

**PEX
PEAX**

**ALL SOLUTIONS FOR
SAMPLE COLLECTION**

SAMPLING



SIMPLE AND SECURE SAMPLING

All manufacturers wish to guarantee the quality of the products consumed or used by consumers, who are increasingly demanding. The level of attention covers both the homogeneity of the productions and the texture or taste of the product produced.



*Renewal in progress

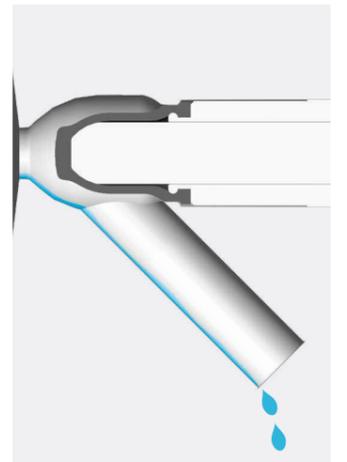
PEX - PEAX

AN ANSWER WITH DEFINOX SAMPLING VALVES, COMBINING COMPACTNESS AND RELIABILITY

Most often installed on tanks or pipes, **PEX - PEAX sampling valves** are easily integrated thanks to their multiple connection. Available in different diameters, fluids from the most liquid to the most viscous can be collected with the **PEX - PEAX** sampling valves.

The possibility of adapting the Sorio® control top to the automatic version makes it possible to control and view the status of the sampling valve remotely.

-  **HYGIENIC DESIGN, WITHOUT RISK OF CONTAMINATION**
-  **OPTIMAL CLEANABILITY, CERTIFIED**
-  **COMPACT AND MODULAR DESIGN, THANKS TO THE MULTIPLE CONNECTIONS**
-  **MAXIMUM ADAPTABILITY ACCORDING TO THE ENVIRONMENT AND THE CONTEXT OF USE**
-  **THE ENVIRONMENT AND THE CONTEXT OF USE GOOD PERFORMANCE IN DIFFICULT SERVICE CONDITIONS**
-  **TAILOR-MADE ECONOMICAL SOLUTION**



Sampling consists of taking a quantity of liquid to check its appearance, composition, or quality. Before taking the sample, the sampling device needs to be sterilized.

OUR SAMPLING VALVES ALLOW THIS USING TWO TECHNIQUES

1

1-OUTLET VALVE

Flame sterilization of the valve outlet



Manual PEX1

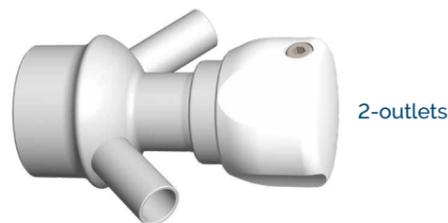


For flame sterilization, bring the flame close to the valve and hold it sufficiently long to transmit the temperature to the whole body by thermal conductivity.

2

2-OUTLET VALVES

Sterilization by circulation of a sterilizing cleaning product or steam injection



Manual PEX2



For sterilization with a cleaning product, with the valve closed, put the lower cap in place to completely fill the valve with sterlant and carry out sampling.
For steam sterilization, remove the two caps (valves closed) and sterilize with steam through the upper outlet.

FIELDS OF APPLICATION

DEFINOX valves can be used on liquids or semi-liquids, more or less viscous, without risk of denaturing the manufactured product.

- **Food:** dairy products, jam, chocolate...
- **Cosmetics / Perfume**
- **Hygiene products:** toothpaste, shampoo, shower gel...
- **Household products:** laundry, detergent...
- **Pet food**



WHAT MAKES THE DIFFERENCE

PEX

MANUAL VERSION
Ergonomic plastic handle (optional, red or another colour, on request), with opening and closing guard, preventing crushing and damaging the diaphragm.

Optional
Plastic handle in red or other colours on request.
Stainless-steel handle.

PEAX

AUTOMATIC VERSION
Pneumatic actuator NC (Normally Closed), compact, in stainless-steel, removable.

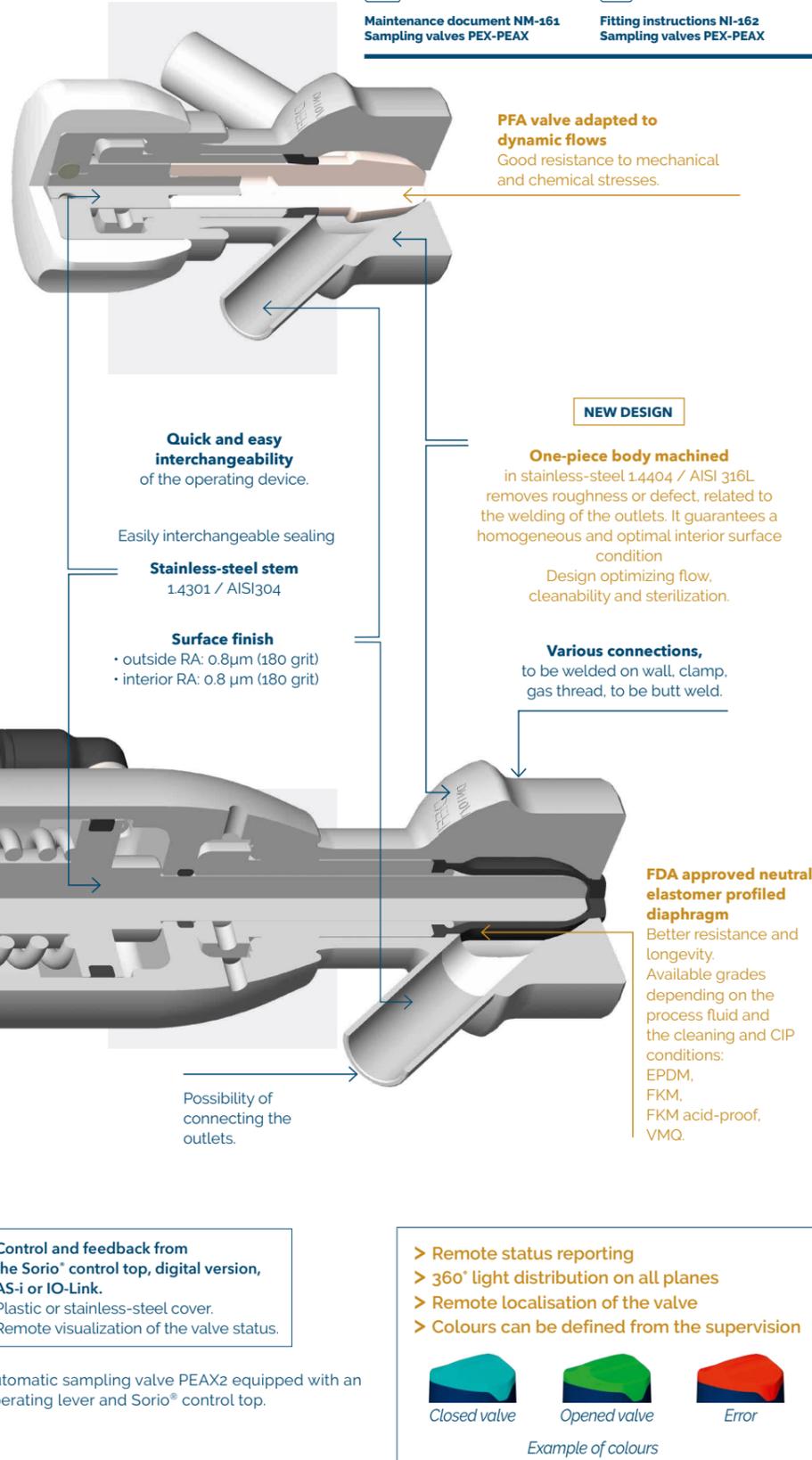
Optional
Operating lever, for manual control in an automatic cycle (extended version, for DN 16/18 to facilitate forcing).



Maintenance document NM-161
Sampling valves PEX-PEAX



Fitting instructions NI-162
Sampling valves PEX-PEAX

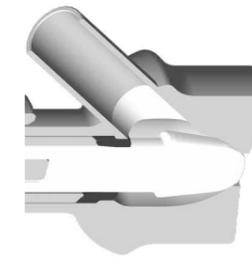


SUITABLE FOR ALL TYPES OF PROCESS

2 PFA SEALS

Suitable for samples under pressure

- Valve PFA / EPDM
- Valve PFA / FKM



5 DIAPHRAGM SEALS

- VMQ diaphragm, as standard
- EPDM diaphragm
- FKM diaphragm
- Acid-proof FKM diaphragm



Resistance levels of elastomer and plastomer

	VMQ	EPDM	FKM	PFA
Oil	★★	★	★★	★★
Greasy substances	★★	★	★★	★★
CIP	★	★★	★★	★★
Aggressive chemicals	★	★	★★	★★
Concentrated essential oils and perfumes	★	★	★★	★★
Abrasion resistance	★★	★	★	★
Low temperature	★★	★★	★	★

★★ Highly suitable ★ Suitable ★ Not recommended

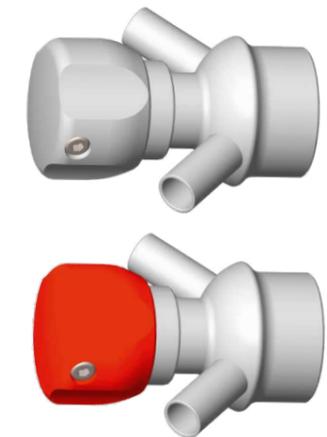
*for a water flow based on a speed of 2m/s

Certification of elastomer and plastomer

	VMQ	EPDM	FKM	PFA
FDA 21 CFR 177.2660	✓	✓	✓	✓
CE 1935 / 2004	✓	✓	✓	✓
ADI Free	✓	✓	✓	✓
3A	✓ (Class I)	✓ (Class II)	✓ (Class I)	✓
USP Ch.87		✓		
USP Ch88, Class VI 121°C		✓		
NSF 51		✓		
ACS				✓

MATERIALS

- Body: stainless-steel 1.4404 / AISI 316L
Other materials, on request (see page 7)
- Handle: white plastic material or stainless-steel 1.4301 / AISI 304
Optional, red or another colour, on request
- Actuator: stainless-steel 1.4301 / AISI 304



TERMS OF SERVICE

- Maximum operating pressure: manual-automatic: **10 bar** (more, contact us)
- Minimum temperature: 0°C
- Maximum temperature: 120°C (more, contact us)
- Air supply of the actuator: 4 to 6 bar
- Air connection: Ø 4/6

MAXIMUM PRESSURE	STATIC (all versions)	DYNAMIC DIAPHRAGM version	DYNAMIC PFA version
DN6/8	10 bar	5 bar	5 bar
DN10/12	10 bar	2 bar	5 bar
DN16/18	10 bar	2 bar	5 bar

WIDE RANGE

3 WAYS TO CHOOSE

In three steps, choose the configuration best suited to your sampling environment and the nature of the product collected.

1 DEPENDING ON THE STERILIZATION METHOD



Flame sterilization

PEX1 - PEAX1



Sterilization by injection of steam or a cleaning solution with sterilant

PEX2 - PEAX2

2 DEPENDING ON THE PASSAGE Ø OF THE PARTICLES

	Particle passage Ø (maximum in mm)	Viscosity
DIN 6/8	1.5	0-100 cp
DIN 10/12	3	0-1,000 cp
DIN 16/18	3.5	0-20,000 cp

3 6 CONNECTIONS, DEPENDING ON CONSTRAINTS OR CONNECTION LOCATION

FLAME STERILIZATION (1 OUTLET)

Manual PEX1



Automatic PEAX1



To be welded on the wall
reference 1



To be butt welded, on tube
reference 3



Gas thread
reference 7



Clamp Ø 50.4 mm
reference 5



Mini clamp Ø 34 mm
reference B



Micro-clamp Ø 25.4 mm
reference A

CLAMP CONNECTION

STEAM OR SOLUTION INJECTION STERILIZATION (2 OUTLETS)

Manual PEX2



Automatic PEAX2



To be welded on the wall
reference 2



To be butt welded, on tube
reference 4



Gas thread
reference 8



Clamp Ø 50.4 mm
reference 6



Mini clamp Ø 34 mm
reference D



Micro-clamp Ø 25.4 mm
reference C

CLAMP CONNECTION

VARIANTS AND OPTIONS

VARIANTS AND OPTIONS FOR GREATER USE

A request?



Contact us

THE OUTLETS CONNECTIONS



Clamp 3/4



Black plastic cap



Ferrule Clamp 3/4



3/8" gas outlet



RBE03 quick coupling



Offset spout



Connection adaptor

SPECIAL STEELS ON DEMAND

- AL6XN - Hastelloy C22: Aggressive product
- 254 SMO: Aggressive food product
- Uranus B6: Saline solution

FOR WIDER USE

OTHER ASEPTIC SAMPLE COLLECTION

Diaphragm sampling valves allow sampling in strict sanitary environments. The design of DMX-DMAX valves incorporates a physical barrier between the interior of the valve and the outside environment, without risk of contamination. The profile of the valve body, without jumping, eliminates the risk of bacteriological development.



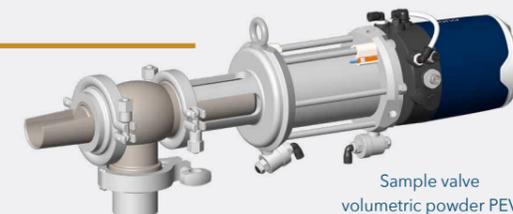
Automatic sampling diaphragm valve - DMAX



Manual sampling diaphragm valve - DMX

POWDER SAMPLING

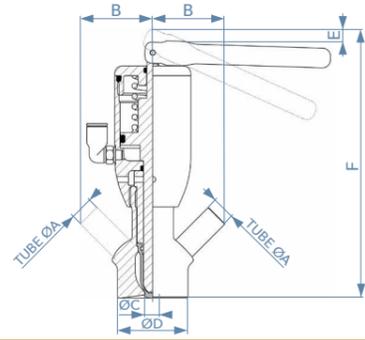
For powder applications, DEFINOX offers a volumetric sampler suitable for powder sampling.



Sample valve volumetric powder PEV

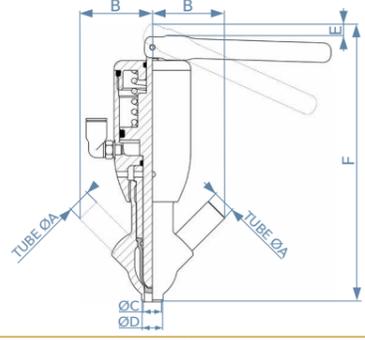
DIMENSIONS

TO BE WELDED ON A WALL MANUAL AND AUTOMATIC



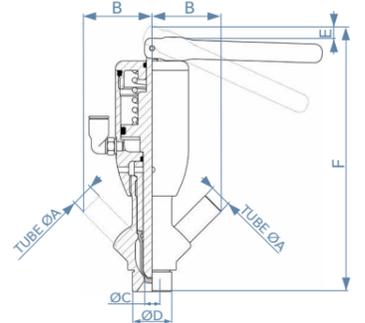
TubeØA	B	ØC	ØD	Stroke E	F	WEIGHT (kg)
DIN 6/8	33	4,5	28	5	115	0,60
DIN 10/12	37	8	36	7	140	0,70
DIN 16/18	50	15	52	7	160	1,55

TO BE BUTT WELDED MANUAL AND AUTOMATIC



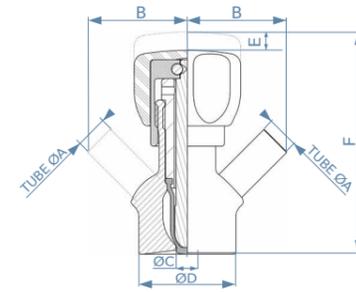
TubeØA	B	ØC	ØD	Stroke E	F	WEIGHT (kg)
DIN 6/8	33	4,5	7	5	115	0,60
DIN 10/12	37	8	11	7	140	0,65
DIN 16/18	50	15	18	7	160	1,40

GAS THREAD MANUAL AND AUTOMATIC

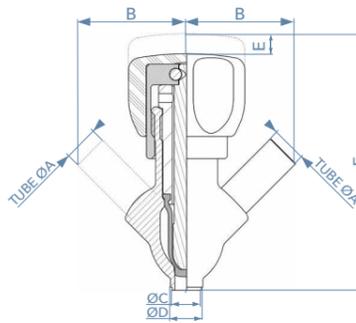


TubeØA	B	ØC	ØD	Stroke E	F	WEIGHT (kg)
DIN 6/8	33	4,5	1/2" gaz	5	115	0,60
DIN 10/12	37	8	1/2" gaz	7	140	0,65
DIN 16/18	50	15	1/2" gaz	7	160	1,40

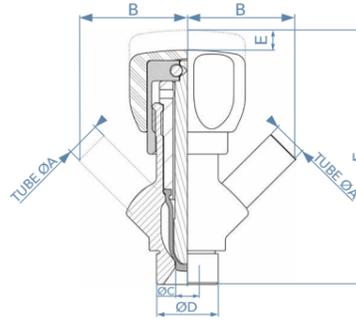
DIMENSIONS



TubeØA	B	ØC	ØD	Stroke E	F	WEIGHT (kg)
DIN 6/8	33	4,5	28	5	68	0,30
DIN 10/12	37	8	36	7	83	0,40
DIN 16/18	50	15	52	7	96	0,80



TubeØA	B	ØC	ØD	Stroke E	F	WEIGHT (kg)
DIN 6/8	33	4,5	7	5	73	0,30
DIN 10/12	37	8	11	7	88	0,35
DIN 16/18	50	15	18	7	106	0,70



TubeØA	B	ØC	ØD	Stroke E	F	WEIGHT (kg)
DIN 6/8	33	4,5	1/2" gaz	5	69	0,30
DIN 10/12	37	8	1/2" gaz	7	88	0,35
DIN 16/18	50	15	1/2" gaz	7	106	0,70

CLAMP AUTOMATIC

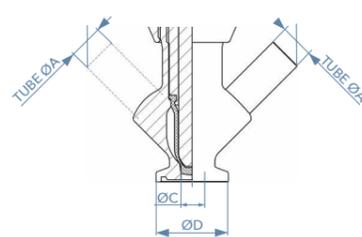
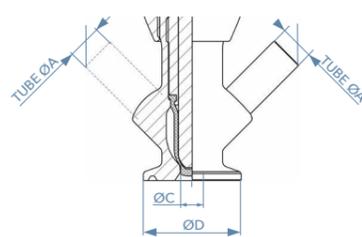
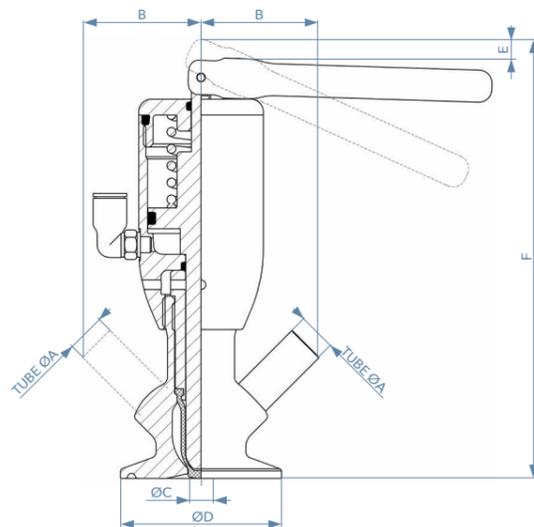
MINI CLAMP

MICRO CLAMP

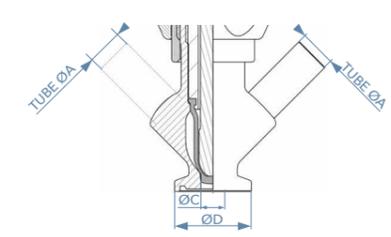
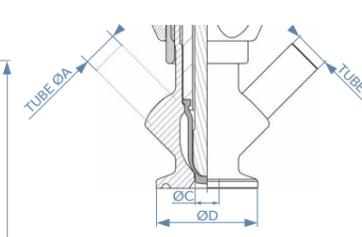
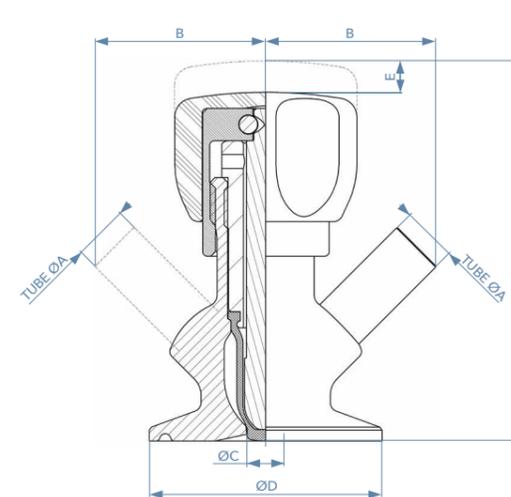
CLAMP MANUAL

MINI CLAMP

MICRO CLAMP



TubeØA	B	ØC	ØD	ØD	ØD	Stroke E	F	WEIGHT (kg)
DIN 6/8	33	4,5	50,4	34	25,4	5	115	0,65
DIN 10/12	37	8	50,4	34	25,4	7	140	0,70
DIN 16/18	50	15	50,4	34	25,4	7	160	1,35



TubeØA	B	ØC	ØD	ØD	ØD	Stroke E	F	WEIGHT (kg)
DIN 6/8	33	4,5	50,4	34	25,4	5	68	0,35
DIN 10/12	37	8	50,4	34	25,4	7	83	0,40
DIN 16/18	50	15	50,4	34	25,4	7	93	0,65



DOWNLOAD, SCAN, BROWSE...

The augmented reality developed by DEFINOX for more services.

- Immediate identification of the valve and spare parts
- Saves time on valve fleet management
- Reduced risk of errors
- Immediate access to documentation
- Individualized monitoring of the valve with the service book function



MOBILE APPLICATION, FREE TO DOWNLOAD AND ACCESSIBLE FROM YOUR SMARTPHONE



CUSTOMER SERVICE

The customer service offers various services.

- > Training*
- > Preventive maintenance program
- > Spare parts management
- > Advice/expertise

Our teams of specialized multilingual technicians work in France and abroad for maintenance operations.

They are also involved in product retrofit operations (change in generation of valves or housings).

*Definox is Qualiopi certified

- > Work safely on valves

With tool kits and dismantling press.



SPECIALIST FOR OVER 50 YEARS

70 COUNTRIES

60,000 EQUIPMENT AND VALVES SOLD PER YEAR

150 EMPLOYEES



MACHINING IN THE BODIES



WELDING OPERATION



HEAT TREATMENT



ASSEMBLY OF PROCESS VALVES

FLEXIBILITY AND PERFORMANCE

The machining, turning and welding techniques selected by DEFINOX for the production of valves, pigging solutions and personalized equipment give strategic components in contact with the fluid a high level of finish and quality and in accordance with process requirements.

Mass-machines of the bodies is the guarantee of manufacturing parts without retention zones. This process provides great resistance to mechanical and thermal deformation. The spherical shape of the bodies promotes optimum fluid flow and a reduction in pressure losses.

Milling and turning operations offer great flexibility to adapt the outlet pipes. Many configurations are thus made possible.

The internal polishing (Ra = 0.8 µm or 180 grit) contributes to a good in-line cleanability. This is the assurance of a finish that complies with health requirements. A passivation operation reinforces the corrosion resistance.

The quality of the welds (made by TIG certified welders) meets health standards and requirements. The welds guarantee good geometry and resistance of the mechanically welded assemblies.

DEFINOX is committed to a Lean Manufacturing approach and continuous improvement. Our industrial and organizational choices optimize our production flows and provide the flexibility necessary to produce specific valves or specific equipment according to customer needs.





ENGINEERING DEPARTMENT

Our engineering department provides knowledge in IO-Link technology associated with process valves and liquid transfer.

It advises and supports your approach to implement predictive valve maintenance.

Definox has been a specialist in the transfer of liquids or semi-liquids for over 50 years. A renowned French brand, DEFINOX specialises in the design and production of process valve assemblies and customised equipment in stainless steel, meeting specific customer specifications (valve manifolds, pigging solutions, injection systems, etc.).

The valves and equipment meet the standards of the regulations in force applicable to hygienic processes and the most severe constraints in terms of cleanability.

[definox.com](https://www.definox.com)

AND FOLLOW US ON:



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