

Demonstration

XSR



Instruction Manual

Reference: XSRDEMO_NOT_EN

Version A



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1 GENERAL PRESENTATION

1.1. Manufacturer

SERVINOX is a specialist, making process equipment for the brewing, food, cosmetic and chemical industries.

Skill and knowledge about process equipment :

In areas such as the protection of tanks, sampling, injection of gas in liquids, securing or cleaning pipes with patented products...

SERVINOX is certified **ISO 9001 : 2008** and makes products complying with the following applicable standards and directives :

- Pressure Equipment Directive (**DESP**) **2014/68/EU**
- European Directive concerning Devices for Use in Explosive Atmospheres (**ATEX**) **2014/34/CE**
- Hygienic standard for manufacturers **US 3A**

We are an active member of the association **EHEDG France** (hygienic standard for European manufacturers).

1.2. Instruction manual

To ensure the integrity of the device and the safety of people, you should be aware of the information contained in these instructions before installing and using the device.

Depending on the installation and the fluid, the specific directives and regulations apply, and should be complied with.

In addition to these instructions, the general instructions for safety at work and protection should be applied. The regulations concerning the protection of the environment must also be followed..

1.3. Presentation of the equipment

The objective of the SERVINOX demonstration skid is to present the pigging system

Description of operation

The pigging skid provides an overall view of how a pigging system operates. The clear pipes enable us to observe how the pig behaves in a straight line.

1.4. Brand

If you have difficulties these instructions cannot resolve, you should ask for further information from the manufacturer or from the equipment distributor.



It is essential to mention the SERVINOX order and/or the serial/production order number, beginning with SVX, for all special requests (spare parts, etc).

2 SAFETY GUIDELINES



The technical manual contains the fundamental safety guidelines that must be observed. Therefore, you must read it prior to assembly and operation.

2.1. Information and symbols

The following pictogrammes draw your attention to the important points regarding people safety and the integrity of the equipment:

SYMBOL	DEFINITION
	Immediate danger to people
	Possible damage to the product or surrounding area
	Mandatory guideline
	Minimum number of people required for certain operations (the pictogramme indicates the minimum number of people required)
	Minimum level of technical ability (the number in red indicates the minimum level required)

Some interventions require specific technical abilities and skills, such as curative maintenance and work on electrical equipment.

3 levels specify the required technical ability (knowledge of the relevant equipment, experience, training, etc.):

	OPERATOR PROFILE	SPECIFICITY
Level 1	End user without any technical knowledge	Level by default if the ability pictogramme is not shown. Only authorised for basic operations of use and maintenance
Level 2	Experienced professional	Trained and experienced . Knowledge of the equipment and technologies used
Level 3	Manufacturer's employee/product expert	Work reserved for the constructor of the documented equipment

2.2. Operator safety

Installation, test, adjustment, maintenance and replacement should be performed:

- By qualified persons,
- Following the recommendations and guidelines given in these instructions,
- Complying with the arrangements safety at work, procedures and resources of the fitter, and the legal notifications for the prevention of accidents, especially those concerning electrical installations.

Not following these safety instructions can result in the loss of all right to claim damages.

2.3. Intended use

Recommended use

In the certification documents, check that the device chosen is right for its intended use.

Misuse

The device must not be used for any other purpose other than its intended use. The manufacturer cannot be held responsible in case of incorrect use.



The equipment must not be used beyond the following operational limits:

PARAMETER	LIMITS
Maximum allowable pressure	6 bar
Mini/maxi temperature	+5°C / 45°C
Propelling medium	Air only



Do not introduce liquids

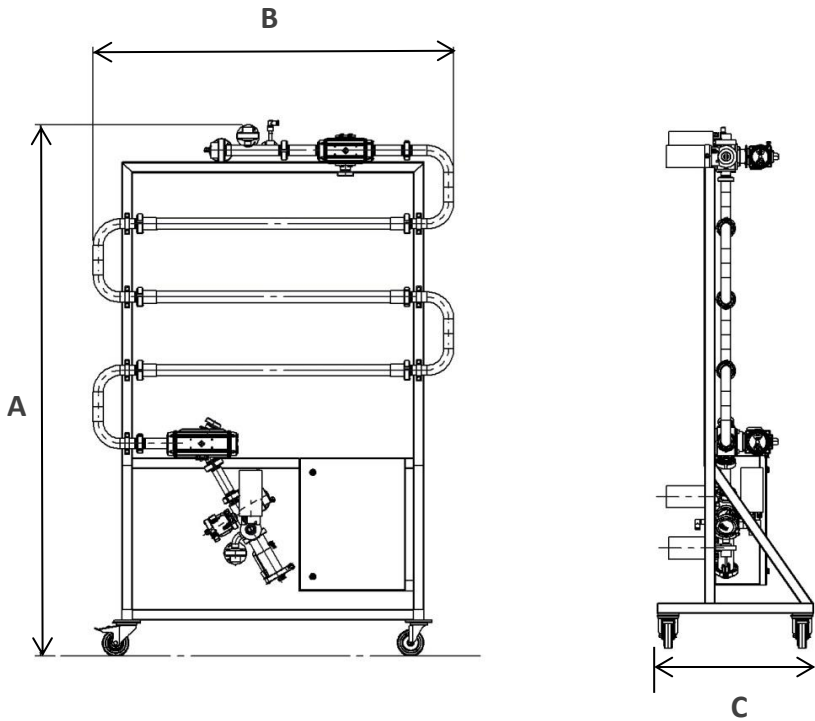
3 TECHNICAL FEATURES

3.1. Features

FEATURES	SERVINOX RANGE
Connection	<u>CONTROLLER INLET CONNECTION</u> Pneumatic: diameter 4, 6 or 8 mm <u>DEMO SKID:</u> Electric: 220 V A/C plug
Working temperature	MINI: +5°C MAXI : +45°C
Pressure	Controller outlet: 3 to 6 Bar
Supply voltage	220 VAC / 50Hz (0.5kW)
Servinox pig reference	JM38605TI
Equipment supplied	Key for the electrical cabinet 2 x JM38605TI pigs, including 1 spare Set of fittings
Propelling agent	Air

3.2. Dimensions

Demonstration skid



	A	B	C
Skid	2000 mm	1360 mm	600 mm

4 COMMISSIONING

4.1. Transport/Delivery/ Use

Protect from all outside dangers during transport (shocks, knocks, vibration, etc.)



On delivery, check that:

- the *packaging is in a good state*
- the equipment *delivered complies with the order placed*
- the equipment *is not damaged*



If the equipment is damaged. Contact the manufacturer or your distributor.



▪ **Description of the packaging:**

- 1) Dimensions: 1500 x 700 x 2100
- 2) Servinox reference: EMBCB15070210

4.2. Storage



If the device is not fitted immediately after delivery, it should be stored **carefully**.

It should be stored in its original packaging, in a covered area, with protection against dirt, rain, snow, insects and away from shock.

The safe storage temperature is between 5°C and 40°C, with relative humidity of the air < 50%.

4.4. Installation

General



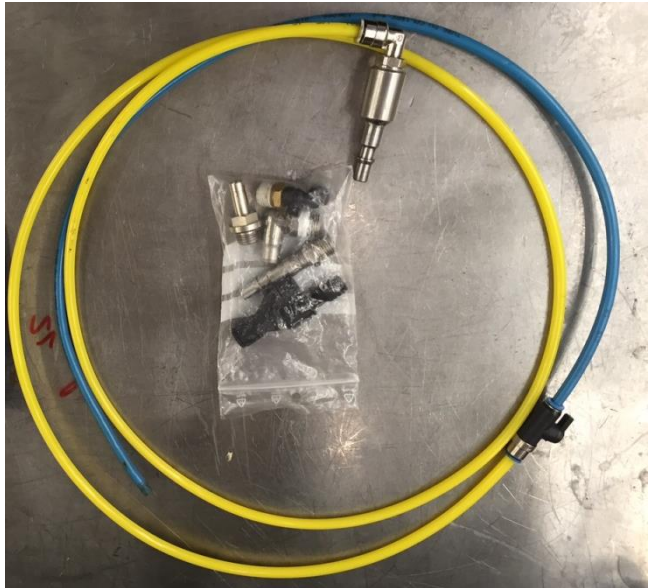
Before any utilisation of the equipment, the user must **visually verify good condition: absence of corrosion, bits of packaging.**

Operators



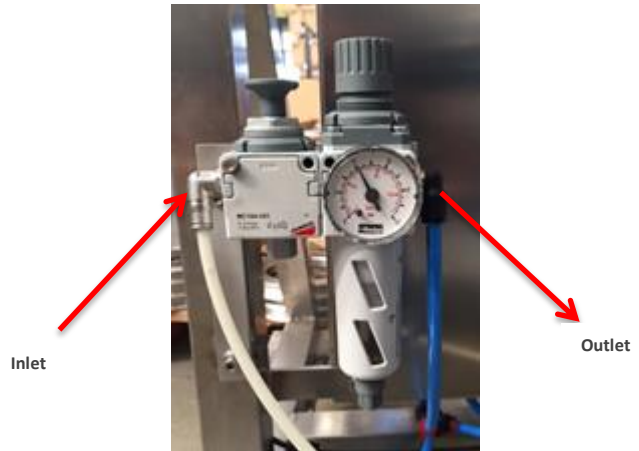
The work described below should be carried out by **qualified and experienced persons.**

Set of fittings air input



Connection to the controller

- 1) Check that the controller knob is in the up position prior to any connection.



▪ **Pneumatic connection:**

- 1) Connect the air flow to the controller inlet (left). Three fittings are available according to the desired tubing size (outside diameter 4mm, 6mm or 8 mm).
- 2) Check that an 8 mm fitting is connected to the controller outlet (right), to enable the skid to operate.

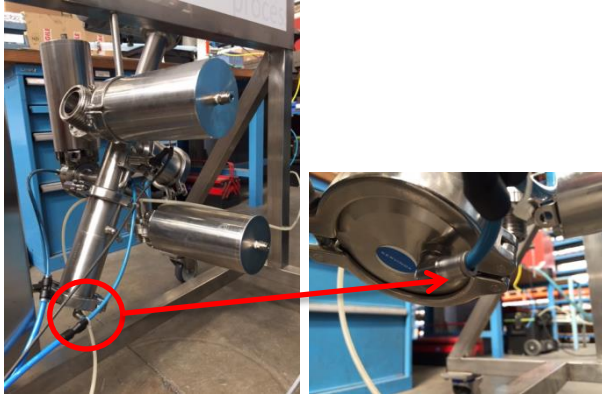
▪ **Air discharge:**

- 1) Lift the knob on the left of the controller to discharge the air.

Pneumatic connection

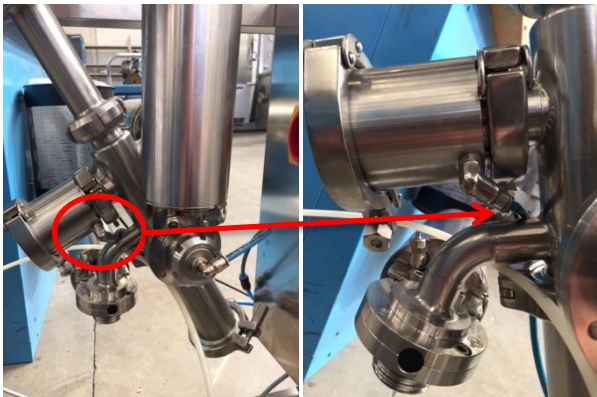
- 1) Check that the pneumatic fitting is correctly connected to the controller outlet.
- 2) Check the positioning valve is connected.

▪ **Positioning valve:**



▪ **Blocking valve:**

- 3) Check that the pneumatic fitting is correctly connected to the controller outlet, to prevent the pig from becoming blocked.



4) Introduce the air into the demonstration skid.

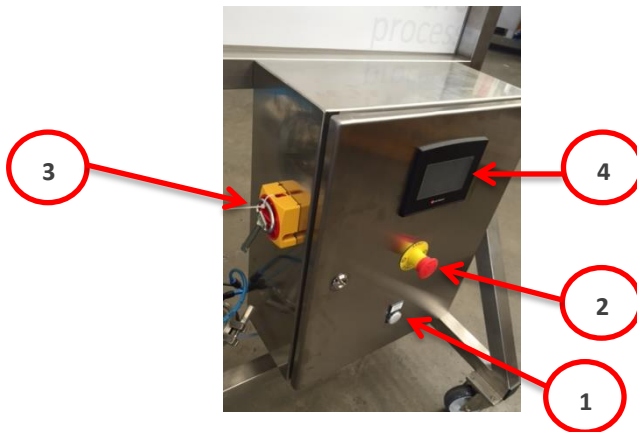


Check that the controller is set at 4.5 bar

Electrical connection

▪ Description of the electrical cabinet:

- 1) Indicator light (1) on the front of the electrical cabinet to inform the user of the presence of an electrical voltage, as well as an emergency stop button (2)
- 2) Dual position on/off disconnecter (3) on the left of the electrical cabinet
- 3) Operational interface (4)



▪ Electrical connection:

- 2) Connect the demonstration skid to the mains supply using the 230 V a/c plug supplied
- 3) Turn the disconnecter
 - a. Position the arrow to the left to turn off
 - b. Position the arrow to the up position to turn on

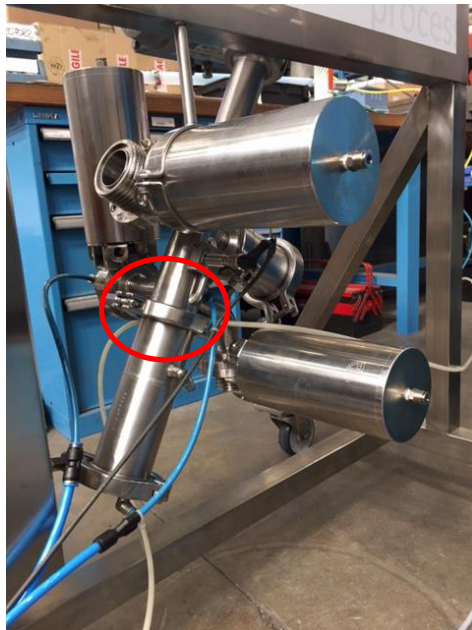


Replacing the pig



Check the absence of pressure prior to dismantling.

Replacing the pig requires the positioning valve to be dismantled. To do this, unscrew the clamp shown below. Check that the pig is indeed in the station via the detection sensor.

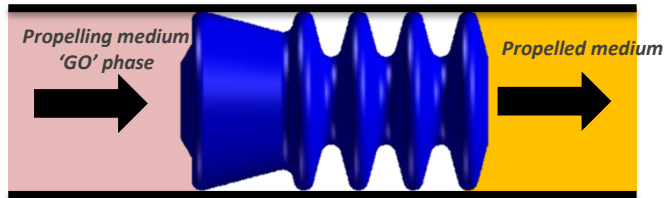


▪ ***Carry out the following steps:***

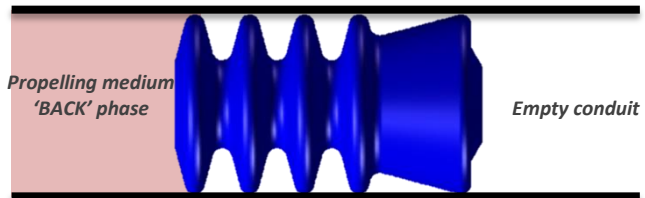
- 1) Allow the air to escape
- 2) Dismantle the clamp (shown above)
- 3) Remove the pig

- 4) Position the pig

'GO' phase for standard pigging



'BACK' phase for standard pigging



- 5) Reassemble the positioning valve and the clamp

Travel speed of the blockage



All settings have already been programmed and do not require any modification.

The 2 throttle valves (in the electrical cabinet) act directly on the travel speed of the blockage. The valves for the 'Go' and 'Back' phases can be identified by labels:

- GO = Go phase
- BACK = Back phase



Throttle valves

5 OPERATION



Do not handle the multiway valves.

Using the interface



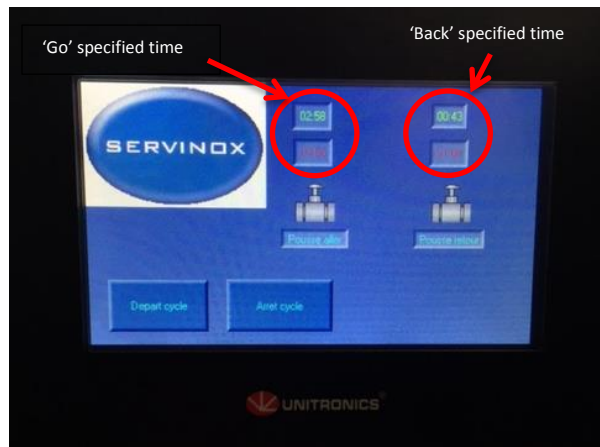
All settings have already been programmed and do not require any modification.

- **Automatic operation of the pigging system:**
 - 1) Press on start cycle to start the pigging cycle
 - 2) Press on stop cycle to stop the pigging cycle

- **Specified time:**

If the blockage is not detected at the launching or receiving station at the end of the specified time, the blockage has been pushed in the opposite direction.

- 1) Press the time indicator on the screen and enter the desired value to change the specified time.



5.1. Checks prior to operation

- *Check that the controller inlet is correctly linked up to the pneumatic network*
- *Check that the demonstration skid is correctly linked up to the electrical network*
- *Check that the positioning and blocking valves are connected correctly*

5.2. Settings

Any adjustments must be carried out by the manufacturer of the documented equipment.

Please contact SERVINOX or your distributor.

solutions

engineered for you

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