

PSV STATION

A family of compact, digital, easy operated and transportable stations, for test and calibration of safety and relief valves, with connections from ½" to 10" and pressures up to 10000 psig (700 bar).



PRESYS[®]
www.psvstation.com

PSV STATION

They have a unique acquisition system that allows automatic detection of opening pressures (SET) and valve closing (RESEATING).

The **PRESYS** PSV station is a complete solution, composed of a test bench that communicates with the calibration software Isoplan-5®, emitting complete and detailed certificates and test reports for pressure safety valves (PSV) and pressure relief valves (PRV). Isoplan PSV-5 Calibration Software one license included.

Pneumatic and hydraulic versions available.

Hybrid version with independent pneumatic and hydraulic operating circuits.

Configurable Digital indicator according to the E.U. of the tested valve.

Available units: psi, bar, MPa, kPa, kgf/cm², gf/cm² (others units under consult).

Easy to install and ready to use.

Nitrogen or air operated for pneumatic versions and, water or oil for hydraulic versions.

PRESSURE RANGES AVAILABLE*

500 psig (35 bar) / 1000 psig (70 bar) / 3000 psig (210 bar) / 5000 psig (350 bar)
10000 psig (700 bar) *other pressures on request

STANDARD FEATURES

- ❑ AUTOMATIC ACQUISITION of SET and RESEATING values.
- ❑ 0.1 % FS High accuracy digital pressure acquisition and measurement system.
- ❑ Calibration certificates for all pressure indicators.
- ❑ Ball valve to isolate high pressure accumulator.
- ❑ Pressurized valve sinalization.
- ❑ Data book of internal pressure vessels.
- ❑ High-strength 6mm polycarbonate shield for operator protection.
- ❑ Threaded valves up to 2", with set thread female NPT adapter's kit for up to 5000 psi (350 bar).
- ❑ Mounting flanged valves: from 1" (DN 25) to 10" (DN 250).
- ❑ Manual bubble counter Assembly, with flange adapters in accordance with API-527.
- ❑ Easy to operated control panel with precision regulators for fine adjustment of pressure.
- ❑ Manual clamping system with up to 4 clamps.
- ❑ Manifold block for external pressure standard gauge with fast connection – tool free. It can be used as gauge calibration port.
- ❑ Compact dimensions (H x W x D): 1220 mm (48,0 in) x 1000 mm (39,4 in) x 1300 mm (51,2 in),
- ❑ 450 kg (992 lbs), total height with shield: 1900 mm (74,8 in).
- ❑ Suspension eyelet for easy transport.

PSV STATION

INCLUDED ACCESSORIES

Set thread female NPT adapters



Sizes:
 $\frac{1}{2}$ " , $\frac{3}{4}$ " , 1" , $1\frac{1}{4}$ " , $1\frac{1}{2}$ " e 2".
Maximum pressure up to 5000 psi (350 bar)
Other size/pressure, under consult.

Bubble counter assembly



With flange adapters, clamps and
bubble jar (API 527)

Manual clamping system



With 4 clamps set

Flange adapters for test



For test flanged valves from $\frac{1}{2}$ " (DN 15) to 10" (DN 250)
With 9 polyurethane O-ring gasket.

OPTIONAL ACCESSORIES

- Station operating Training.
- Extra digital pressure transducers for better accuracy measurements.
- Split Assembly, with command panel and test table separated.
- Spare O-ring gasket kit for flange test adapters.
- RTJ Flange Adapters.



COMPANY: PRESYS INSTRUMENTS CO.		REG. NUMBER: CRN 06715550
INSTRUMENT: SAFETY VALVE	FUNCT.: BOILER PROTECTION	TAG: PSV-1231004 - 10 bar
SECTOR: PLANT A/BOILER 1	CRITICALITY: SECURITY	CALIBRATION PERIOD: 12 Months
O.S.: SAP001	PROC.: P-CO-04	

PROCESS OPERATION INFORMATION

Associated Equipment: B-403	Operating Temperature: Not Informed
Operating Pressure: Not Informed	PMTP: Not Informed

INSTRUMENT SPECIFICATION

Manufacturer: HANSEN USA	Fluid: AIR
Model: HANSEN USA	Body Material: STEEL
Fixed Assets: N/A	Seat Material: STAINLESS STEEL
Input Connections: 2 1/2"	Pressure Class: 150#
Output Connection: 3"	Manufacturing Standard: ASME VIII
Threaded or Flanged Connection: FLANGED	Hole: F

CALIBRATION AND ADJUSTMENT

INITIAL CALIBRATION

	Reference (bar)	Reading 1 (bar)	Average (bar)	Error (bar)	Blowdown (%)	U (bar)
SET PRESSURE	11,00	10,70	10,70	0,30	43,93	0,14
RESEATING PRESSURE	6,50	6,00	6,00	-0,50		

Leakage: LEAKING Internal State: GOOD

FINAL CALIBRATION

	Reference (bar)	Reading 1 (bar)	Reading 2 (bar)	Reading 3 (bar)	Average (bar)	Error (bar)	Blowdown (%)
SET PRESSURE	11,00	10,76	10,76	10,74	10,75	-0,25	42,7
RESEATING PRESSURE	6,50	6,25	6,06	6,16	6,16	-0,34	

COMMENTS:

- Used Norm: ASME VIII (Gas)

SUMMARY OF PERFORMED SERVICES

PARTS REPLACED SEATS	NOZZLE MACHINED,
SEAT: GRINDING, LAPPING	SPRING VERIFIED
STEM POLISHED	UPPER SEALING SEALED
CLEANING SOLVENT, SANDBLASTED	LOWER SEALING: SEALED
PAINTING: ALUMINUM 600°C	

LEAK TEST

FLUID: AIR	NUMBER OF BUBBLES: 2	MINUTES: 1
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SHIFTING LIFT

GOOD

CALIBRATION CONDITIONS

LOCATION: PRESYS MAINTENANCE LABORATORY	TEMPERATURE: 21°C
HUMIDITY: 65%	PRESS: 1 atm

USED STANDARDS

MODEL: DMY-2017-Light-1112-0-0-3-0-1 S.N.: 005.09.15 Cert. N.: R3060.07.15 Next Calib.: 15/09/2016 Scale: Pressure PSV (G)

INITIAL DIAG.: Not Approved FINAL DIAG.: Approved

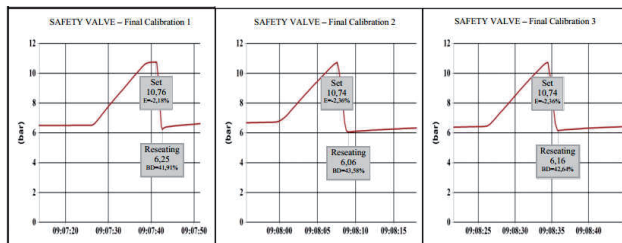
CALIBRATION: 18/02/2016 NEXT: 18/02/2017

COMMENTS

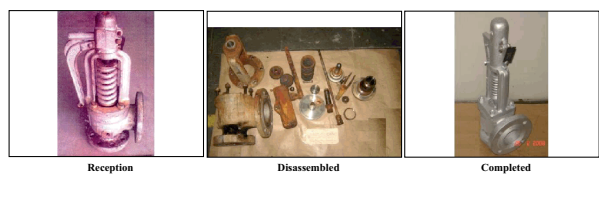
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O.S.: SAP001	PROC.: P-CO-04	

CALIBRATION GRAPHIC



PHOTOGRAPHIC REPORT



Jean Marc
Exécutant 18/02/2016 17:10:08

William Johnson
Responsible 18/02/2016 17:10:12

The set pressure and reseating pressure are automatically registered and display on the digital pressure registration system and can be send in real-time to the ISOPLAN® Software.

ISOPLAN® calibration software allows you to record all your safety valves technical information and calibration operations in a strong database in order to meet your safety regulations.

It will generate the full calibration report that will include the calibration graphics, calculation of *blowdown*, photos of the valve before and after maintenance as well as any technical relevant information.

PRESYS PSV Workstation is delivered ready to use and we provide training by internet conference or on-site on request. **PRESYS** products are developed in a technology context combining high quality and reliability, using a continuous improvement process. With a global presence in most regions of the world, directly or with specialized and trained distributors, **PRESYS** provides you with the right solution for you application or calibration needs, always benefiting of our entire technical support.