

## BOSS 100 FI

Descaling pump for radiators, heat exchangers, plastic press moulding machines, big boilers, chiller and big installations.

COD. 300601009



### TECHNICAL FEATURES

|                      |                      |
|----------------------|----------------------|
| TANK                 | 100 l                |
| MAX FLOW RATE        | 52 l/min             |
| CONNECTIONS          | 3/4"                 |
| MOTOR                | 230 V/50 Hz/0,373 kW |
| PRESSURE             | 1,6 bar              |
| DEGREE OF PROTECTION | IP 55                |
| WEIGHT               | 19 kg                |
| MAX TEMPERATURE      | 70° C                |
| DIMENSIONS           | H: 910 mm ø: 480 mm  |

### PACKAGING FEATURES

|                                  |                      |
|----------------------------------|----------------------|
| NUMBER OF PIECES PER BOX         | 1 pc                 |
| NUMBER OF PIECES PER EPAL PALLET | 4 pcs                |
| BOX DIMENSIONS                   | H: 95 L: 58 P: 50 cm |
| EPAL PALLET DIMENSIONS           | 80x120x204 cm        |
| PRODUCT WEIGHT                   | 14,5 kg              |
| BOX WEIGHT                       | 16 kg                |
| EPAL WEIGHT                      | 84 kg                |
| CUSTOMS CODE                     | 8413.82.00           |
| BARCODE EAN 13                   | 8054633849750        |

\*Data updated in May 2016

### ADVANTAGES

- Acid resistant material
- Self-protection against damages caused by dry work
- Hose reel handle
- Trolley as component part available for a fast carriage also with full tank

### BENEFITS

- Restoring of the optimal heat exchange
- Reduction of energy consumption visible on your bill
- Extension of life system
- Prevention of hot water total block

### MAIN FEATURES

Boss 100 FI - has been designed to remove limestone deposits and corrosion debris from cooling and heating circuits. The plastic tank contains chemical substances safely during the descaling operation, guaranteeing to observe the colour change of the acid after the nut removal thanks to its big diameter. Equipped with Flow Inverter valve (FI), through a manual level, that guarantees to the descaling liquid to alternatively act at both side of the circuit. BOSS 100 FI is able to resist to the action of all common descaling acid products. It has been designed to being used on site, with low weight and good stability. The pump can be used with alkaline cleansing solutions and chlorine based solutions, used for sanitization. The use of descaling products with inhibitors, created by Manta Ecologica S.r.l. assure a fast intervention and the maximum safety for heating systems and workers. For the correct functioning of the pump use exclusively chemical products of BP

descaling line. It is suggested for a long duration of the device to not leave any acid products inside the tank, once the cleaning process is over, and to let circulate for few minutes the neutralizing solution Neutral Liquid or Neutral Powder, in order to eliminate acid debris present inside the system.

## APPLICATION AND USE

---

Descaling pump for radiators, heating exchangers, plastic press moulding machines, big boilers and chiller. The pump is suitable for both civil and industrial uses, to remove limestone scales from coils of kettles and boilers in general. Suitable for being used with restoring products for heating systems cleaning.

## WHAT DO I NEED TO INSTALL IT

---

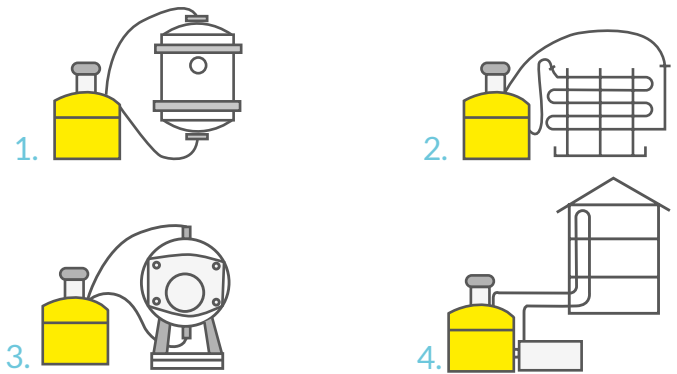
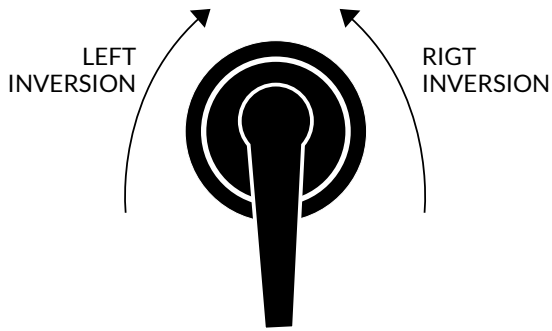
- Flexible pipes for an easier connection
- Nipples
- Connections
- Typical plumber 'tool for connections of different type

## CORRECT INSTALLATION

---

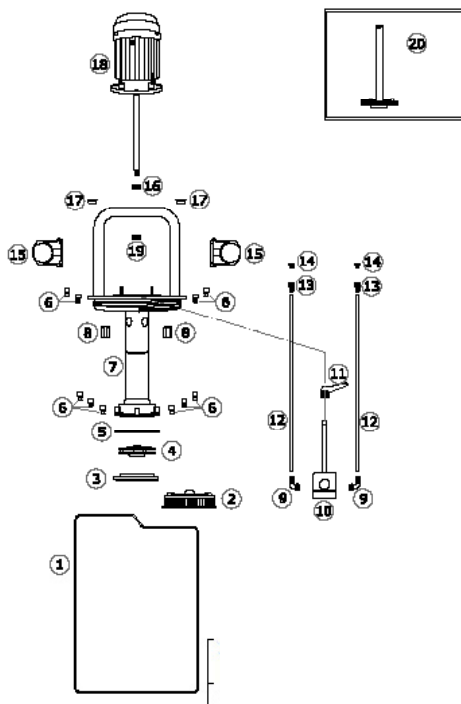
1. Control, as first thing (if it is possible) as first thing (if it is possible) control if inside the device that has to be descaled, there is enough space to guarantee the passage for the acid solution, the operation is not possible.
2. Disconnect the outlet and inlet of the device to descale, if it is possible, drain it from the internal water and then connect it to the pump, through the use of equipped pipes.
3. Remove the tank cap and add cold water up to half tank (please notice that operational temperature during descaling must never exceed 70 °C).
4. Turn the pump on with the switch and start adding slowly the descaling chemical, until required concentration is obtained. This operation guarantees the correct acid product blending. Please carefully follow use and

safety information reported on the label of product. Anyway, maximum operational time (continuously) of the motor, should not exceed 2 hours. Please after 2 hours, let the system rest for at least half an hour.  
**ATTENTION:** on all version equipped with Flow Inverter (FI) the acid solution flow can be inverted acting on the external control (directional valve) to obtain a better result. In case of excessive foam production, dilute the acid solution and switch off for a short time the pump. At the end of the descaling operation, replace the acid solution inside the pump, with clean water and rinse the descaled element.



1. Suitable for the descaling of big heat exchangers
2. Suitable for the descaling and cooling towers
3. Suitable for the descaling of big boilers
4. Suitable for the descaling of systems for the production of hot sanitary water

## EXPLODED VIEW AND SPARE PARTS



- 1- TANK
- 2- NUT + VENT
- 3- IMPELLER COVER
- 4- IMPELLER
- 5- O-RING 117,07x3,53 mm
- 6- PLASTIC SCREW M6 x 20 mm
- 7- PUMP BODY
- 8- PLASTIC NUTS
- 9- CURVE HOSE HOLDER 8131 ½"x 20 mm
- 10- FLOW INVERTER
- 11- KIT DIRECTIOVAL VALVE LEVER
- 12- TREADED HOSE 19x26
- 13- COMPLETED HOSE CONNECTOR 8120 ¾"x19 mm
- 14- MALE NUT 8200 ¾"
- 15- HOSE HOLDER D. 75 mm
- 16- FAIRLEAD FG 028
- 17- FAIRLEAD FG 216
- 18- MOTOR
- 19- ANTI OIL GASKET

## PACKAGING CONTENT

- 1 connections bag
- 1 User's guide
- Connection pipes: 2 threaded pipes from 2,5 m each
- Pump

## MAINTENANCE

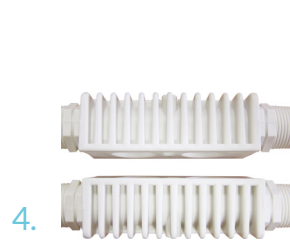
At the end of the descaling operation:

1. Do not leave pump unattended during the operations.
2. Control the pH is included between 6,5 and 9,5. For the liquid neutralization, both the ones present inside the pump, and also the ones present inside the descaled elements, we recommend to use neutralizing products (ex. Neutral Liquid or Neutral Powder).
3. Switch off the pump and disconnect as first thing the powder cord.
4. Wait till when the solution circulating inside the descaled device returns inside the tank.

**DO NOT LEAVE ANY ACIDIC SOLUTION INSIDE THE TANK:** fumes may seriously damage pump components.

## OPTIONAL

1. Terminal bags  
COD. 300610002
2. Connections  
COD. 300610003
3. Trolley 100  
COD. 300610005
4. HE Descale adaptor  
COD. 300610004



## SIMILAR PRODUCTS

1. Boss Pulce FI  
COD. 300601001
2. Boss 5 FI  
COD. 300601002
3. Boss 18 - 18 FI  
COD. 300601004 - 300601003
4. Boss 22 - 22 FI  
COD. 300601006 - 300601005
5. Boss 36 - 36 FI  
COD. 300601008 - 300601007
6. Boss 200 FI  
COD. 300601010



## TO BE USED WITH

- 1. DETEX FE**  
5 kg - COD. 300501001  
10 kg - COD. 300501002  
20 kg - COD. 300501003
- 2. DETEX PLUS**  
1 kg - COD. 300501014  
5 kg - COD. 300501004  
10 kg - COD. 300501005  
20 kg - COD. 300501006
- 3. DETEX Plurimetal**  
10 kg - COD. 300501011  
20 kg - COD. 300501012
- 4. DETEX POWDER MULTI**  
1 kg - COD. 300501007  
10 kg - COD. 300501008
- 5. DETEX POWDER ZN**  
1 kg - COD. 300501009  
10 kg - COD. 300501010
- 6. NEUTRAL LIQUID**  
10 kg - COD. 300502001
- 7. NEUTRAL POWDER**  
1 kg - COD. 300502002  
10 kg - COD. 300502003



## OFFER DESCRIPTION

Suitable for the cleaning with acid products of radiators, heat exchangers, plastic press moulding machines, big boilers and chiller. Equipped with trolley for a higher handling and facility of movement.

## COMPLIANCE

---

This products mod. BOSS 100 FI has been designed and constructed in accordance with the following European directives (including all applicable amendments):

Directive 2006/42/EC: Machine

Directive 2006/95/EC: Low Voltage

Directive 2004/108/EC: Electromagnetic Compatibility

Directive 2011/65/EC: RoHS 2

In addition, declares, that the electrical material used to made the product is in compliance with Regulation CEI-EN 60034: Electrical rotating machines. Part 1: Nominal and operative features.

## ORIGIN OF THE PRODUCT

---

 Made in Italy

TDS. 350.00  
Date of issue: 14/10/2016  
Date of revision:

Boiler Performance by Manta Ecologica S.r.l.

Viale Archimede, 45 - 37059 - Zevio (VR)

[www.boilerperformance.com](http://www.boilerperformance.com)

