : 910 mm
- Basement water vessel : 200 L
- Termination allowed : ALL
- Clamping style : Type: 4 - Universal
- Press Clamping force control : Automatic within 5%-100% interval, proportional to hydrostatic pressure inside the valve under test.
- Dimension : 1420 (L) x 2000 (D) x 3110 (H)

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

DN	1/2"	1"	2"	3"	4"	5"	6"	8"	10"	12"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									



[Patent Pending]


(*)Note: Showed data have been calculated considering SHELL test pressure and nominal bore size added by 50mm in case of press clamping. For further details please contact our technical office.

BV-PMCV/100H

MOBILE BRIDGE
COMBINED CLAMPING

CLAMP
TYPE
3



 Note: Safety perimetral protection available on request

Reaction force	:	100 TON
Workig stand	:	1 (2 on request)
Length max	:	3500 mm
Length min	:	200 mm
Column inner clearance	:	1300 mm
Loading height	:	700 mm
Bridge course	:	900 mm
Basement water vessel	:	250 Liters ca.
Terminations allowed	:	RF, RJ, BW, SW
Clamping style	:	Type 3 – Bore Plugs & proportional press clamping
Dimensions	:	1740 (L) x 2090 (D) x 5300/8500 (H)

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

DN	1"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
ANSI-150 TON											
ANSI-300 TON											
ANSI-600 TON											
ANSI-900 TON											
ANSI-1500 TON											
ANSI-2500 TON											

(*)Note: Showed data have been calculated considering SHELL test pressure and nominal bore size added by 50mm in case of press clamping.
For further details please contact our technical office.

Vertical test rig with combined clamping style : inner radial seal + proportional press clamping facilities.
Upper side screw assures the complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. Upper side bridge allows vertical loading of the valve and the possibility to have double working stand; while the first is working, the second could be prepared for next piece. In the basement there is a water vessel and an external water vessel could be added as option. The rig is controlled by SKA class pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



BV-CV/100

COMBINED CLAMPING
INNER RADIAL SEAL + PROPORTIONAL
PRESS CLAMPING

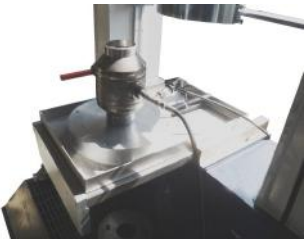
CLAMP
TYPE
3



Note: Safety perimetral protection available on request

- Reaction force : 100 TON (See working limits table)
- Valve length max : 1000 mm
- Valve length min : 0 mm
- Column inner clearance : 900
- Basement water vessel : 300 Liters
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 3 – Combined
Inner radial clamping & Pressing clamping with Proportional control.
- Dimensions : 1340 (L) x 1690 (D) x 2604/3520 (H)

Vertical test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by screwed column that assures the complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. In the basement, a water vessel could be installed as water reservoir for test procedures (see Option). The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Loading tray available as option.

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

	DN	2"	4"	6"	8"	10"	12"	14"	16"	18"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 50mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

[Patent Pending]

BV-CCV/20P

Vertical test benches for valves
COMBINED CLAMPING, PROPORTIONAL CONTROL
+ AUTOMATIC TEST VALVE ACTUATOR

CLAMP
TYPE
3



Fully automatic vertical test rig with controlled pressing clamp; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms. It has a 90° hydraulic actuator, that let the valve move according to the test sequence.

The high resolution differential pressure drop leak detection is used to measure leak rate according to DIN 12266-1 for GAS leakage. A mobile loading plate makes loading operations simple.

A mobile vertical protection assures operator's safety in case of seal blow.

An electronic PLC controls all test operations, and the operator has a LCD touch screen monitor to set-up test sequence.

Reaction force	:	20 TON (see working limits table)
Valve length max	:	505 mm
Valve length min	:	30 mm
Loading height	:	900 mm
Water vessel	:	External 220 Liters
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 3 – Combined
Clamping force control	:	Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test. Reg. gain controlled by the operator.
Hydraulic test	:	H2O w/oil 5% , 3-40bar (200bar, 650bar, as option)
Pneumatic test	:	0,5 – 6 bar
Pneumatic supply	:	6.5 bar @ 1100 NI/min - Dry air not lubricated
Electric supply	:	3PH + T, 400V@50Hz, 5KW
Dimensions	:	1550 (L) x 1050 (D) x 2250 (H)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
DIN VALVES, SHELL TEST**

	DN	50	100	125	150	200
PN-10	TON					
PN-16	TON					
PN-25	TON					
PN-40	TON					
PN-64	TON					
PN-100	TON					

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 30mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig



BV-CCV/15P

COMBINED CLAMPING
PROPORTIONAL CONTROL

CLAMP
TYPE
3



Vertical test rig with automatic test sequence. Combined clamping style: proportional press clamping & inner radial seals. A protection against water jets surrounds the valve under test and it is automatically controlled with pneumatic cylinders. A PLC controls test sequence that can be configured by a LCD touch screen. Full automatic test cycle with leakage flange measuring (water fail)



Reaction force	:	15 TON (See working limits table)
Valve length max	:	590 mm
Valve length Min	:	50mm
Loading height	:	900mm
Water vessel	:	300L External
Termination allowed	:	BW, SW, RF, RTJ
Clamping style	:	Type: 3 – Combined: Proportional pressing & inner radial seal (bore plugs)
Clamping force control	:	Automatic within 5%-100% interval, proportional to hydrostatic pressure inside the valve under test.
Reference standards	:	ISO, DIN, API, ANSI, ASTM, FCI, BS (Other on request).
Hydraulic test	:	H2O 700 bar MAX
Pneumatic test	:	0.5 bar – 6 bar
Pneumatic supply	:	6.5 bar @ 1100 NI/min - Dry air not lubricated
Electric supply	:	3PH + T, 380V@50Hz, 5KW
Dimension	:	730 (L) x 1010 (D) x 2340 (H)

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

	DN	1"	2"	3"	4"	6"	8"
ANSI-150	TON						
ANSI-300	TON						
ANSI-600	TON						
ANSI-900	TON						
ANSI-1500	TON						
ANSI-2500	TON						

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 30mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

BOR-M/350

Tiltable test benches for valves
DOUBLE CLAWS CLAMPING
WHIT TILTABLE BRIDGE

CLAMP
TYPE
6



Horizontal test rig with double claws clamping with on side tiltable. Right side is movable to adjust valve length. Claws clamping can be performed only on flanged valves. It allows the verification of mechanical stress on flange neck during test performing. Besides, the clamping force has no influence on valve seat behaving during test, due to the absence of external forces applied. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more

 Note: Safety perimetral protection available on request

Reaction force	:	350 TON (See working limits table)
Length max	:	2200 mm
Length min	:	500 mm
Flange diameter max	:	1200 mm
Flange diameter min	:	120 mm
Flange thickness max	:	125 mm
Flange thickness min	:	0 mm
Flow Axis Height	:	1180 mm
Basement water vessel	:	1000 Liters ca.
Terminations allowed	:	RF, RJ
Clamping style	:	Type 6 – Double claws clamping
Dimensions	:	4460 (L) x 2300 (D) x 1930 (H)

★Working limits for PRESS CLAMPING, ANSI VALVE, SHELL TEST:

DN	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"
ANSI-150	TON													
ANSI-300	TON													
ANSI-600	TON													
ANSI-900	TON													
ANSI-1500	TON													
ANSI-2500	TON													
ANSI-4500	TON													

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size added by 80mm in case of press clamping. For further details please contact our technical office.



BOR-M/200

DOUBLE CLAWS CLAMPING
WHIT TILTABLE BRIDGE

CLAMP
TYPE
6



Note: Safety perimetral protection available on request

Horizontal test rig with double claws clamping with one side tiltable. Right side is movable to adjust valve length. Claws clamping can be performed only on flanged valves. It allows the verification of mechanical stress on flange neck during test performing. Besides, the clamping force has no influence on valve seat behaving during test, due to the absence of external forces applied. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more.



Reaction force	:	300 TON
Length max	:	1700 mm
Length min	:	100 mm
Flange diameter max	:	700 mm
Flange diameter min	:	120 mm
Flange thickness max	:	100 mm
Flange thickness min	:	0 mm
Flow Axis Height	:	1070 mm
Basement water vessel	:	800 Liters ca.
Terminations allowed	:	RF, RJ
Clamping style	:	Type 6 – Double claws clamping
Dimensions	:	3500 (L) x 1800 (D) x 1625 (H)

★Working limits for PRESS CLAMPING, ANSI VALVE, SHELL TEST:

	DN	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
ANSI-150	TON											
ANSI-300	TON											
ANSI-600	TON											
ANSI-900	TON											
ANSI-1500	TON											
ANSI-2500	TON											
ANSI-4500	TON											

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size added by 80mm in case of press clamping. For further details please contact our technical office.

Tiltable test benches for valves

BOR-2V/600
BOR-2CV/600

BORE PLUGS CLAMPING
W/90° TILTABILITY

CLAMP
TYPE
2

CLAMP
TYPE
3



Horizontal test rig with bore plug clamping style: inner radial seal facilities. The mobile reaction bridge is moved by one screwed column that assures the complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. Besides, valve flow axes can be tilted by 90° according to the test position preferred by customer. In the basement, a water vessel is installed as water reservoir for test procedures. Test process is controlled by **SKA-100** pressurization SKID. See dedicate literatures for further details.

Note: Safety perimetral protection available on request

		BOR-2V/600	BOR-2CV/600
Reaction force	:	600 TON (see working limits table)	600 TON (see working limits table)
Length max	:	2500 mm	1900 mm
Length min	:	200 mm	0 mm
Columns inner clearance	:	1400 mm	1400 mm
Loading height	:	Vertical 1380 mm / Horizontal 1200 mm	Vertical 1380 mm / Horizontal 1200 mm
Rotation angle	:	90°	90°
Basement water vessel	:	1000 Liters	1000 Liters
Termination allowed	:	RF, RTJ, BW, SW	RF, RTJ, BW, SW
Clamping style	:	Type 2 – bore plugs	Type 3 - Combined
Dimensions	:	Horizontal : 2700 (L) x 4300 (D) x 1520 (H) Vertical : 2700 (L) x 4300 (D) x 4800 (H)	Horizontal : 2700 (L) x 4300 (D) x 1520 (H) Vertical : 2700 (L) x 4300 (D) x 4800 (H)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
DIN VALVES, SHELL TEST**

	DN	1/2"	1"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"
ANSI-150	TON																			
ANSI-300	TON																			
ANSI-600	TON																			
ANSI-900	TON																			
ANSI-1500	TON																			
ANSI-2500	TON																			

*Note: Showed data have been calculated considering API SHELL test pressure and nominal bore size.
For further details please contact our technical office.

***Working limits for PRESS CLAMPING ANSI VALVES, SHELL TEST**

[Patent Pending]




BOR-1V/200

BORE PLUGS CLAMPING
W/90° TILTABILITY

CLAMP
TYPE
2



 Note: Safety perimetral protection available on request

- Reaction force : **200 TON** (see working limits table)
- Length max : 1000 mm
- Length min : 100 mm
- Columns inner clearance : 900 mm
- Loading height : Horizontal 720 mm / Vertical 1020 mm Flow axes height in horizontal position
- Rotation angle : 90°
- Basement water vessel : 600 Liters
- Termination allowed : RF, RTJ, BW, SW
- Clamping style : Type 2 – bore plugs
- Dimensions : Horizontal : 1920 (L) x 3500 (D) x 970 (H)
Vertical : 1920 (L) x 2500 (D) x 2820 / 3700 (H)

***Working limits for BORE PLUGS CLAMPINGS, ANSI VALVE, SHELL TEST:**

	DN	4"	6"	8"	10"	12"	14"	16"	18"	20"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

*Note: Showed data have been calculated considering API SHELL test pressure and nominal bore size.
For further details please contact our technical office.

Horizontal test rig with bore plug clamping style: inner radial seal facilities. The mobile reaction bridge is moved by one screwed column that assures the complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. Besides, valve flow axes can be tilted by 90° according to the test position preferred by customer. In the basement, a water vessel is installed as water reservoir for test procedures. Test process is controlled by **SKA-100** pressurization SKID. See dedicate literatures for further details.



[Patent Pending]

BOR-M/20P

Tiltable test benches for valves

CLAWS CLAMPING
+ PORTABLE CLAMPING DEVICE

CLAMP
TYPE
5

CLAMP
TYPE
6



! Note: Safety perimetral protection available on request

- Reaction force : **20 TON**
- Max Flange Ø : 200 mm
- Min Flange Ø : 90 mm
- Flange thickness max : 10...65mm
- Tilt angle : 90°
- Basement water vessel : 100 Liters ca.
- Terminations allowed : RF, RJ
- Clamping style : Type 5 – Combined
- Dimensions : 1020 (L) x 1940 (D) x 1800 (H)

***Working limits for PRESS CLAMPING**
ANSI VALVES, SHELL TEST

	DN	1/2"	1"	2"	3"
ANSI-150	TON				
ANSI-300	TON				
ANSI-600	TON				
ANSI-900	TON				

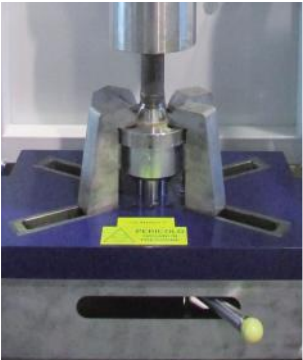
(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 20mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

Tilt able Single/Double claws clamping with floor fixed claws clamping unit, and optional portable clamping unit. Claws clamping can be performed only on flanged valve.

It allows the verification of mechanical stress on flange neck during test performing. Besides, the clamping force has no influence on valve seat behaving during test, due to the absence of external forces applied.

Even VISUAL test on valve seat during test is facilitated. armored fairing system ensure operator safety.

The rig is controlled by **SKMM-100** pressurization skid; to have more information about, please consult dedicated technical data sheets.



Autocentering claws movement with manual lever

[Patent Pending]



BOR-M/15

CLAWS CLAMPING
+ PORTABLE CLAMPING DEVICE

CLAMP
TYPE
5

CLAMP
TYPE
6



Note: Safety perimetral protection available on request

Reaction force	:	15 TON
Max Flange Ø	:	400 mm
Min Flange Ø	:	90 mm
Flange thickness max	:	10...65mm
Tilt angle	:	90°
Basement water vessel	:	100 Liters ca.
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 5 – Combined
Dimensions	:	1180 (L) x 1230 (D) x 1060 (H)

Tilt able Single/Double claws clamping with floor fixed claws clamping unit, and optional portable clamping unit. Claws clamping can be performed only on flanged valve.

It allows the verification of mechanical stress on flange neck during test performing. Besides, the clamping force has no influence on valve seat behaving during test, due to the absence of external forces applied. Even VISUAL test on valve seat during test is facilitated.

The rig is controlled by **SKMM-100** pressurization skid; to have more information about, please consult dedicated technical data sheets.



★Working limits for PRESS CLAMPING
ANSI VALVES, SHELL TEST

	DN	1"	2"	3"	4"	6"	8"
ANSI-150	TON						
ANSI-300	TON						
ANSI-600	TON						
ANSI-900	TON						
ANSI-1500	TON						

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore **size + 30mm** and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

[Patent Pending]

Multiple stations test benches

BV-3V/450
BV-3V/360
BV-3V/240

CLAMP
TYPE
2

INNER RADIAL SEAL (BORE PLUGS)
3 LOADING TRAYS



Independent loading tray.



Vertical test rig with inner radial seal clamping style.
3 test places, for contemporary pressure test.
The screwed columns assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. The rig is controlled by **SKMM-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



! Note: Safety perimetral protection available on request

		BV-3V/450	BV-3V/360	BV-3V/240
Reaction force	:	450 TON 150 TON /screw (See working limits table)	360 TON 120 TON /screw (See working limits table)	240 TON 80 TON /screw (See working limits table)
Valve lenght max	:	1200 mm	1000 mm	700 mm
Valve lenght min	:	150 mm	150 mm	150 mm
Culumn inner clearance	:	700 mm	650 mm	580 mm
Basement water vessel	:	400 Liters	400 Liters	400 Liters
Loading tray	:	3 indipendent	3 indipendent	3 indipendent
Loading tray smoke	:	400 mm	400 mm	400 mm
Terminations allowed	:	BW, SW, RF, RJ	BW, SW, RF, RJ	BW, SW, RF, RJ
Clamping style	:	Type 2 – Inner radial	Type 2 – Inner radial	Type 2 – Inner radial
Dimensions	:	2525(L) x 1200(D) x 2750(H)	2375(L) x 1200(D) x 2750(H)	2200(L) x 1200(D) x 2450(H)

★Operative limits for INNER RADIAL SEAL – ANSI Valve: Shell test at 1,5 x PN

		240TON	360TON	450TON					
	DN	1"	2"	3"	4"	6"	8"	10"	14"
ANSI-150	TON								
ANSI-300	TON								
ANSI-600	TON								
ANSI-900	TON								
ANSI-1500	TON								
ANSI-2500	TON								

*Note: RIG without protection for bunker use. Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig.

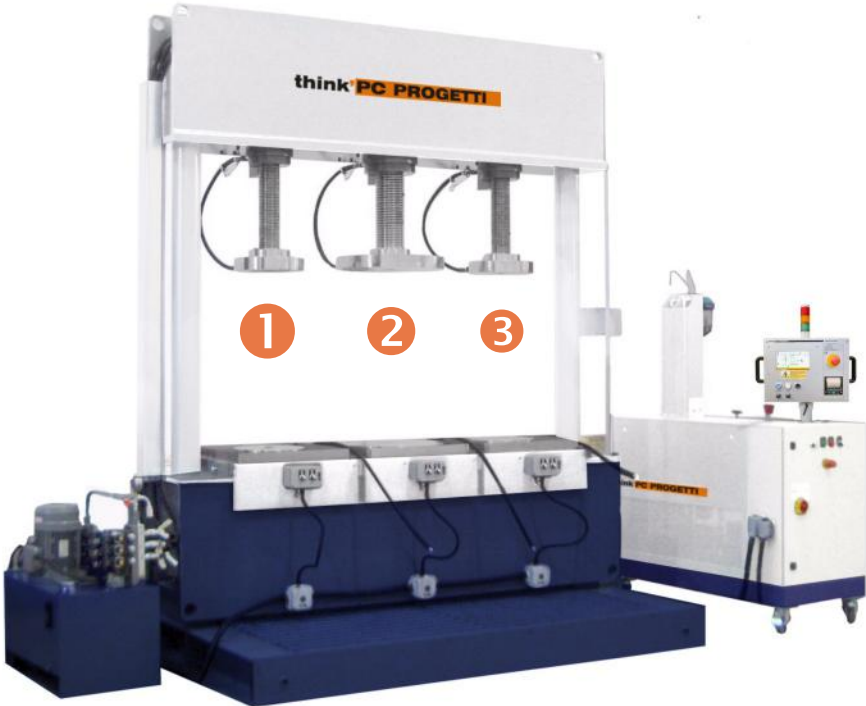
[Patent Pending]



BV-3V/270L

INNER RADIAL SEAL (BORE PLUGS)
3 LOADING TRAYS
DIFFERENTIATED LOAD

CLAMP
TYPE
2



Vertical test rig with inner radial seal clamping style.
3 test places, for contemporary pressure test.
The screwed columns assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards.
Different screw diameters let you extend valve range that could be tested (See working limits).
The rig is controlled by **SKMM-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Note: Safety perimetral protection available on request

Reaction force	:	3x90 TON 2x125 TON (lateral) 1x200 TON (Central) (See working limits table)
Valve length max	:	1200 mm
Valve length min	:	500 mm
Station to station dist.	:	650 mm
Loading height	:	970 mm
Screw stroke	:	700 mm
Loading tray	:	3 independent
Loading tray smoke	:	400 mm
Basement water vessel	:	450 Liters
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 2 – Inner radial
Dimensions	:	2200(L) x 1200(D) x 2750H)

★Working limits INNER RADIAL SEAL - ANSI valve
Stations ① and ③

	DN	4"	6"	8"	10"	12"
ANSI-150	TON					
ANSI-300	TON					
ANSI-600	TON					
ANSI-900	TON					
ANSI-1500	TON					
ANSI-2500	TON					

★Working limits INNER RADIAL SEAL - ANSI valve
Stations ②

	DN	4"	6"	8"	10"	12"	14"	16"	18"	20"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

*Note: Showed data have been calculated considering SHELL test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.

BV-3V/150LP

Multiple stations test benches

INNER RADIAL SEAL (BORE PLUGS)
3 LOADING TRAYS
DIFFERENTIATED LOAD

CLAMP
TYPE
2



! Note: Safety perimetral protection available on request

Reaction force : 150 TON TOT
1 x 150 TON
2 x 75 TON
3 x 50 TON
(See working limits table)
Valve lenght max : 950 mm
Valve lenght min : 0 mm
Loading height : 1000 mm
Loading tray smoke : 300 mm
Max flange diameter : 450 mm
Basement water vessel : 400 Liters
Terminations allowed : BW, SW, RF, RJ
Clamping style : Type 2 – Inner radial
Dimensions : 1860 (L) x 1250 (D) x 2750 (H)

*Working limits INNER RADIAL SEAL - ANSI valve
3 x 50TON 2 x 75TON 1 x 150TON

	DN	1/2"	1"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"
ANSI-150	TON												
ANSI-300	TON												
ANSI-600	TON												
ANSI-900	TON												
ANSI-1500	TON												
ANSI-2500	TON												

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.

Vertical test rig with inner radial seal clamping style.
3 test places, for contemporary pressure test.
The screwed columns assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards.
The rig is controlled by SKA-100 pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



BV-3V/150P

INNER RADIAL SEAL (BORE PLUGS)
3 LOADING TRAYS

CLAMP
TYPE
2



Vertical test rig with inner radial seal clamping style.
3 test places, for contemporary pressure test.
The screwed columns assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards.
The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Note: Safety perimetral protection available on request

- Reaction force
- :
- 150 TON TOT

50 TON/screw

(See working limits table)
- Valve lenght max
- :
- 700mm
- Valve lenght min
- :
- 0 mm
- Loading height
- :
- 900 mm
- Max flange diameter
- :
- 250 mm
- Basement water vessel
- :
- 250 Liters
- Terminations allowed
- :
- BW, SW, RF, RJ
- Clamping style
- :
- Type 2 – Inner radial
- Loading tray stroke
- :
- 300 mm
- Dimensions
- :
- 1860 (L) x 1250 (D) x 2750 (H)



Independent loading tray.

★Working limits INNER RADIAL SEAL - ANSI valve

	DN	1/2"	1"	2"	2 1/2"	3"	4"	5"	6"	8"	10"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.

BV-3CV/240SH

Multiple stations test benches
COMBINED CLAMPING, CYLINDER+SCREW
3 LOADING TRAYS

CLAMP
TYPE
3



 Note: Safety perimetral protection available on request

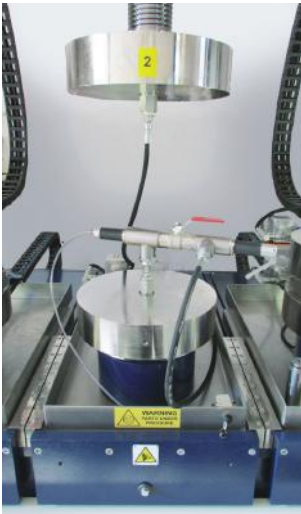
- Reaction force : 240 TON TOT
- Valve length max : 80 TON/screw (See working limits table)
- Valve length min : 1000 mm
- Loading height : 150 mm
- Distance between places : 1100 mm
- Basement water vessel : 580 mm
- Terminations allowed : 400 Liters
- Clamping type : RF, RJ, BW, SW
- Clamping force control : Type 3 - Combined
- Loading tray stroke : Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test. Reg. gain controlled by the operator
- Dimensions : 500 mm
- : 2200 (L) x 1200 (D) x 2750 (H)

*Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST

DN	1/2"	1"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										

*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only.
Press clamping style limits are based on bore size increased by 50 mm.
For more accurate information please contact our technical office or consult instructions book delivered along the rig.

Vertical test rig with, combined clamping style.
It has 3 test places, with combined clamping.
With the **hydraulic cylinder** (bottom side), operator can test flanged valves with proportional controlled press clamp, where the press force is controlled automatically according to the water pressure inside valve, and the result load is reduced to minimal terms; with the screwed columns he can test BW, SW termination using the inner radial seal.
The combination of that two different clamping styles, makes the rig suitable for all valve kinds.
Each station has its own loading tray that simplifies loading procedure. Nr.3 independents units.
The unit could be controlled by **SKA-100** pressurization skid.



Optional quick clamping for screwed ports valves.

[Patent Pending]



BV-5CV/150L COMBINED CLAMPING,
CYLINDER+SCREW

CLAMP
TYPE
3



Vertical test rig with combined clamping style.
It has 5 test places, with combined clamping.
With the **hydraulic cylinder** (bottom side), operator can test flanged valves with proportional controlled press clamp, where the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms; with the screwed columns he can test BW, SW terminations using the inner radial seal.
The combination of that two different clamping styles, makes the rig suitable for all valve kinds.
The unit could be controlled by **SKA-100** pressurization skid.
Please contact our sales office to have more information.



! Note: Safety perimetral protection available on request

- Reaction force : **150 TON**
- : **30 TON/SCREW** (See working limits)
- Valve lenght max : 650mm
- Valve lenght min : 0 mm
- Loading height : 900 mm
- Distance between places : 580 mm
- Basement water vessel : 400 Liters
- Terminations allowed : BW, SW, RF, RJ
- Clamping style : Type 3 – Combined
- Dimensions : 3280 (L) x 1250 (D) x 2750 (H)



***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

DN	1/2"	1"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
ANSI-150 TON											
ANSI-300 TON											
ANSI-600 TON											
ANSI-900 TON											
ANSI-1500 TON											
ANSI-2500 TON											

*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only.
Press clamping style limits are based on bore size increased by 50 mm.
For more accurate information please contact our technical office or consult instructions book delivered along the rig.

[Patent Pending]

BV-5V/150SH

Multiple stations test benches
INNER RADIAL SEAL (BORE PLUGS)
5 LOADING TRAYS

CLAMP
TYPE
2



Vertical test rig with inner radial seal clamping style.
5 test places, for contemporary pressure test. The screwed columns assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards.
The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig accessories, please contact our sales office to have more information.

! Note: Safety perimetral protection available on request

Reaction force	:	5 x 30 TON
Length max	:	700 mm
Length min	:	200 mm
Culumn inner clearance	:	580 mm
Loading height	:	1200 mm
Basement water vessel	:	400 Liters ca.
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 2 – Bore plugs
Dimensions	:	3280 (L) x 1250 (D) x 2750 (H)



★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

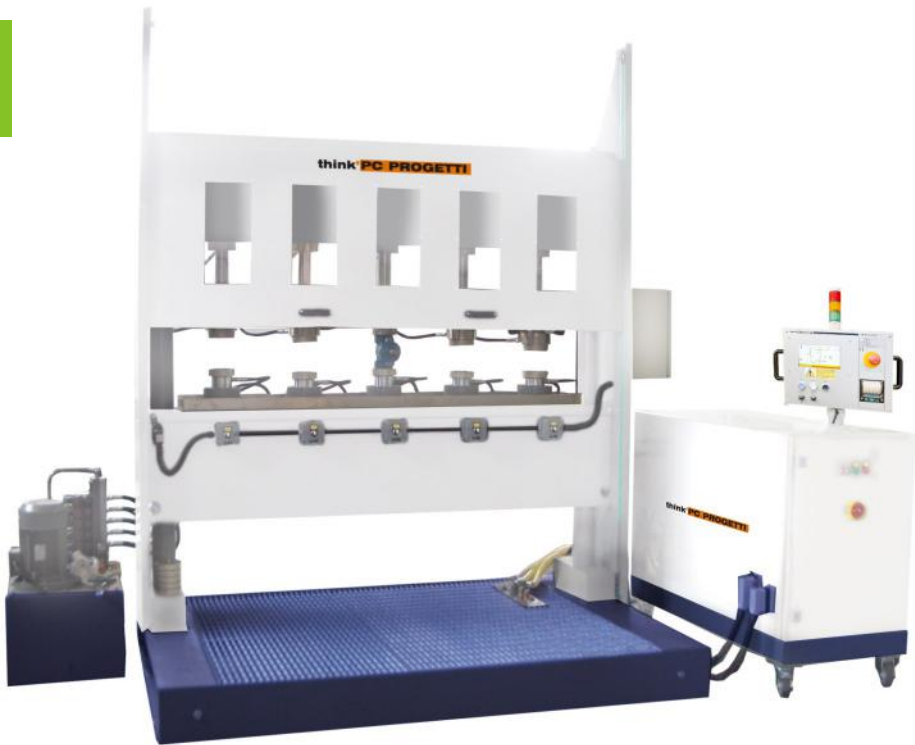
DN	1"	2"	3"	4"	6"	8"	10"	12"
ANSI-150	TON							
ANSI-300	TON							
ANSI-600	TON							
ANSI-900	TON							
ANSI-1500	TON							
ANSI-2500	TON							

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.



BV-5CV/100P COMBINED CLAMPING,
CYLINDER+SCREW

CLAMP
TYPE
3



Vertical test rig with combined clamping style.
It has 5 test places, with combined clamping.
With the hydraulic cylinder (bottom side), operator can test flanged valves with proportional controlled press clamp, where the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms; with the screwed columns he can test BW, SW terminations using the inner radial seal.
The combination of that two different clamping styles, makes the rig suitable for all valve kinds.
Two feeding tables with rolls, can simplify the loading operations (option).
The unit could be controlled by **SKA-100** pressurization skid.



- Reaction force : **100 TON**
20 TON/screw (See working limits tables).
Valve length max : 500 mm
Valve length min : 50 mm
Distance between places : 300 mm
Basement water vessel : 200 Liters
Terminations allowed : RF, RJ, BW, SW
Clamping type : Type 3 - Combined
Clamping force control : Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test. Reg. gain controlled by the operator
Dimensions : 2106 (L) x 1420 (D) x 2536 (H) (skid not included)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
ANSI VALVES, SHELL TEST**

	DN	1/2"	1"	2"	2 1/2"	3"	4"	5"	6"
ANSI-150	TON								
ANSI-300	TON								
ANSI-600	TON								
ANSI-900	TON								
ANSI-1500	TON								
ANSI-2500	TON								



*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only.
Press clamping style limits are based on bore size increased by 50 mm.
For more accurate information please contact our technical office or consult instructions book delivered along the rig.

BV-3V/30SH

Multiple stations test benches
INNER RADIAL SEAL (BORE PLUGS)
3 TEST PLACES

CLAMP
TYPE
3



Vertical test rig with inner radial seal clamping style.
5 test places, for contemporary pressure test. The screwed columns assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards.
Upper side screws are moved manually by the operator.
The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.



Option for automatic ¼ turn valve actuator.

Reaction force	:	3 x 10 TON
Length max	:	340 mm
Length min	:	50 mm
Max flange diameter	:	300 mm
Basement water vessel	:	100 Liters ca.
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 2 – Bore plugs
Dimensions	:	1200 (L) x 1490 (D) x 1950/2305 (H)

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

	DN	1/2"	1"	1 1/2"	2"	3"	4"
ANSI-150	TON						
ANSI-300	TON						
ANSI-600	TON						
ANSI-900	TON						
ANSI-1500	TON						
ANSI-2500	TON						

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size.
For further details please contact our technical office.



BV-5MV/20 UNIVERSAL CLAMPING

CLAMP
TYPE
4



Note: Safety perimetral protection availables on request

Reaction force	:	5 x 20 TON/station (see working limits table)
Valve length max	:	500 mm
Valve length min	:	0 mm
Inner column clearance	:	500 mm
Basement water vessel	:	450 Liters
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 4 – Universal
Dimensions	:	3640 (L) x 1638 (D) x 2261 (H)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL
DIN VALVES, SHELL TEST**

DN	50	100	125	150	200
PN-10	TON				
PN-16	TON				
PN-25	TON				
PN-40	TON				
PN-64	TON				
PN-100	TON				

(*)Note: Indicated values have been calculated for shell test and with nominal minimum bore size + 30mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

Vertical test rig with universal clamping style:

- Claws on RF/RJ valves
- Press clamping
- Inner radial seal.

5 test places, for contemporary pressure test. The screwed columns assure complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards. Upper side reaction bridge can be removed with a 90° rotation flag style. In this way, loading procedures are easier.

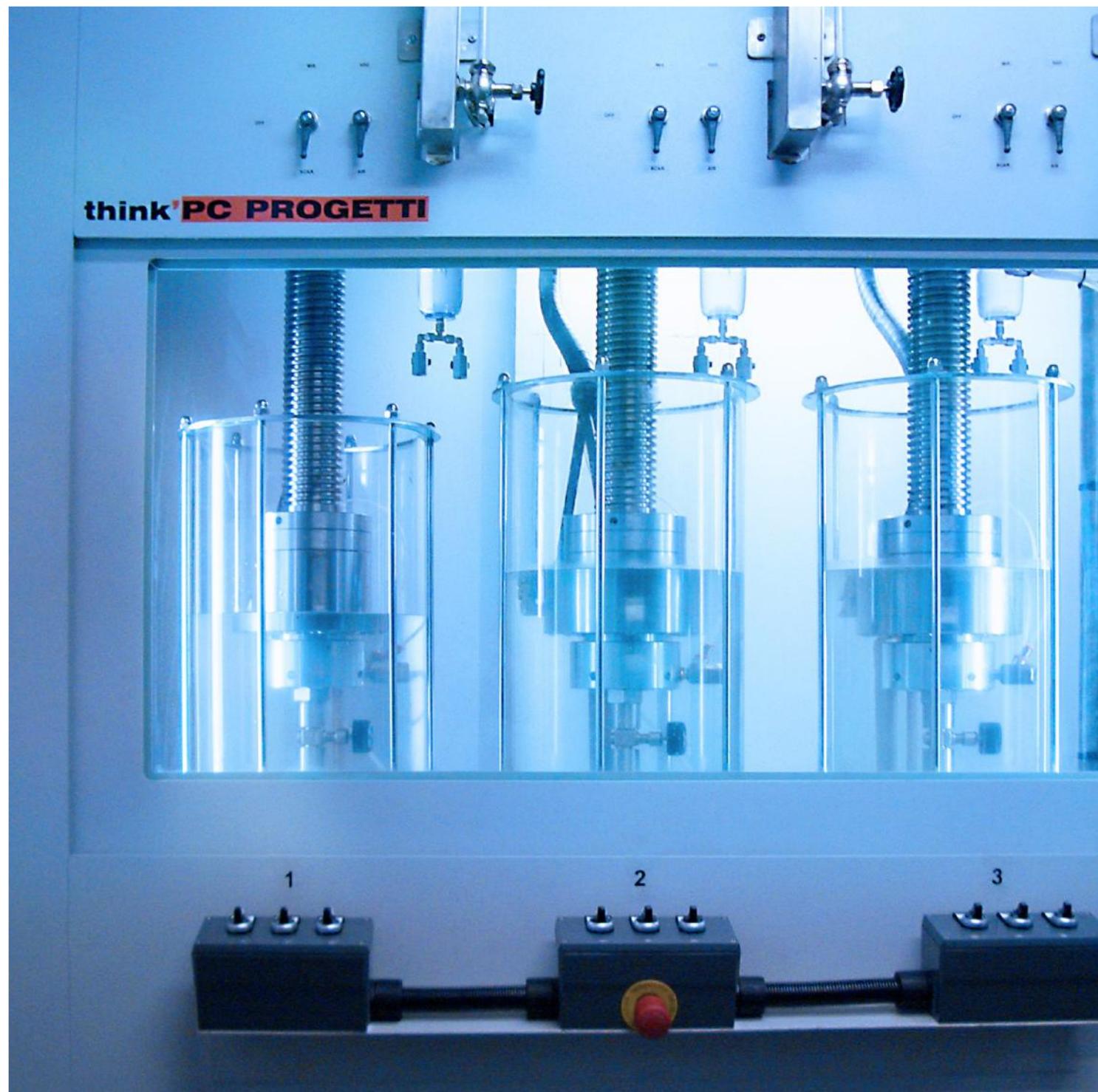
Water recovering is automatic even for check valve.

A device to open check valve is available on request. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicated technical data sheets.

The rig could be completed with several options and accessories, please contact our sales office to have more information.



[Patent Pending]





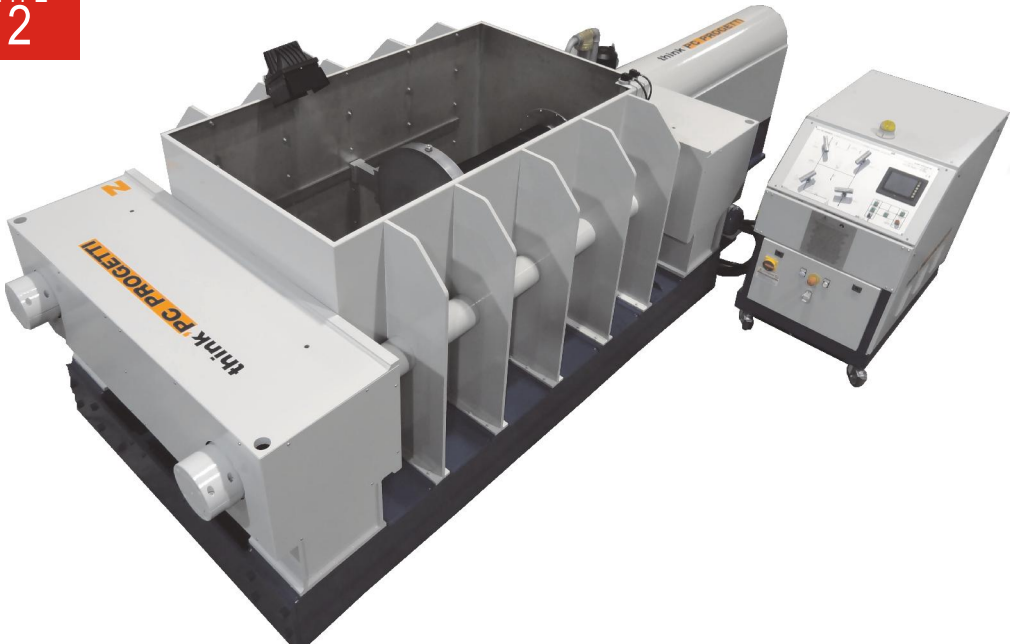
Water immersion test benches

BOI-V/450

Water immersion test benches
HORIZONTAL LOADING
INNER RADIAL SEALS (BORE PLUGS)

CLAMP
TYPE
2

Version to be installed
in concrete BUNKER



Horizontal test rig with inner radial seal clamping style. The mobile reaction bridge is moved by one screwed column that assures the complete absence of external forces on valve body. This prerogative makes it conform to the most diffuse international test standards.

A vessel around the valve can be filled with water to check visually external leakage under GAS test. The rig is controlled by SKMM/GAS pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories, please contact our sales office to have more information.

 Note: Safety perimetral protection availables on request

Reaction force	:	450 TON (See working limits table)
Valve length max	:	1550 mm
Valve length min	:	150 mm
Column inner clearance	:	1034 mm
Flow axes height	:	868mm (heigh of flow axes from soil)
Vessel inner dimension	:	1930 (L) x 1065 (D) x 1100 (H)
Vessel capacity	:	2260 L
Filling/ Recovering pumps	:	500 L/min (1000 L/min optional)
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 2 – Inner radial
Dimensions	:	4750 (L) x 1690 (D) x 1415 (H)



Option for pit installation.

WORKING LIMITS TABLE

***Operative limits for INNER RADIAL SEAL: Shell test at 1,5 x PN**

	DN	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
ANSI-150	TON												
ANSI-300	TON												
ANSI-600	TON												
ANSI-900	TON												
ANSI-1500	TON												
ANSI-2500	TON												
ANSI-4500	TON												

*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only. For more accurate information please contact our technical office or consult instruction book delivered along the rig.



BVI-3CV/60

VERTICAL LOADING,
COMBINED CLAMPING - DOUBLE MEDIA (GAS+H₂O)
PROPORTIONAL PRESS CONTROL CYLINDER + SCREW

CLAMP
TYPE
3



3 station vertical test rig with clamping style Nr.3 combined. Each test place has the possibility to perform GAS test under water having independent water vessels idraulically moved. Each water vessel has a temperature control to setup water temperature max 40°. Proportional control of pressing clamp is available as well; the press force is controlled automatically according to the water pressure inside the valve, and the result load is reduced to minimal terms. Armored steel protection with bullet proof glass guarantees highest safety level for the operator, and the best view for under water bubbles leak catching. The rig is controlled by **SKA-100** pressurization skid; to have more information about please consult dedicate technical data sheet. The rig could be completed with several options and accessories, please contact our sales office to have more information.



- Reaction force : **60 TON** 20 TON/screw (See working limits tables).
- Valve length max : 500 mm
- Valve length min : 0 mm
- Distance between places : 400 mm
- Water immersion vessel : D. 290mm x 550H
- Water Heating : Automatic 20-40°C
- Terminations allowed : RF, RJ, BW, SW
- Clamping type : Type 3 - Combined
- Clamping force control : Automatic within 5..100% interval, proportional to the hydrostatic pressure inside the valve under test. Reg. gain controlled by the operator
- Dimensions : 1960 (L) x 1040 (D) x 2640 (H) /2950 (H) MAX



Proportional press clamping available only with Hydro test.

★Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

DN	1/2"	1"	2"	2 1/2"	3"	4"
ANSI-150 TON						
ANSI-300 TON						
ANSI-600 TON						
ANSI-900 TON						
ANSI-1500 TON						
ANSI-2500 TON						

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore size + 20mm and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig


BVI-PMV/100P

Water immersion test benches
VERTICAL LOADING, INNER RADIAL SEALS
(BORE PLUGS)

CLAMP
TYPE
2



Water immersion,
Gastest rig.
It has been designed to
discover bubbles leakage in
valve casting. Water vessel is
vertically moved in order to
save testing time. A clamping
system will let the operator
mount the valve directly on
testing position.
Armored fairing system ensure
operator safety in case of
components ejecting.

 Note: Safety perimetral protection availables on request

- Reaction force : 100 TON
- Valve length max : 1000 mm
- Valve length min : 200 mm
- Clearance between columns : 1000 mm
- Vessel dimension : 750 (L) x 750 (D) x 1000 (H)
- Water vessel : 562 l.
- Clamping style : Type 2: Inner radial seal
- Dimensions : 1150 (L) x 1900 (D) x 2810 (H)

WORKING LIMITS TABLE

★ Working limits INNER RADIAL SEAL ANSI VALVE:

	DN	1/2"	1"	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"
ANSI-150	TON												
ANSI-300	TON												
ANSI-600	TON												
ANSI-900	TON												
ANSI-1500	TON												
ANSI-2500	TON												

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.



BVI-V/20

VERTICAL LOADING, INNER RADIAL SEALS
(BORE PLUGS)

CLAMP
TYPE
2



Version to be installed
in BUNKER



Water immersion, air test rig.
It has been designed to
discover bubbles leakage in
valve casting. Water vessel is
vertically moved in order to
save testing time. A clamping
system will let the operator
mount the valve directly on
testing position.



Note: Safety perimetral protection availables on request

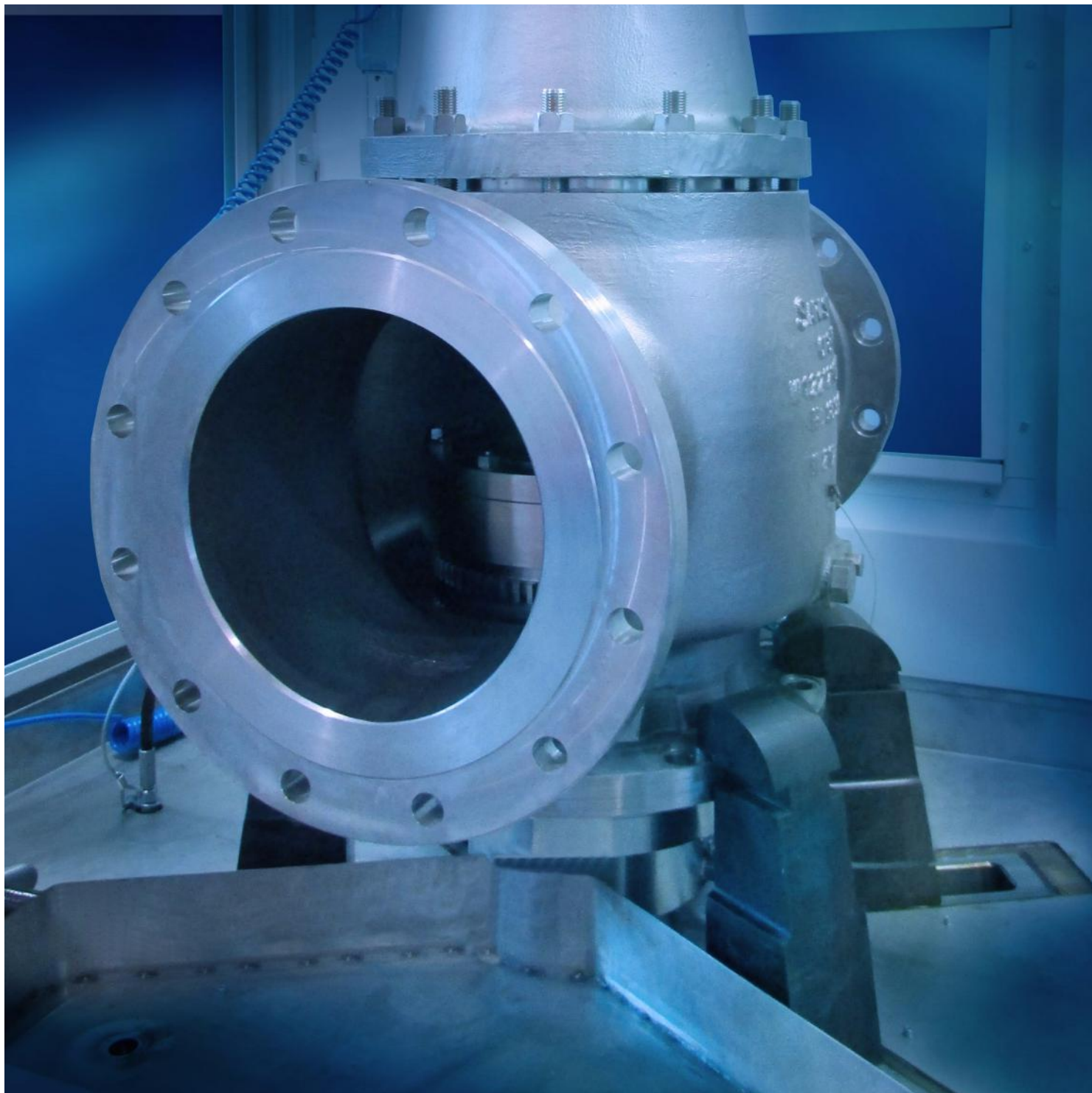
Reaction force	:	20 TON
Valve length max	:	610mm
Valve length min	:	200 mm
Clearance between columns	:	800 mm
Water immersion vessel	:	690 (L) x 880 (D) x 790 (H) vertical smoke
Clamping style	:	Type 2: Inner radial seal
Dimensions	:	1150 (L) x 1900 (D) x 2810 (H)

WORKING LIMITS TABLE

*Working limits INNER RADIAL SEAL ANSI VALVE:

	DN	1/2"	1"	2"	2 1/2"	3"	4"	5"	6"	8"	10"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										

*Note: Showed data have been calculated considering Shell test pressure and nominal bore size according to API-6D.
For further details please contact our technical office.





Test rigs for pressure safety valves (PSV), pressure relief valves and breather valves, have three main prerogatives:

- Clamping is performed by claws which have the benefit not to apply mechanical effort on valve body, and mechanical strength can be applied in same way of real application in order to verify resistance of mechanical design of flanged ends.
- Pressurization must be supported by adequate volume vessel able to "supply" enough discharge flow to verify correct seat lift and blow down ability of the components under test.
- Full Surrounding bullet proof protection fairing (roof include) will ensure best operator safety level.

Rigs described in these pages are available for both media water & GAS (Nitrogen/Air) with different styles of claws clamping: manual fixing, manual auto-centering, hydraulic auto-centering.

Standard rigs are available up to 16" flanged valves, with different nominal loads as indicated in working limits tables. Different sizes range is available on request, as well as tilt ability design even for large sizes range. Bullet proof protection perimeter can be added as option to ensure maximum safety level to the operators. Several process options can be selected to make performance & leakage test procedure according to API standards rules. Electrical & pneumatic driven compressor is available for GAS supply. Dedicated software package **TestREC-PSV** is available to collect test data, store them in test data base and to print out complete certification of valve performance (Simmer points, Pop pressure, Re-Seat pressure, Blow down, Seat Lift measure & Leak rate). Computer console with Windows computer and laser printer is available as well.

PSV PRV test benches

BV-M/90SH

PSV - PRV test benches
CLAWS CLAMPING
WITH FULL SURROUNDING FAIRING SYSTEM

CLAMP
TYPE
5



- Reaction force : **90 TON**
(See working limits table)
- Flange max Ø : 530 / 650 / 860mm
- Flange min Ø : 90mm
- Flange thickness max : 140mm
- Tilt angle : FIXED (no tiltable)
- Basement water vessel : 200 l.
- Terminations allowed : RF, RJ
- Clamp type : Type 5 - Hydraulic cylinder w/claws
- Clamping force control : On/Off type, Range 5..100 %
- Reference standard : SO, API, ASME, ASTM
- Pneumatic supply : 6.5 bar @ 1100 NI/min
- Electrical supply : Dry air not lubricated
- Dimensions : 1465(L) x 2100(D) x 1900(H)

Test rig with claws clamping.
Test of RF or RTJ valves could be executed in the real working conditions. The clamping is hydraulic on/off type.
This prerogative makes it suitable for PSV valves and for flow valves.
The auto-centering movement of claws and tilting is controlled hydraulically or pneumatically (as option).
In the basement there is a vessel for test fluid and additional vessel are available.
Full Surrounding **bullets proof** protection fairing (roof included) will ensure best operator safety level.
It can be controlled by standard pressurization skid; in the picture you can see mod. **SKMM-100-G**



DN	1"	2"	3"	4"	6"	8"	10"	12"	14"	16"
bar	700	700	678	510	287	183	127	94	65	52



BVR-M/90

CLAWS CLAMPING
WITH PROTECTION PERIMETER
AND 90° TILT ABILITY

CLAMP
TYPE
5



Test rig with claws clamping.
Test of RF or RTJ valves could
be executed in the real working
conditions. The clamping is
hydraulic on/off type.
This prerogative makes it
suitable for PSV valves and for
flow valves.
The auto-centering movement of
claws and tilting is controlled
hydraulically or pneumatically
(as option).
In the basement there is a vessel
for test fluid and additional
vessel are available.
Tilting ability of clamping plateau
improve product loading
capability, and allow bullets
proof protection fairing (roof
include) will ensure best
operator safety level.
It can be controlled by standard
pressurization skid; in the picture
you can see mod. **SKMM-100-G**



Reaction force	:	90 TON
	:	(See working limits table)
Ø flange max	:	530 / 650 / 860mm
Ø flange min	:	90mm
Flange thickness max	:	140mm
Tilt angle	:	0° +90°
Basement water vessel	:	200 l.
Terminations allowed	:	RF, RJ
Clamp type	:	Type 5 - Hydraulic cylinder w/claws
Clamping force control	:	On/Off typeRange 10..100 ton
Reference	:	standard ISO, API, ASME, ASTM
Pneumatic supply	:	6.5 bar @ 1100 NI/min
	:	Dry air not lubricated
Electrical supply	:	3PH + T400V@50Hz, 2KW
Dimensions	:	1465(L) x 2100(D) x 1900(H)

DN	1"	2"	3"	4"	6"	8"	10"	12"	14"	16"
bar	700	700	678	510	287	183	127	94	65	52

BV-M/60

PSV - PRV test benches
HIDRAULIC AND PNEUMATIC
TEST BENCHES FOR PSV VALVES

CLAMP
TYPE
5



- Reaction force : **60 TON**
(See working limits table)
- Flange max : 530 / 650 / 860mm
- Flange min : 90mm
- Flange thickness max : 90mm
- Tilt angle : FIXED (no tiltable)
- Basement water vessel : 200l
- Terminations allowed : RF, RJ
- Clamp type : Hydraulic cylinder w/claws
Clamping force control
On/Off type
- Range : 5..100 %
- Electrical supply : 3PH + T400V@50Hz, 2KW
- Dimensions : 1250 (L) x 700 (D) x 1250 (H)

DN	1"	2"	3"	4"	6"	8"	10"	12"	14"	16"
bar	700	700	452	340	191	122	85	62	43	35

SKA-PSV



Pressurization skid dedicated to small size PSV calibration procedures. It is controlled by PLC and a touch screen LCD terminal. A local printout on 24cln thermal paper is available as option. Dedicated software for PSH set-point, pop and reseal pressure value. It has water reservoir inside cabinet in order to be independent during test performance. A fine regulation for water or gas pressurization, complete the standard furniture. Designed for screwed port PSV valves.

- Allowed size : NPT 1/2", 3/4", 1", 1 1/2"
(clamp stand for flanged valve available on request)
- Allowed fluid : H2O + synt. oil 5%, N2, AIR
- MAX pressure : 200 bar / 650 bar / 1000 bar
- Water Booster : N°1 Booster 0,3HP
(2° booster option)
- Fine regulation : Included
- Internal surge vessel : Optional
- Internal water reservoir : 50 L
- Reference standard : ISO-4126
- Connection : 1/4" - 1/2" - 3/4" - 1"
- Manometer : Digital 4dg cl. 0,15%
- Filling pump : Centrifugal 70L/min
- Electrical supply : 3PH + T, 380V@50Hz 1KW
- Gas supply : Max 200 bar
- Dimensions : 600 (L) x 1160 (D) x 1460 (H)



SKMA-100/PSV-2

HYDRAULIC AND PNEUMATIC
PRESSURIZATION SKID FOR
PSV VALVES

CLAMP
TYPE
5



Pressurization skid dedicated to small size PSV calibration procedures. It is controlled by PLC and a touch screen LCD terminal. Dedicated software for set-point, pop and reseal pressure value. It has water reservoir inside cabinet in order to be independent during test performance. A fine regulation for water or gas pressurization, complete the standard furniture.

Claws concentric command to agevolate the clamping procedure.

Armoured full surrounding fairing system ensure operator safety.

- Reaction force
- :
- 20TON
(See working limits table)
- Flange max Ø
- :
- 400mm
- Flange min Ø
- :
- 90mm
- Flange thickness
- :
- max 65mm
- Terminations allowed
- :
- RF, RJ
- Clamping force control
- :
- On/Off style - Hydraulic
- Reference standard
- :
- ISO-API-ASME-ASTM
- Pneumatic supply
- :
- 6.5 bar @ 1100 NI/min
Dry air not lubricated
- Electrical supply
- :
- 3PH + G 380V@50Hz, 5.5KW
- Dimensions
- :
- 1100 (L) x 1250 (D) x 2150 (H)

DN	½"	1"	2"	3"	4"	6"	8"
bar	1410	842	388	222	146	76	46

SKMM-100/PSV

CLAMP
TYPE
5



- Reaction force
- :
- 10 TON
(See working limits table)
- Flange max Ø
- :
- 300mm
- Flange min Ø
- :
- 90mm
- Flange thickness max
- :
- 40mm
- Tilt angle
- :
- FIXED (no tiltable)
- Terminations allowed
- :
- RF, RJ
- Clamping force control
- :
- Clamp type DIN T-Bolts
- Reference standard
- :
- ISO, API, ASME, ASTM
- Pneumatic supply
- :
- 6.5 bar @ 1100 NI/min
Dry air not lubricated
- Electrical supply
- :
- 3PH + G 380V@50Hz, 2KW
- Dimensions
- :
- 700L x 1250 P x 1900 H

DN	1"	2"	3"	4"
bar	226	127	75	56





Cryogenic & Helium microleakage test benches

SKMA-100/CRYO

Cryogenic test benches

CRYOGENIC TEST

GAS PRESSURIZATION SKID

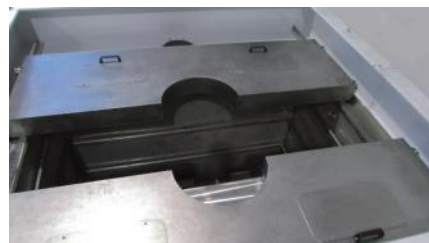


Helium pressurization skid dedicated to cryogenic temperature leakage test. Local instrumentation about 5 temperatures inside test vessel is included. Test is performed as requested by BS-6364 standard. A Serial interface port allows the user to connect a personal computer to **TestREC6.6.0-CRYO** certification software installed.

Max Working pressure He	: 1050 bar
Min Working pressure He	: 20 bar
GAS Booster opt	: 150:1
Process valve	: "Metal to metal" needle valve & "soft seat" bypass valve
Process style	: Bidirectional
HP Fluid allowed	: Helium (He)
Control system	: Manual valve & Electrical lighted pushbuttons installed on graphical synoptic panel
Pressure measure	: 4-20mA Pressure transmitter+7-seg Digital Display
Temperature measure	: N°5 Temperature sensor
Ref. Standard	: BS-6364 (CRYO TEST)
Serial Interface	: RS-485 MODBUS PROTOCOL
Certification software	: TestREC - CRYO
Seat leakage detection GAS	: Volumetric bubbler
Process Connections	: MP 1/4"
Service air supply	: 7bar @ 2000 L/min Other available on request
Electrical supply	: 2Ph+T 220V@50Hz 1KW Other available on request
Dimensions	: 700 (L) x 1120 (D) x 1120 (H)



SKMM-50/TC + CV MOVABLE CRYOGENIC TEST VESSEL WITH TEMPERATURE CONTROL PANEL



Cryogenic test vessel is now available with temperature control panel.

On – off style temperature control is able to fix cryogenic bath temperature in the range 0 / -196 °C.

Nr.5 temperatures transmitters are installed: 1 for bath temperature, 4 for custom applications.

All temperature signals are connected to certification software **TestREC-CRYO**

Temperature control	: Digital On/Off style
Temperature measure	: Nr. 4 PT100
Temperature range	: -196°C / +150°C
Exhaust Vapours trap	: Included
Cryo Vessel Inner Dimensions	: CB-350 350 Liters - 1000 (L) x 500 (D) x 700 (H)
	: CB-1000 1070 Liters - 1500 (L) x 750 (D) x 950 (H)
	: CB-3000 3000 Liters - 2000 (L) x 1000 (D) x 1500 (H)



[Patent Pending]

Helium microleakage test benches

BV-5C He/10

5-WAY AUTOMATIC PRESS CLAMPING
HIGH VACUUM MICROLEAKAGE GAS TEST



Vertical test bench with press clamping system for 5 valves ports (included inner seat). It is able to perform Helium microleakage test on natural gas pressure reducer casting body. Helium test is performed by pressurizing the casting at low pressure (5 bar abs) under high vacuum chamber. The rig is able to catch leakages visible by high pressure gas test with soap bubbles detections. This prerogative allows the customers to reduce operational risk avoid expensive gas test bunkers. The rig is controlled by **SKA-100/He** pressurization SKID. Please read dedicated data sheets for further information.

Reaction force	:	10 TON
Products allowed.	:	Natural GAS pressure reducer Range ½"-3" (DN15-DN80)
Valve length max	:	400 mm
Valve length min	:	140 mm
H max	:	400 mm
H min	:	140 mm
Terminations allowed	:	BW, RJ
Clamping style	:	Type 1 – Press Clamping 5 ways Inlet Outlet Top Bottom Inner SEAT
Electric supply	:	3PH + T, 380V@50Hz, 10KW
Dimensions	:	3500 (L) x 2500 (D) x 2200 (H)



5 way clamping.



BV-CHe/30

PRESS CLAMPING
HIGH VACUUM MICROLEAKAGE GAS TEST

CLAMP
TYPE
1



Vertical test with press clamping system. It is able to perform Helium microleakage test . Helium test is performed by pressurizing the valve @ 1050 bar under high vacuum chamber. The rig is able to catch leakages visible by high pressure gas test with soap bubbles detections (white spot). Armored fairing system ensure operator safety. The rig is controlled by SKA-100/He pressurization SKID. Please read dedicated data sheets for further information.

Reaction force	: 30 TON
Products allowed.	: High pressure Valve / Fittings
Range	: 1/4" - 1"
Valve length max	: 200 mm
Valve length min	: 40 mm
Clamping style	: Type 1 – Press Clamping
Electric supply	: 3PH + T, 380V@50Hz, 10KW
Dimensions	: 1400 (L) x 880 (D) x 3000 (H)

SKA-100/He



SKID for micro-leakage HELIUM test for castings. It has been designed to control full automatic clamping rigs based on overpressure leak test of "Integral Method – Vacuum Hood Test". Casting is pressurized at low pressure with helium (5 bar abs) and a vacuum chamber which is evacuated by an auxiliary pump and which is connected to a leak detector (spectrometer) is used as the hood. The search of escaping gas through the leaks is converted in electrical signals which are immediately displayed. This method permits the detection of very small leaks and is especially suited for automatic industrial leak detection. The skid includes pre-test with air pressure drop to verify the absence of macro-leakage and evacuation service pump to remove air from test piece and recover helium (option).



High vacuum Pump (Vaccum Hood)	: 75 m³/h @ 5x10 ⁻³ mbar MAX
Service vacuum pump	: 40 m³/h @ 0.5 mbar
Max working pressure	: 1050 bar
Smallest detectable leak	: 1 x 10 ⁻⁷ mbar l s ⁻¹ (other on request)
Electric supply	: 3PH + T, 400V@50Hz, 10KW
Dimensions	: 600 (L) x 1300 (D) x 1700 (H)

[Patent Pending]







LAB

Mobile workshop for valve repair and test

LAB

MOBILE WORKSHOPS FOR
VALVE TEST & REPAIR

LAB-10
LAB-20
LAB-40




Workshop unit built into 10/20/40 feet container.

Mobile valve repairing workshop, equipped with a complete tools set to repair & test valve onsite.

The unit makes available all supply lines (electrical & pneumatic) for a complete mechanical workshop.

Generators are installed in separate container area, accessible from outside. Separated from workshop area. It has 160x160 H-Beam structure, about 1 Ton capacity over head crane with sliding beam running on container full length. A swing out crane installed on entrance door ensures best access to the equipment. Here following the available equipment inside the workshops:

Electrical Power Generator	: Diesel Engine generator, Silent type 380/220V 50Hz, 33KW 3PH & 2PH power sockets (4x)
Compressed air Generator	: Electrical compressor Air Flow : 1400NL Max output pressure : 10 bar Power Supply : 400V-50Hz, 11 KW Air Reservoir : 300 l Vertical design. Refrigeration air dryer included
Air conditioning equipment	: 100m³/h with with HyperFilter system
Mechanical equipment installed	: Compact floor drill Universal Centre lathe machine Bench Grinder with Stand Electrical Hoist (1 TON) Adjustable torque wrenches. Impact drill machine Electric driven Straight grinder Mechanical Bench vice 8" Complete tools set for industrial maintenance. Universal workbenches Swing doors cabinets
Lifting Equipments	: Over Head travelling crane 1 Ton capacity Swing Crane with 2m swing out arm 1 Ton capacity.
Non destructive test equipment	: Magnetic particle inspection (MT) - Liquid Penetrants (PT)
Version 	: Available on request (zone II)





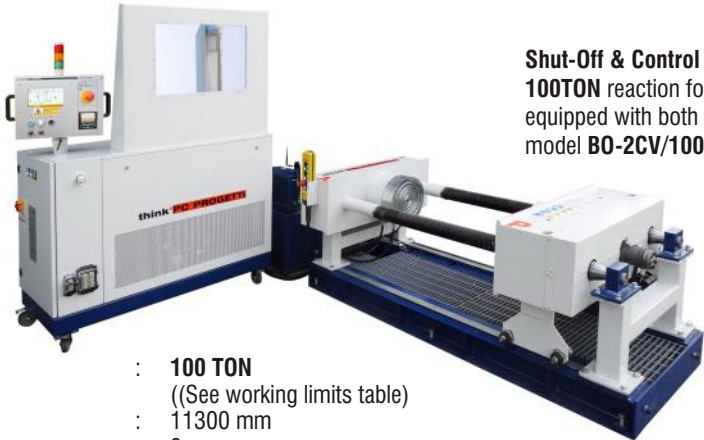
		LAB-10	LAB-20	LAB-40
Electrical Power generator		NONE	NONE	Diesel Engine generator, Silent type 400V 50Hz, 45KWA 3PH & 2PH power sockets.
ELECTRICAL panel & LIGHTING		INCLUDED	INCLUDED	INCLUDED
Compressed air generator		NONE	NONE	Electrical compressor Air Flow : 1400NL Max output pressure : 10 bar Power Supply : 400V-50Hz, 11 KW
Air Dryer		Optional	Optional	Refrigeration type. Air flow: 100 m3/h, connection ¾", max inlet pressure 16 bar
Air TANK		NONE	NONE	300L, Vertical
Internal AIR distribution		INCLUDED	INCLUDED	INCLUDED
High pressure GAS generator		NONE	NONE	NONE
Air conditioner equipment		External Supply Line • 9,500 BTU • Dehumidification (Pts/Hr) 3.0 • 280 CFM	External Supply Line • 9,500 BTU • Dehumidification (Pts/Hr) 3.0 • 280 CFM	External Supply Line • 14000 BTU • Dehumidification (Pts/Hr) 3.0 • 420 CFM
Mechanical equipment installed		- Nozzle Remover MAX 6" - Portable Grinding & lapping machine - Universal work bench w/ vice 8" - Office bench - Tools Cabinets - Fire extinguisher.	- Nozzle Remover MAX 6" - Portable Grinding & lapping machine - Universal work bench w/ vice 8" - Office bench - Tools Cabinets - Fire extinguisher. - Impact drill machine Electric driven - Straight grinder - Complete tools set for industrial maintenance.	- Nozzle Remover mandrin MAX 12" - Portable Grinding & lapping machine - Grinding machine for GATE VALVES & SWING CHECK VALVES. - Universal work bench w/ vice 8" - Office bench - Tools Cabinets - Swing doors cabinets - Compact floor drill - Universal Centre lathe machine. - Impact drill machine Electric driven - Straight grinder - Complete tools set for industrial maintenance. - Fire extinguisher.
Lifting Equipments	Overhead travelling CRANE	NONE	0.5 TON w/Manual Hoist	1 TON w/Electrical Hoist (1 TON)
	Swing CRANE	0,5 TON w/Manual Hoist	0,5 TON w/Manual Hoist	1 TON w/Electrical Hoist (1 TON)
VALVE TEST EQUIPMENT		PSV test bench: BV-M/60-LAB Up to 6" Size	Control Valve test bench: B045-2CV/100-LAB Up to 12" Size PSV test bench: BV-M/60-LAB	Control Valve test bench: B045-2CV/100-LAB Up to 12" size PSV test bench: BV-M/60-LAB
Nondestructive test		Optional	Optional	Magnetic particle inspection (MT kit) & Liquid penetrants (PT kit).
Dimension	Std Size	10'	20'	40'
	External	2438 (L) x 2991 (D) x 2591 (H)	2438 (L) x 6058 (D) x 2591 (H)	2438 (L) x 11956 (D) x 2500 (H)
	Internal	2344 (L) x 2831 (D) x 2376 (H)	2344 (L) x 5898 (D) x 2376 (H)	2344 (L) x 11796 (D) x 2376 (H)
	Access door	2310 (L) x 2280 (H)	2310 (L) x 2280 (H)	2310 (L) x 2280 (H)
Superposition		Allowed – Max 2 units	Allowed – Max 2 units	Allowed – Max 2 units
Floor		Plywood with plastic coating, thickness 20 mm water resistant made tight with elastic resin Covered Chequered aluminium plate, 4mm thickness. Max load 1500 Kg/m2	Plywood with plastic coating, thickness 20 mm water resistant made tight with elastic resin Covered Chequered aluminium plate, 4mm thickness. Max load 1500 Kg/m2	Plywood with plastic coating, thickness 20 mm water resistant made tight with elastic resin Covered Chequered aluminium plate, 4mm thickness. Max load 1500 Kg/m2
CT Entrance & Window		1 Entrance door	1 Entrance door	1 Entrance door + 1 side door
Outside color		WHITE RAL 7035 & Blu RAL 5003	WHITE RAL 7035 & Blu RAL 5003	WHITE RAL 7035 & Blu RAL 5003
Working location		Onshore	Onshore	Onshore
Working temperature		0° - 45° C (others on request)	0° - 45° C (others on request)	0° - 45° C (others on request)



LAB

BO-2CV/100-LAB DOUBLE SCREWED COLUMN + CYLINDER
COMBINED CLAMPING, LOW FLOW AXES HEIGHT

CLAMP
TYPE
3



Shut-Off & Control valves test rig.
100TON reaction force, **Combined clamping**, horizontal test bench
equipped with both bore plugs & proportional press clamping style.
model **BO-2CV/100 LAB & SKM-100**.

- Reaction force
- : 100 TON
((See working limits table)
- Valve length max
- : 11300 mm
- Valve length min
- : 0 mm
- Column inner clearance
- : 900
- Flow axes height
- : 650 mm from soil
- Basement water vessel
- : 170 Liters
- Terminations allowed
- : BW, SW, RF, RJ
- Clamping style
- : Type 3 – Combined
Inner radial clamping
& Pressing clamping with
Proportional control.
- Dimensions
- : 2600 (L) x 1290 (D) x 910 (H)
(Mechanical structure)

*Working limits for **PRESS CLAMPING** and **INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

DN	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
ANSI-150	TON									
ANSI-300	TON									
ANSI-600	TON									
ANSI-900	TON									
ANSI-1500	TON									
ANSI-2500	TON									

*Note: Indicated values have been calculated for shell test and with API-6D nominal minimum bore size and they have to be considered as reference only.
Press clamping style limits are based on bore size increased by 50 mm. For more accurate information please contact our technical office or consult instructions book delivered along the rig.

BV-M/60-LAB CLAWS CLAMPING
LOW LOADING HEIGHT

CLAMP
TYPE
5



- Reaction force
- : 60 TON
(See working limits table)
- Ø flange max
- : 530 / 650 / 860mm
- Ø flange min
- : 90mm
- Flange thickness max
- : 90mm
- Tilt angle
- : FIXED (no tiltable)
- Basement water vessel
- : 200l
- Terminations allowed
- : RF, RJ
- Clamp type
- : Hydraulic cylinder w/claws
- Clamping force
- : 200l
- Range
- : 5..100 %
- Electrical supply
- : 3PH + T400V@50Hz, 2KW
- Dimensions
- : 1250 (L) x 700 (D) x 650(H)

High Pressure air compressor up to 300 bar with 150 L
reservoir vessel. Surge vessel 200 L for blow down supply

DN	1"	2"	3"	4"	6"	8"	10"	12"	14"	16"
bar	700	700	452	340	191	122	85	62	43	35



BO45-2CV/100

LAB

with 45° column disposal

DOUBLE SCREWED COLUMN + CYLINDER

COMBINED CLAMPING

LOW FLOW AXES HEIGHT

CLAMP

TYPE

3

Horizontal test rig with combined clamping style: inner radial seal + press clamping facilities. The mobile reaction bridge is moved by two screwed columns that assure complete absence of external forces on valve body and an hydraulic cylinder can make pressing clamping with or without proportional control. This prerogative makes it conform to the most diffuse international test standards. The rig is controlled by SKA-100 pressurization skid; to have more information about please consult dedicated technical data sheets. The rig could be completed with several options and accessories.



Note: Safety perimetral protection available on request

Reaction force	:	100 TON
Length max	:	1300 mm
Length min	:	0 mm
Column inner clearance	:	900 mm
Flow Axis Height	:	700 mm
Basement water vessel	:	170 Liters ca.
Terminations allowed	:	BW, SW, RF, RJ
Clamping style	:	Type 3 – Combined
Dimensions	:	2250 (L) x 1016 (D) x 1200 (H)

***Working limits for PRESS CLAMPING and INNER RADIAL SEAL**
ANSI VALVES, SHELL TEST

	DN	1"	2"	3"	4"	6"	8"	10"	12"	14"	16"
ANSI-150	TON										
ANSI-300	TON										
ANSI-600	TON										
ANSI-900	TON										
ANSI-1500	TON										
ANSI-2500	TON										

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore **size + 50mm** and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig

[Patent Pending]







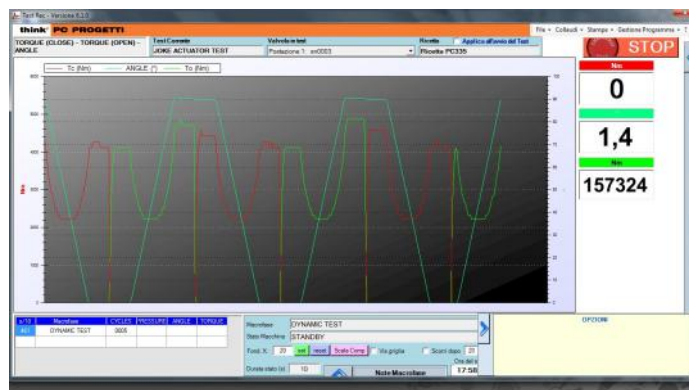
$\frac{1}{4}$ turn actuator static and dynamic torque test benches

Scotch Yoke $\frac{1}{4}$ turn actuator test bench

STATIC TORQUE PEAK MEASURE
AND ENDURANCE DYNAMIC TEST



Scotch YOKE $\frac{1}{4}$ turn actuator test bench, able to perform TORQUE test in static positions and dynamic endurance full load simulation.
It is controlled by **SKMM-100** pressurization skid and test data are collected by TestREC control software.





BPA-250K
BPA-400K

STATIC TORQUE PEAK MEASURE
AND ENDURANCE DYNAMIC TEST

	BPA-250K	BPA-400K
Nominal TORQUE	: 250.000 Nm	400.000 Nm
Working range	: 10 – 100%	10 – 100%
Torque measurement	: Indirect (load cell)	Indirect (load cell)
Angle range	: 0.0° - 90.0°	0.0° - 90.0°
ZERO adjustment	: -5.0° / +5.0°	-5.0° / +5.0°
Bidirectional reaction force	: INCLUDED	INCLUDED
Static torque measuring angle res.	: 0,1°	0,1°
Static torque fixed point (PIN BLOCK)	: Available as option	Available as option
General accuracy	: 0.5% F.S.	0.5% F.S.
Dynamic test simulation	: Dynamic brake	Dynamic brake
Rotation speed	: 0,1 – 2,0 °/sec (Other on request)	0,1 – 1,5 °/sec (Other on request)
Dimensions	: 2700 (L) x 2600 (D) x 1600 (H)	2700 (L) x 3600 (D) x 1600 (H)



Scotch Yoke $\frac{1}{4}$ turn actuator test bench

BPA-10K
BPA-40K
BPA-130K

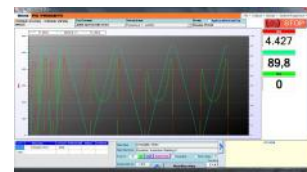
STATIC TORQUE PEAK MEASURE
AND ENDURANCE DYNAMIC TEST


BPA-10K

Nominal TORQUE	: 10000 Nm
Torque measurement	: Direct / Indirect
Working range	: 10 – 100%
Angle range	: 0.0° - 90.0°
ZERO adjustment	: -5.0° / +5.0°
Bidirectional reaction force	: INCLUDED
Static torque measuring angle res.	: 0,1°
Static torque fixed point (PIN BLOCK)	: Available as option
General accuracy	: 0.5% F.S.
Dynamic test simulation	: Dynamic brake
Rotation speed	: 0,1 – 3,5 °/sec (Other on request)
Dimensions	: 1540 (L) x 1770 (D) x 900 (H)

Scotch YOKE $\frac{1}{4}$ turn actuator test bench, able to perform TORQUE test in static positions and dynamic endurance full load simulation.

It is controlled by **SKMA-100** pressurization skid and test data are collected by TestREC6.6.0-ACT control software.



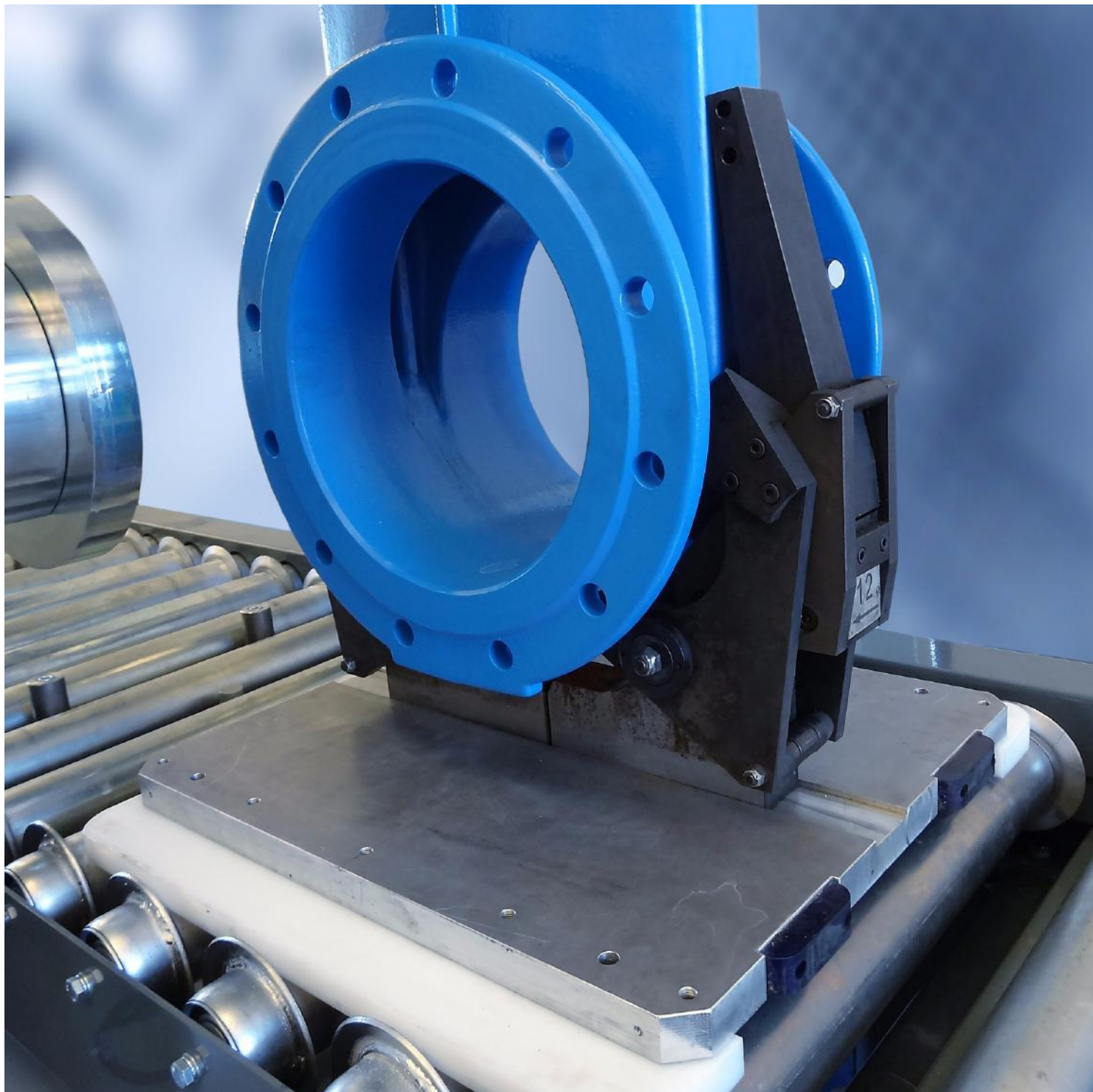
**BPA-40K**

Nominal TORQUE	: 40000 Nm
Torque measurement	: Direct / Indirect
Working range	: 10 – 100%
Angle range	: 0.0° - 90.0°
ZERO adjustment	: -5.0° / +5.0°
Bidirectional reaction force	: INCLUDED
Static torque measuring angle res.	: 0,1°
Static torque fixed point (PIN BLOCK)	: Available as option
General accuracy	: 0.5% F.S.
Dynamic test simulation	: Dynamic brake
Rotation speed	: 0,1 – 2,9 °/sec (Other on request)
Dimensions	: 2300 (L) x 2316 (D) x 1150 (H)

**SK-PC/01****SKMA-100****BPA-40K****BPA-130K****SKMA-100****SK-PC/01****BPA-130K**

Nominal TORQUE	: 130000 Nm
Torque measurement	: Direct / Indirect
Working range	: 10 – 100%
Angle range	: 0.0° - 90.0°
ZERO adjustment	: -5.0° / +5.0°
Bidirectional reaction force	: INCLUDED
Static torque measuring angle res.	: 0,1°
Static torque fixed point (PIN BLOCK)	: Available as option
General accuracy	: 0.5% F.S.
Dynamic test simulation	: Dynamic brake
Rotation speed	: 0,1 – 2,5 °/sec (Other on request)
Dimensions	: 2300 (L) x 2516 (D) x 1150 (H)







Special Applications & Skids

Special Applications

SKC-100

ENDURANCE CYCLING
PRESSURIZATION SKID



Automatic skid for endurance test on trunnion mounted ball valves. System supplies a total leakage flow of 0.7L/min (0,5 L/min on downstream side + 0,2 L/min from cavity). Control System will be interfaced directly to a axial piston motor able to perform open/close movement on valve under test with adjustable torque. Cycling is controlled by PLC and a configuration LCD touch screen.

Allowed fluids	:	H2O + olio em. 5%
Supply water pressure	:	2.5 - 8 bar
MAX working pressure	:	250 bar
Accumulator	:	60 L
Compression ratio	:	60:1
Motor torque	:	4,52Nm/bar, MAX 45 Kgm
Connection	:	NPT 3/8"
Pressure measure	:	LCD Touch screen
Electrical supply	:	2PH + T, 220V@50Hz
Dimension	:	600 (L) x 1150 (D) x 1500 (H)

SKMM-100/FS

FIRE SAFE TEST
PRESSURIZATION SKID



PRESSURIZATION SKID for FIRE SAFE TEST according to API-607 / API 589 / API – 6FA
This pressurization skid has all process equipment to perform FIRE SAFE test on valve with stem packing or quarter turn shutoff valves. It has up to 8 thermocouples with calorimeter cubes (where necessary). Internal water reservoir of 120L. max working pressure 1600 bar. Full digital report through RS232 MODBUS RTU connection, data collection with certification software TestRECFS-M.

Allowed fluids	:	Plenty water
Water reservoir	:	internal 120L
Max working pressure	:	700/ 1050/ 1380/ 1600 bar
Filling flow	:	70L/min
Air driven booster ratio	:	1:100/ 1:150/ 1:225 / 1:250
Reference std	:	API-607 / API-589 / API-6FA
Temperature measure	:	Nr. 5 TC type K with Digital display
Pressure measure	:	Nr. 2 pressure transmitters with Digital Display.
Water level measure	:	Nr. 1 Pressure transmitter with Digital Display



SKMM-100/HC

HYBERBARIC CHAMBER
PRESSURIZATION SKID



Pressurization skid able to control hyperbaric chamber.
Up to 10000 m dept simulation, with 40L volume compesation with high pressure accumulators.
PSV protection on max dept . GAS & Water test facilities included.
Automatic Filling/Recovering of water into hyperbaric chamber.

Simulated dept	: 300M, 1000m, 4500 m, 7000 m, 10000 m
Compensated volume	: 10L / 40L / 200L
Gas test	: Up to 1000 bar
Water test	: Up to 2000 bar
Filling flow	: 120 L / 470 L / 910 L min
Dimensions	: 600 (L) x 1150 (D) x 1500 (H)

SKMM-100/UHP

SKMM-100/UHP2
ULTRA HIGH PRESSURE
PRESSURIZATION SKID



Ultra high pressure hydraulic pressurization skid, up to 10000 bar
High pressurization ratio liquid pump along with reliable needle valves makes this skis suitable for high pressure systems. Emergency pressure release is included as well.

	SKMM-100 UHP	SKMM-100 UHP2
Allowed Media	: Water + Oil	Water + Oil
Max Working pressure	: 5000 bar	10000 bar
Filling FLOW ability	: 1 L/min	1 L/min
Output connections	: 3/8" UHP	3/8" UHP
Internal liquid reservoir	: 50L	50L
Dimensions	: 700 (L) x 1120 (D) x 1120 (H)	700 (L) x 1120 (D) x 1120 (H)



Production line automatic test

BO-CV/40SA

CLAMP
TYPE
1





Think'PC PROGETTI's new test unit designed to perform high speed API / DIN full valve test procedures directly on 2 ways valve production line. Special product supports pallets rolling on conveyor, allowing perfect alignment. Clamping procedure is fully automatic with 4-axes positioning control, with proportional press clamping to reduce mechanical stress to minimum terms. Valve Opening / Closing movements are even automatic, controlled by torque programmable hydraulic actuator. Rig is configured by TestREC Windows based software package that can store recipes & test data of each tested product.

Reaction force	:	40 TON
Length max	:	760 mm
Length min	:	90 mm
Loading height	:	1250 - 1500 mm (Automatic regulation)
Basement water vessel	:	100 Liters
Terminations allowed	:	RF, RTJ, BW, SW
Clamping style	:	Type 1 – with proportional (option)
Clamping force control	:	Proportional pressing
Reference standards	:	ISO, DIN, API, ANSI, ASTM, FCI, BS (Other on request).
Filling Flow	:	70L/min
Vacuum pump	:	36m /h (Option)
Max pressure	:	100 bar (water) - 12 bar (AIR)
Pneumatic supply	:	7 bar @ 2000 NI/min
Electric supply	:	3PH + T, 380V@50Hz,10KW (other on request)
Dimensions	:	2060 (L) x 1160 (D) x 4100 (H)



***Working limits for PRESS CLAMPING and INNER RADIAL SEAL ANSI VALVES, SHELL TEST**

DN		1/2"	1"	2"	3"	4"	5"	6"	8"
ANSI-150	TON								
ANSI-300	TON								
ANSI-600	TON								
ANSI-900	TON								
ANSI-1500	TON								
ANSI-2500	TON								
ANSI-4500	TON								

(*)Note: Indicated values have been calculated for **shell test** and with **API-6D** nominal minimum bore **size + 30mm** and they have to be considered as reference only. For more accurate information please contact our technical office or consult instructions book delivered along the rig



Automatic pressurization Skid

SKA CLASS



SKA-100/S




SKA-100/SHV



SKA-100



SKA-250

Max working pressure				
H ₂ O	2068 / 4138 / 6897 bar	-	700/ 1050/ 1380/ 1600/ 2068/ 4138/ 6897 bar	700/ 1050/ 1380/ 1600/ 2068/ 4138/ 6897 bar
N ₂ / He	-	-	200 / 450 / 700 / 1380 bar	200 / 450 / 700 / 1380 bar
Air	-	-0.998 / 0 bar	200 / 450 bar	200 / 450 bar
Filling flow	70 L/min (from external line)	70 m ² /h	120 L/min	240 L/min
Pressurization Power	0,4 / 1,5 HP	-	1,5 / 3 HP	1,5 / 3 HP 3 / 6 / 9 HP
Vacuum pump opt.	36 m ³ /h	36 m ³ /h	36 / 80 m ³ /h	80 / 160 m ³ /h
Backseat test				
Seat over pressure test				
Operating HP test				
DBB test opt.	Not available	Not available	Available	Available
GAS Test opt.	Not available	Not available	Available	Available
GAS Booster opt.	Not available	Not available	Available	Available
CAVITY test opt	Not available	Not available	Available	Available
Multistation opt.	Not available	Not available	Available	Available
Actuator control panel opt.	Not available	Not available	Available (option)	Available (option)
ATEX certification opt.	Not available	Available	 II 2/3- G c X	Available
Fluid allowed	Water, Water & oil mixture, Glicole, Ethanol (Atex), Methanol (Atex).			
Control system	PLC/LCD touch screen 7"	PLC/LCD touch screen 7"	PLC/LCD touch screen 7"/ 10"	PLC/LCD touch screen 7"/ 10"
Printer opt.	Not available	Not available	Available - Thermal printer 24cIn	Available - Thermal printer 24cIn
Ref. Standard	API \ DIN \ BS \ FCI other on request		API \ DIN \ BS \ FCI other on request	
Ethernet Interface	RJ45 10-100BASE-T	RJ45 10-100BASE-T	RJ45 10-100BASE-T	RJ45 10-100BASE-T
Certification software	TestREC	TestREC	TestREC	TestREC
Teleservice XPN router	Not included	Not included	Included	Included
Leakage detection:				
Air	ANSI Bubbler, Bubbles counter, Volumetric bubbler, Mass flowmeters			
Water	Water Column, Digital water column, Turbines flowmeters, accordin client preferences.			
Service air supply	7 bar @ 2000L/min		7 bar @ 2000L/min	7 bar @ 2000L/min
	Other available on request.		Other available on request.	Other available on request.
Electrical supply	3ph+T 400V@50Hz 1 KW	3ph+T 400V@50Hz 2.2 KW	3Ph+T 400V@50Hz 5,5KW	3Ph+T 400V@50Hz 6 KW
	Other available on request.	Other available on request.	Other available on request.	Other available on request.
Dimensions	500(L) x 1000(D) x 700(H)	500(L) x 1000(D) x 700(H)	600(L) x 1300(D) x 1900(H)	600(L) x 1500(D) x 1900(H)



AUTO/MAN double control style (auto/man) available as option



SKA-500



SKA-1000



SKA-2000



SKA-4000

700/ 1050/ 1380/ 1600 bar	700/ 1050/ 1380/ 1600 bar	700/ 1050/ 1380/ 1600 bar	700/ 1050/ 1380/ 1600 bar
200 / 450 / 700 bar	200 / 450 / 700 bar	200 / 450 / 700 bar	200 / 450 / 700 bar
200 / 450 bar	200 / 450 bar	200 / 450 bar	200 / 450 bar
470 L/min	940 L/min	1880 L/min	3900 L/min
3 / 6 / 9 / 12 HP	4,5 / 6 / 9 / 12 HP	6 / 9 / 12 HP	15 / 30 HP
80 / 160 m³/h	160 / 240 m³/h	160 / 240 m³/h	160 / 240 m³/h
Available	Available	Available	Available
Available	Available	Available	Available
Available	Available	Available	Available
Available	Available	Available	Available
Available	Available	Available	Available
Available (option)	Available (option)	Available (option)	Available (option)
Available	Available	Available	Available
PLC/LCD touch screen 7"/ 10"	PLC/LCD touch screen 7"/ 10"	PLC/LCD touch screen 7"/ 10"	PLC/LCD touch screen 7"/ 10"
Available - Thermal printer 24cln	Available - Thermal printer 24cln	Available - Thermal printer 24cln	Available - Thermal printer 24cln
API \ DIN \ BS \ FCI other on request	API \ DIN \ BS \ FCI other on request	API \ DIN \ BS \ FCI other on request	API \ DIN \ BS \ FCI other on request
RJ45 10-100BASE-T	RJ45 10-100BASE-T	RJ45 10-100BASE-T	RJ45 10-100BASE-T
TestREC	TestREC	TestREC	TestREC
Included	Included	Included	Included
7 bar @ 2000L/min Other available on request.	7 bar @ 4000L/min Other available on request.	7 bar @ 4000L/min Other available on request.	7 bar @ 6000L/min Other available on request.
3Ph+T 400V@50Hz 7,5KW Other available on request.	3Ph+T 400V@50Hz 10KW Other available on request.	3Ph+T 400V@50Hz 10KW Other available on request.	3Ph+T 400V@50Hz 40KW Other available on request.
1300(L) x 1600(D) x 1900(H)	1250(L) x 1540(D) x 2400(H)	1300(L) x 2000(D) x 1900(H)	1300(L) x 3000(D) x 1900(H)

Hydraulic/pneumatic pressurization skid.
Controlled by electronic PLC, configured by LCD touch screen monitor whit double control style: automatic and manual. Test can be performed following test procedures programmed under PLC control or by manual activation of singles process component (valves, pumps, ecc) through touch screen buttons. PLC store test data, set-points, times and leak limits. Pressure set point is automatically reached. Leak could

be measured (option) by electronic bubbles counter or precision water column for H2O leak (height measured by pressure transmitter). Vacuum pump could be installed (option) to assure the absence of air inside valve's body before filling it with water; in order to reduce test time and increase operator's safety. All wet process components are stainless steel made and dimensioned for a working pressure of 700 bar (up to 4000 bar as option). It has a high filling flow ability and the

recovering of test fluid is automatic. Metal to metal needle valves assures high reliability.
A 24cln thermal printer (option) could be installed to printout a simple test report without connection to an external PC windows based supervision with certification software TestREC2.0 installed. The software and process option it has, make it compliant with the most diffuse test standards.



Semi automatic pressurization Skid


SKM CLASS



SKM-100



SKM-250

Max working pressure		
H ₂ O	700 / 1050 / 1380 / 1600 / 2068 / 4138 / 6897 bar	700 / 1050 / 1380 / 1600 / 2068 / 4138 / 6897 bar
N ₂	200 / 450 / 700 / 1380 bar	200 / 450 / 700 / 1380 bar
Air	200 / 450 bar	200 / 450 bar
Filling flow	120 L/min	240 L/min
Pressurization Power	1,5 / 3 HP	1,5 / 3 HP
Vacuum pump	36 / 80 m ³ /h	36 / 80 m ³ /h
GAS Test opt.	Available	Available
GAS Booster opt.	Available	Available
CAVITY test opt	Available	Available
Multistation option	Available 2 to 5 stations control	Not available
Actuator control panel opt.	Available (option)	Available (option)
ATEX certification opt.	Available  II 2/3/- G c X	Available
Fluid allowed	Water, Water & oil mixture, Glicole, Ethanol (Atex), Methanol (Atex).	
Control system	Electrical lighted pushbuttons installed on graphical synoptic panel.	
Ref. Standard	API \ DIN \ BS \ FCI (other on request)	API \ DIN \ BS \ FCI (other on request)
Serial Interface	RS485 MODBUS PROTOCOL	RS485 MODBUS PROTOCOL
Certification software	TestREC	TestREC
Leakage detection		
Air	ANSI Bubbler, Bubbles counter, Volumetric bubbler	
Water	Water Column, Digital water column	
Service air supply	7 bar @ 2000L/min	7 bar @ 2000L/min
	Other available on request.	Other available on request.
Electrical supply	3Ph+T 400V@50Hz 5KW	3Ph+T 400V@50Hz 5,5KW
	Other available on request.	Other available on request.
Dimensions	600(L) x 1300(D) x 1900(H)	600(L) x 1500(D) x 1900(H)

Hydraulic/pneumatic pressurization skid. Semi-automatic control with command on control console. Each process element (valves & pump) is controlled by the operator by luminous pushbuttons. Leak could be measured (option) by electronic bubbles counter or precision water column for H₂O leak (height measured by pressure transmitter).

Vacuum pump could be installed (option) to assure the absence of air inside valve's body before filling it with water; in order to reduce test time and increase operator's safety. All wet process components are stainless steel made and dimensioned for a working pressure of 700 bar (up to 4000 bar as option). It has a high filling flow ability and

the recovering of test fluid is automatic. Metal to metal needle valves assures high reliability. The "manual" nature of this skid, allows the operator to perform test on the valve (or test sequences) non contemplated into the reference test standard.



SKM-500



SKM-1000



SKM-2000

700 / 1050 / 1380 / 1600 bar	700 / 1050 / 1380 / 1600 bar	700 / 1050 / 1380 / 1600 bar
200 / 450 / 700 bar	200 / 450 / 700 bar	200 / 450 / 700 bar
200 / 450 bar	200 / 450 bar	200 / 450 bar
470 L/min	940 L/min	1880 L/min
3 / 6 / 9 HP	3 / 6 / 9 / 12 HP	6 / 9 / 12 HP
80 / 160 m³/h	160 / 240 m³/h	160 / 240 m³/h
Available	Available	Available
Available	Available	Available
Available	Available	Available
Not available	Not available	Not available
Available (option)	Available (option)	Available (option)
Available	Available	Available
API \ DIN \ BS \ FCI (other on request)	API \ DIN \ BS \ FCI (other on request)	API \ DIN \ BS \ FCI (other on request)
RS485 MODBUS PROTOCOL	RS485 MODBUS PROTOCOL	RS485 MODBUS PROTOCOL
TestREC	TestREC	TestREC
7 bar @ 2000L/min	7 bar @ 4000L/min	7 bar @ 4000L/min
Other available on request.	Other available on request.	Other available on request.
3Ph+T 400V@50Hz 7,5KW	3Ph+T 400V@50Hz 10KW	3Ph+T 400V@50Hz 10KW
Other available on request.	Other available on request.	Other available on request.
1250(L) x 1250(D) x 1900(H)	1300(L) x 1700(D) x 1900(H)	1300(L) x 2000(D) x 1900(H)



Manual pressurization Skid


SKMM CLASS



SKMM-10

SKMM-80/GAS

SKMM-100

Max Working pressure			
H ₂ O	700 / 1200 / 2100 / 4000 bar	-	700 / 1050 / 1380 / 1600 / 2068 / 4138 / 6897 bar
N ₂ :	700 / 1050 bar	200 bar	200 / 450 / 700 / 1000 bar
AIR :	200 / 450 bar	200 bar	200 / 450 bar
Filling flow H ₂ O	10L/min (10L Internal TANK Included)	-	120 L/min
Vacuum pump	-	-	36 m³/h (80 m³/h on request)
DBB test opt.	Included	-	Available
GAS Booster opt	Available	-	Available
CAVITY test	Available	Available	Available
ATEX certification opt.	Available 	Available	Available
Process style	Bidirectional	Unidirectional	Bidirectional, with or without bypass valve
HP Fluid allowed	Water, Water & oil mixture. Glicole, Ethanol / Methanol (Atex)	GAS (N2, He, AIR)	Water, Water & oil mixture. Glicole, Ethanol (Atex). Methanol (Atex), GAS (N2, He, AIR)
Control system	Manual needle valve	Manual needle valve	Manual valve & Electrical lighted pushbuttons installed
Pressure measure	Analog gauge	on graphical synoptic panel 4-20mA Pressure transmitter + 7-seg Digital Display	on graphical synoptic panel 4-20mA Pressure transmitter + 7-seg Digital Display
Ref. Standard	API / DIN / BS / FCI	API / DIN / BS / FCI	API / DIN / BS / FCI
Serial Interface	RS-485 MODBUS PROTOCOL	RS-485 MODBUS PROTOCOL	RS-485 MODBUS PROTOCOL
Certification software	Option TestREC5.4-M	Option TestREC5.4-M	Option TestREC5.4-M
Leakage detection			
AIR / GAS	-	ANSI Bubbler, Bubbles counter. Volumetric bubbler, Mass Flowmeters	ANSI Bubbler, Bubbles counter. Volumetric bubbler, Mass Flowmeters
Water	-	-	Water column, Digital water column, Turbine flowmeters.
Process Connections	BSPP ½"-F / HP 1/4"-F	NPT 1/2"-F, HP 1/4"-F	BSPP 1"-F
Service air supply	7bar @ 2000 L/min Other available on request	-	7bar @ 2000 L/min Other available on request
Electrical supply	-	2Ph+G 220V@50Hz 1KW Other available on request	3Ph+G 380V@50Hz 3KW Other available on request
Dimensions	700(L) x 300(D) x 350(H)	600(L) x 800(D) x 1580(H)	700(L) x 1120(D) x 1120(H)

Hydraulic/pneumatic pressurization skid. Controlled by electrical pushbutton on a graphical synoptic panel or manual needle valves (GAS). Every process element is controlled directly by the operator; main safety garrison for wrong maneuvers has been included. This make the

SKID very flexible to any testing procedure. Leak could be measured (option) by electronic bubbles counter, high accuracy water column (API) , turbine flow meter and mass flow meter (FCI 70-2) . Vacuum pump could be installed (option) to assure the absence of air inside

valve's body before filling it with water; in order to reduce test time and increase operator's safety. All wet process components are stainless steel made and dimensioned for a working pressure of 700 bar (4000 bar as option).



SKMM-50/Gas/B2

SKMM-100/Gas/B2

SKMM-100/Gas/B3

SKMM- 100/GAS - B4

-	-	-	-
200 bar	450 / 700 / 1380 bar	1050 bar	N2 60 / 200/ 700 bar contemporary,
200 bar	-	-	AIR 60 / 200 bar contemporary
-	-	-	-
-	-	-	-
-	Available	-	-
Available	Available	Available	Available
Available	Available	Available	Available
Available	Available	Available	Available
Bidirectional	Bidirectional	Bidirectional.	Bidirectional
GAS (N2, He, AIR)	GAS (N2, He, AIR)	GAS (N2, He)	GAS (N2, He)
Manual needle valve on graphical synoptic panel	Manual valve & Electrical lighted pushbuttons installed on graphical synoptic panel	Manual valve & Electrical lighted pushbuttons installed on graphical synoptic panel	Manual valve & Electrical lighted pushbuttons installed on graphical synoptic panel
Analog pressure gauge	4-20mA Pressure transmitter + 7-seg Digital Display	4-20mA pressure trasmitter + LCD	4-20mA pressure trasmitter + 7-seg Digital Display
API / DIN / BS / FCI	API / DIN / BS / FCI	API / DIN / BS /FCI	API / DIN / BS /FC
-	RS-485 MODBUS PROTOCOL	RS-232	RS-485 MODBUS PROTOCOL
-	Option TestREC5.4-M	Option TestREC5.4	Option TestREC5.4-M
ANSI Bubbler, Bubbles counter. Volumetric bubbler, Mass Flowmeters Water column, Digital water column, Turbine flowmeters.	ANSI Bubbler, Bubbles counter. Volumetric bubbler, Mass Flowmeters -	ANSI Bubbler, Bubbles counter, Volumetric bubbler. -	ANSI Bubbler, Bubbles counter, Volumetric bubbler. -
BSPP 1/4"	NPT 1/2"-F, HP 1/4"-F	NPT 1/2"-F / HP 1/4"-F / HP 3/8"-F	NPT 1/2"-F / HP 1/4"-F / HP 3/8"-F
-	7bar @ 2000 L/min Other available on request	7bar @ 2000 L/min Other available on request	7bar @ 2000 L/min Other available on request
2Ph+G 220V@50Hz 1KW Other available on request	2Ph+G 220V@50Hz 1KW Other available on request	2Ph+G 220V@50Hz 1KW Other available on request	2Ph+G 220V@50Hz 1KW Other available on request
600(L) x 600(D) x 1020(H)	700(L) x 1120(D) x 1120(H)	700(L) x 1120(D) x 1120(H)	1000 (L) x 1280 (D) x 2000 (H) Bullet proof class BR6 dim. 900 (L) x 700 (D) x 700 (H)



Accessories

CCMP/200 AIR COMPRESSOR



CCMP/80 AIR COMPRESSOR



Air compressor skid.
It is formed by electric 3 stage compressor able to pressurize ambient air up to 330 bar as std.
Reservoir vessel and final pressure booster are available as options.
Maximum outlet pressure: 1000 bar.

	CCMP/200	CCMP/80
Outlet pressure	: 330 bar std	200 bar std
Flow ability	: 200 SL/min (8 min to pressurize 10 L vessel up to 200 bar).	80 SL/min (25 min to pressurize 10 L vessel up to 200 bar).
Final booster	: Optional – Available on request	Optional – Available on request
Reservoir tank	: 150 L @ max 330 bar	50 L @ max 330 bar
Noise level	: 79 Db (ISO-3746)	91 Db (ISO-3746)
Electrical supply	: 3PH + T, 400V@50Hz, 5KW	2PH + T, 220V@50Hz, 5KW
Dimensions	: 900(L) x 2100(D) x 2100(H)	700(L) x 700(D) x 2100(H)

SK-PC01 PERSONAL COMPUTER CONSOLE



Console for windows passed Personal Computer.
Ideal for workshop certification applications.

The console includes:
Cabinet mounted on wheels with ventilation equipment
Personal computer with LCD 18.5" screen.
Keyboard & mouse
CCD bar code reader and webcam.
Color printer.

Personal Computer	:	Processor Intel Core 2 Duo E7500 (or above) (2.93GHz, 1066MHz, 3MB) - SO Windows 7 Professional HD 320GB Serial ATA (7,200 Rpm) - RAM 3GB
LCD screen	:	Widescreen 18.5 E1910H - 18,5" Visible area 470 mm – Black color - Brightness 250 cd / m ² – contrasto 1000:1
Printer	:	color A4 24 ppm, 600x600 dpi
Electrical supply	:	2PH + T, 220V@50Hz, 1KW
Dimensions	:	717 (L) x 595 (D) x 1625 (H)

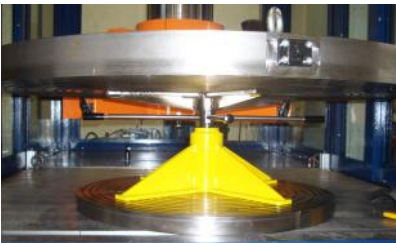


CV-1200/ 1700/ 2200/ 2700
VALVE SUPPORT



CV-1200	700mm – 1200mm	1000kg
CV-1700	1000mm – 1700mm	1000Kg
CV-2200	1500mm – 2200mm	1000Kg
CV-2700	2200mm – 2700mm	1000Kg

PLT-600, PLT-2000
PLATEAU LOADING TOOL



Plateau loading tools. With these accessories it is possible to install sealing plateau on vertical rig quickly and under high safety conditions. It is available in 2 sizes: 600Kg – 2000Kg

VB-1500
VOLUMETRIC BUBBLER



Measurable volume	: 1500 mL
Max working pressure	: 2 bar
Fluids allowed	: H ² O / Alcool

RE-01
PORTABLE DIGITAL RECORDER
FOR PRESSURE MEASURE



Portable digital recorder for pressure measure. Recorder data can be stored on USB key. Certification software supplied along the unit, can read encrypted data on USB data storage to print out full waveforms.

BC-01
PORTABLE DIGITAL
BUBBLES COUNTER

Portable digital bubbles counter. Impedance variation detector amplifier is able to detect bubbles release from 1/4" glass pipe .



Leak Flow	: max 3 bubbles /sec
Connections	: BSPP 1/4"
Electrical supply	: 2PH + T, 220V@50Hz, 100W
Dimensions	: 220 (L) x 268 (D) x 95 (H)

BPR-01
BORE PLUGS SUPPORT



Adaptors range	: 1/2"-12"
Termination	: RF valves up to class #600

ACP-01
ACTUATOR CONTROL PANEL



Pneumatic Supply Sources	: 0-6 bar @ 3500 NL/min, w/analog indication (1x) 0-6 bar @ 340 NL/min, w/analog indication (2x) 6 bar, fixed supply DN 6mm (3x) 6 bar, fixed supply DN 12mm (3x)
Pneumatic Control Signal	: 0-145.0 PSI @ 770NL/min with digital indication, 10 turns controls potentiometer
Electrical Supply sources	: 0 – 260V @ 1A , with digital indication, 0 – 110V DC, with digital indication.
Electrical control signal	: 0 – 30 V DC @ 3A with digital indication, 10 turns controls potentiometer 0 – 21,0 mA @ 1200 ohm with digital indication, 10 turns controls potentiometer
HART USB2.0 connection	: Available on request.
Assembly asset	: Fixed / Portable

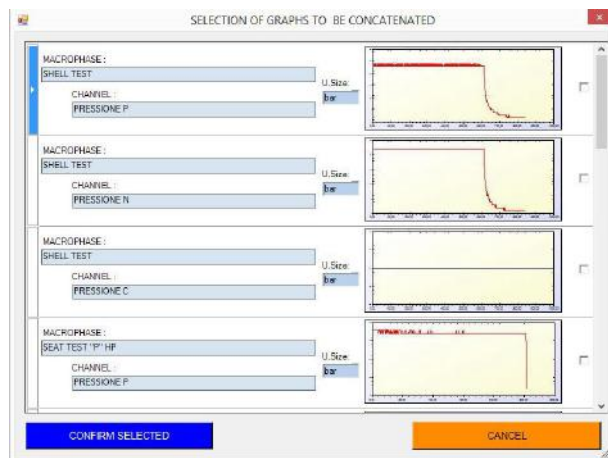
[Patent Pending]



Certification software

TestREC

A COMPLETE, POWERFUL AND FLEXIBLE APPLICATION TO CREATE YOUR TEST CERTIFICATE



Recipe: Config RS90.0 DN400 CL400 MM

Test AP

	CUSTOM P (bar)	Time Stab (sec)	Time Test (sec)	DP (bar)	Flow (mL)	Q (Bls)
SHELL	0100	060.0	900.0	0001		
Seat P HP	0074	060.0	300.0	0001	012.0	0
Seat N HP	0074	060.0	300.0	0001	012.0	0
Seat P+N H	0074	060.0	300.0	0001	012.0	0
CAVIT P N	0074	060.0	300.0	0001	012.0	0

Test BP

	CUSTOM bar	Time Stab (sec)	Time Test (sec)	Q (Bls)
Seat P LP	0006	010.0	300.0	0
Seat N LP	0006	010.0	300.0	0
Seat P+N LP	0006	010.0	300.0	0

Options

HOLD	GATE VALVE	0006 (bar) KP set pressure
Leak H2O Bubbler	dp H2O	0006 (bar) Trend Amplitude
DYPASS AP	VACUUM	0006 (mbar) Vacuum Min
CHECK VALVE	AUTO	0041 (cm) Oring Diameter
		0100 (%) P Correction
		0000 (%) Macro Loss

Product General Parameters

Description	Value	U.M.
NOMINAL_PRESSU...	1400	bar
NOMINAL_PRESSU...	1400	bar
NOMINAL_PRESSU...	1400	bar
NOMINAL_PRESSU...	1400	bar
NOMINAL_PRESSU...	1400	bar
NOMINAL_PRESSU...	1400	bar
NOMINAL_PRESSU...	1400	bar
NOMINAL_PRESSU...	1400	bar

Class

Oring Diameter

KP set pressure

Trend Amplitude

OPEN LEAK CALCULATION

Recipe navigation

SAVE CHANGES

DISCARD CHANGES

CLOSE WINDOW

HardWare

PC 395 - 06/08/2014

APPLY RECIPE

READ FROM PLC

USABLE WITH ALL tink'PCprogetti TEST RIGS

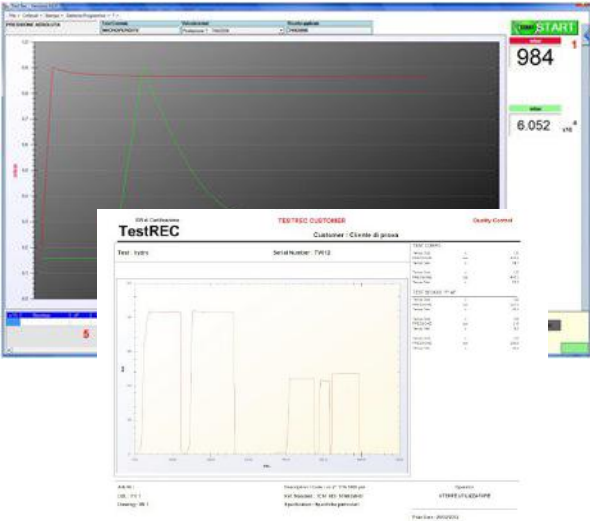
TestRec 3 is the bundle software for all tink'PCprogetti test benches:

- MODBUS INTERFACE for SKM skids
- SYSWAY INTERFACE for all SKA with Ethernet or RS232 communications.

Simple to use and configure, It provides a complete set of tools to allow the operator a complete test control and certificate.

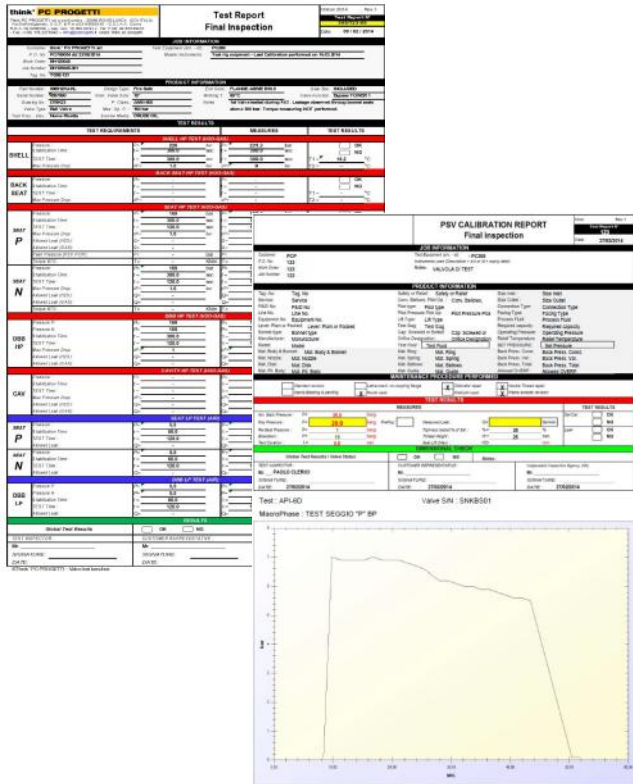
SOFTWARE MAIN FEATURES

- Up to 10 channels simultaneous retrieved
- Multi-threaded process to ensure continuity of data reading in conjunction with the graphical display
- Management of the double Y axis graph in real-time and historical data
- English, Spanish, French, Russian and Italian languages
- Database management with integrated data backup and restore
- Compatible with all Windows versions from WIN XP SP3
- Pressure vs. time, Temperatures vs time Zoom, Hold and auto-stop registration ability indications of simmer point, POP pressure, blowdown range, pressure drop
- Leak calculation tool
- Certifications export in PDF format
- Data exports in XLSX, TXT, CVS
- Customizable by request



THE SOFTWARE FOR ALL YOUR NEEDS IN VALVE TEST

- TestRec allows a full test result control:
- The data collected by the PLC are stored in real time and showed up to 7 channels simultaneously in a clear and simple chart window
 - The chart window design allows the test bench full control at a glance by the operator and the immediate recognition of potentially critical situations
 - Any data channel of any test performed at any time can be retrieved and showed in clear and exhaustive charts
 - The operator can decide whether to use one preinstalled process configuration (recipes) or manually arrange and save any setting of the test bench in the database in order to create his own recipes.
 - There are several working options and a useful setup utility to verify the accuracy of pressure transmitters installed on skid
 - All types of tests are supported in a wide certificate type selection
 - Wide range of reports, full customization service to fit all your needs
 - Graph concatenations to show multiple test results
 - Customer driven certificate for all test types
 - Full data control and manipulation
 - A wide data export tools



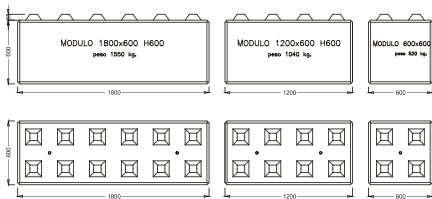
FULL CONTROL OF YOUR TEST

- TestRec 3 provides a complete tool to create your recipes to customize all the phases of your test*:
- Duration time
 - Stabilization and pressurization time
 - Operating pressure for any valve site, low and high pressure.
- All the test options (Hold, Vacuum, Linear Oil and so on) could be also simply managed.
- * depending on skid type

- Technical prerequisites (recommended)
- Operative System : Microsoft Win XP / 7 / 8 / 10 *
- RAM memory : 4GB *
- Video Card memory : 512 MB *
- Processor : Core 2 Duo 2GHz or equivalent *
- Screen Resolution : 1440x900px-1680x1050px (optimal) *
- Hard - Disk : 4GB free space *
- * all parameters or higher



Concrate modular bunker blocks



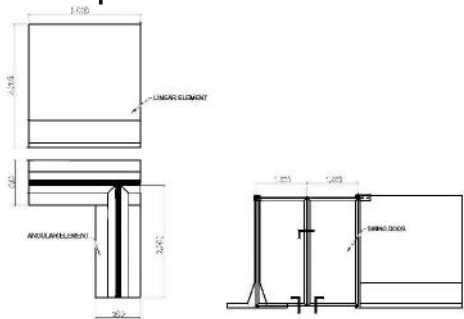
Concrate modular bunker blocks H=2400 Assembly example

Interlocking Concrete blocks that can be used to assemble a safety perimeter around test area. Access door is normally replaced by “Labyrinth walk”, but on request it is possible to supply access Steel door with safety block device. Final painting can be performed after assembly according customer preferences. In Literature, 600 mm concrete wall thickness is able to resist to highest bullets proof test according UNI EN 1522 – FB7 class.

Shape	Dimension	Color	Weight
Long	1800 (L) x 600 (D) x 600 (H)	Not painted	1550 Kg
Medium	1200 (L) x 600 (D) x 600 (H)	Not painted	1040 Kg
Short	600 (L) x 600 (D) x 600 (H)	Not painted	520 Kg

! NOTE: Easy assembly procedure allow final user to perform assembly without our assistance. Assembly design will be supplied along with bunker blocks.

Concrate modular protection panel



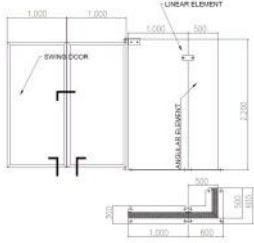
Modular protection perimeter assembly example.

Precast concrete panels that can be connected together with hard steel plate & bolts. Access door is normally replaced by “Labyrinth walk”, but on request it is possible to supply access Steel door with safety block device (See mod. 3c). Final painting can be performed after assembly according customer preferences. Wall thickness of vertical area is 100mm. In literature Such thickness is able to resist to bullets proof test according UNI EN 1522 – FB2 class.

Shape	Dimensions	Color
Linear	2000 (L) x 800 (D) (base) x 2200 (H)	Not Painted
Linear	1000 (L) x 800 (D) (base) x 2200 (H)	Not Painted
Angular	2000 (L) x 800 (D) (base) x 2200 (H)	Not Painted



Sandwich steel / wood modular protection panel



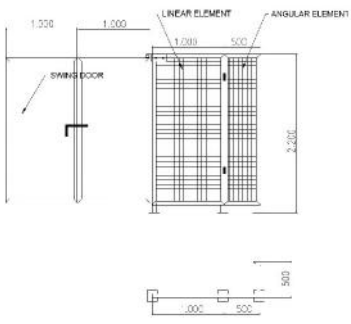
Modular protection perimeter assembly for CUSTUM DIMENSIONS example.

Sandwich panel STEEL/WOOD. Steel thickness 8mm & wood thickness 100mm. Modular assembly with heavy steel plates. Panels to be anchored on floor. Special dimensions available on request. A bullets proof inspection window (EN1063 BR1) is available as option for each panel.

In Literature, such asset is able to resist to bullet impact according UNI EN 1522 – FB6 class.

Shape	Dimension	Color
Linear	1000 (L) x 300 (D) (base) x 2200 (H)	Yellow, RAL1021
Angular	500 (L) x 500 (D) (base) x 2200 (H)	Yellow, RAL1021
Gate (Swing)	2x1000 (L) x 100 (D) x 2200 (H)	Yellow, RAL1021
Gate (Slide)	1500 (L) x 100 (D) x 2200 (H)	Yellow, RAL1021
Window (EN1063 Br1)	700 (L) x 700 (H)	Crystal

Light modular protection panel



Modular protection perimeter assembly for CUSTUM DIMENSIONS example.

Light perimeter protection with steel web welded together to support structure. Panel **MUST** be anchored to floor.

Shape	Dimension	Color
Linear	1000 (L) x 60 (D) x 2200 (H)	WHITE - RAL 7035
Angular	500 (L) x 500 (D) x 2200 (H)	WHITE - RAL 7035
Gate (Swing)	2x1000 (L) x 60 (D) x 2200 (H)	WHITE - RAL 7035
Gate (Slide)	1500 (L) x 60 (D) x 2200 (H)	WHITE - RAL 7035

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