



User Guide
DP15A
DP30A

User's manual –Use and Maintenance
Descaling pumps





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Dear Customer, thank you for choosing a MOULDPRO descaling pump.

MANUAL

This manual is a safe guide for the use of the pump. Please read it carefully in all its parts before use.

This manual contains important information for the proper working and use of the equipment.

MOULDPRO reserve the right to introduce any future changes without notice or replacement.

PRELIMINARY INSPECTION

Upon receipt of the pump, take it out from the carton and check it is in perfect condition. Also check that the data on the rating plate correspond to required ones. For any problem, immediately contact the supplier specifying the kind of fault.

In case of doubts about the safety of the machine, do not use it.

DESCRIPTION

The pumps **DP 15 A 220V** and **DP 30 A 220V** are fitted with programmable automatic flow reverser. Particularly recommended for difficult descaling treatments, they work in complete safety and autonomy enabling the operator to carry out other works at the same time.

Vertical axis pumps with tank for descaling boilers by using specific non-acid restoring products.

The pumps are equipped with special fittings and valves to adjust the flows and purge the sludge, built up by the operation, which is then rapidly removed.

Pumps are supplied ready to use, in strong carton boxes with related user's manual.

Below are the main deposits which can be removed with these pumps:

- Scale deposits
- Calcium and silica deposits.



1- REGULATIONS – CEMARK

Declaration of conformity

The pumps are in conformity with the following European Directives, Laws and Regulations:

Low Voltage Directive:

73/23/EEC

93/68/EEC

Electromagnetic Compatibility Directive:

89/336/EEC

92/31/EEC

93/68/EEC

93/97/EEC



Directives RoHS and WEEE:

02/98/EEC

02/96/EEC

03/108/EEC

QUALITY

MOULDPRO equipment is manufactured with high-quality acid-resistant materials and submitted to severe operating tests.

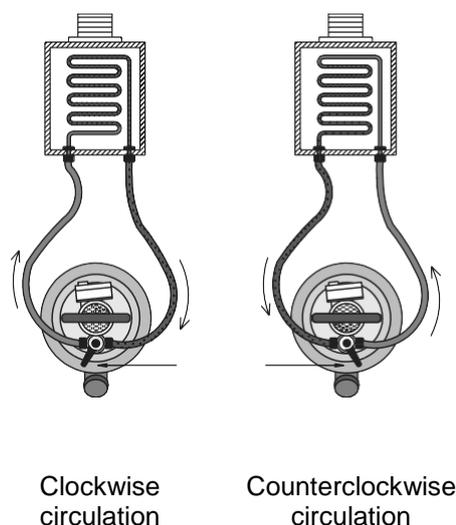
Follow these instructions to avoid any operating and servicing problems.

2- THE ADVANTAGES OF THE PUMPS DP 15 A AND DP 30 A

Time and, above all, temperature increase make calcium salts, usually present in water, precipitate in the form of microcrystals and settle on metallic surfaces of pipes, plant coils and heat exchangers, thus reducing flow rate and thermal efficiency.

To restore the original plant performance it is necessary to carry out a descaling with specific products and equipment.

The **automatic flow reverser device** attacks scale on both sides, thus making descaling particularly effective and fast (as the normal dissolving action is combined with the detachment in flakes of scale, which is made friable by the double attack), even when pipes and exchangers are almost totally obstructed



3-TECHNICAL FEATURES

DP 15 A 220V

Vertical axis pump

Motor DP 15 A 220V 220 V - Hp 0,17

Degree of protection IP 54

Max. temperature 50° C

Flow rate 40* l/min.

Head 10* m

Fittings 1/2"

Tank capacity 15 l

Dimensions ø x H 35 x 48 cm

Weight Kg 6

DP 30 A 220V

Vertical axis pump

Motor DP 30 A 220V 220 V - Hp 0,45

Degree of protection IP 54

Max. temperature 50° C

Flow rate 90* l/min.

Head 20* m

Fittings 1/2"

Tank capacity 24 l

Dimensions ø x H 40 x 63 cm

Weight Kg 10,5

* Data referred to the pump body outlet.

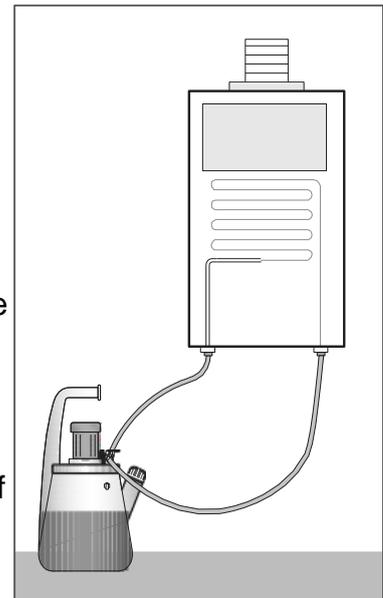
4-CUSTOMER SERVICE

For enquiries on spare parts, please specify serial number of pump (shown on product and carton).

5-USE

5.1- How to prepare the pump and check the seal

- Fill the tank with enough water to ensure that the pump rotor housing is submerged during operation.
- Screw the outer ends of the flexible hoses securely to the exchanger to be descaled.
- Connect the power cable to a single-phase 220V or 110V power supply.
- Switch on the pump and check the seal of the hose fittings on the exchanger and on the pump. In case of leaks of liquid, check hoses and fittings and replace the defective components, if necessary.
- When seal is safe, switch off the pump.
- If necessary, add more descaling product by referring to the dilution specified in the data sheet of the product.





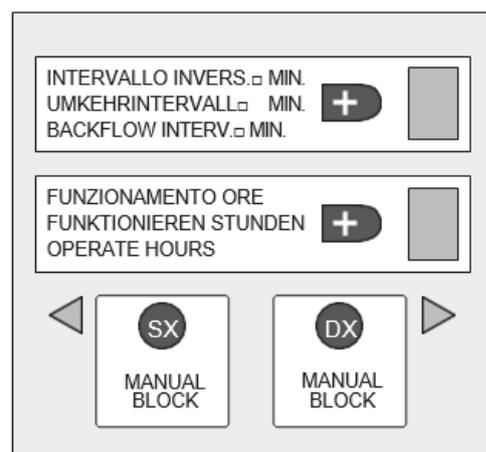
5.2–Programming

Switch on the pump.

When switching on, the led for “OPERATE HOURS” is blinking and is on 0 (zero). Press keys DX (right) or SX (left) to start manual mode; the value 1 will be displayed.

For automatic programming follow the instructions below:

1. By press key + “BACKFLOW INTERV. MIN” the value 1 will be fixed on display; this means the flow reversion will be carried out every minute
2. To modify the value press once the key +, the value will start blinking; only during this stage it is possible to increase the value (up to 9) by pressing again key +. After 3 seconds the value is confirmed.
3. The displayed value decreases as minutes go by. To know the actual value set at the beginning, press key + for 1 second and the actual value will start blinking.
4. To modify the value for “OPERATE HOURS” please refer to steps 2 and 3 above.
5. During automatic operation, to operate in manual mode, press twice in succession keys SX and DX.
6. Once the time set on the display “OPERATE HOURS” is finished, the pump will stop and the display will be blinking and indicate the value 0 (zero).
7. To restart the pump press keys DX or SX; the pump will start working in manual mode and the display “OPERATE HOURS” will show the value 1.



5.3– How to clean the pump

- After descaling REMOVE THE DESCALING LIQUID FROM THE TANK and wash out the pump by circulating clean water through it for at least 10 minutes.



PRECAUTIONS

Only use MOULDPRO chemicals in order to ensure good working and avoid damaging the equipment.

Once the lifetime of the pump has expired, do not dispose of it with household waste. The pump must be recycled in authorized centres and can be assimilated to a household appliance.



During handling lift the pump and do not drag it in order to avoid damages to the tank.

Temperature of the descaling solution must never exceed 50 °C.

Flexible hoses and fittings can be damaged in time; make sure to check the seal whenever using the pump, as indicated in the pump preparation instructions.



6 - SAFETY INSTRUCTIONS

- Avoid using the pump in rooms where there are liquids, gases, flammable powders or with risk of explosion.
- Before plugging in the pump to the outlet, make sure the switch is off.
- The outlet must be suitable for the plug of the pump. Do not use non CE-marked defective outlets.
- Use (CE) approved extensions, only if necessary.
- Do not use plug adapter. Do not carry out any modifications to the plug nor to the electrical cable.
- Pump shall always kept in perfect efficiency.
- During maintenance operations, check the switch is off and the plug is not connected.
- All maintenance operations must be carried out by the authorized Technical Assistance Service.
- Only use MOULDPRO original spare parts.
- Do not carry out any modifications to the pump if not authorized by MOULDPRO Technical Department (ask for written authorization).
- Keep children and unauthorized persons away from the pump.
- Keep the pump out of reach of children and unauthorized persons.
- Do not use the pump if tired or under the effect of alcohol, medicines or drugs.
- When using the pump, wear overalls, do not wear jewelry, and keep hair away from the pump.
- When handling descaling liquids, be very careful. It is necessary to use Individual Protection Equipment (IPE).



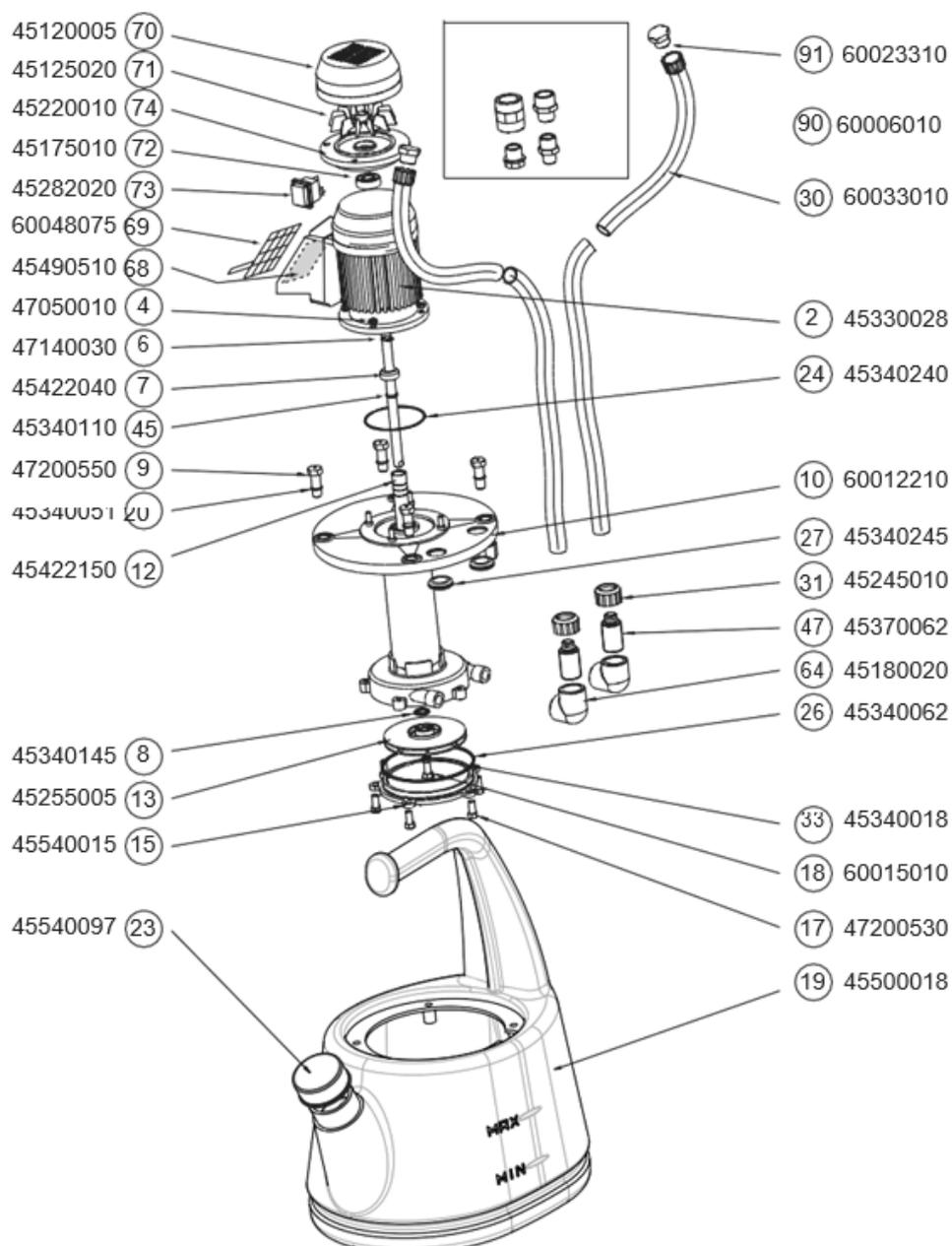
7-CHEMICALS

	Copper	Steel	Stainless Steel	Aluminum	Brass	Tin	Light Alloys	Galvanized iron
DESCALING CHEMICALS								
REMOVER LIQUID Concentrated descaling liquid with powerful reaction for systems and heat exchangers.	●	●						
REMOVER PLUS LIQUID Concentrated descaling liquid (non-fuming), with degreasing action, for systems and heat exchangers.	●	●						
REMOVER PLUS POWDER Concentrated descaling powder (non-corrosive, non-fuming) for systems and heat exchangers.			●	●	●	●	●	
NEUTRALIZING CHEMICALS								
NEUTRALIZER Neutralizing powder to remove residual acidity after descaling systems and heat exchangers. Also suitable for neutralizing descaling chemicals after use, thus making it possible to drain them.	●	●	●	●	●	●	●	●

8 - EXPLODED VIEWS AND SPARES DIAGRAMS

DP 15 A 220V

P.S.: For enquiries on spare parts, please specify always if needed for the model DP 15 A 220V

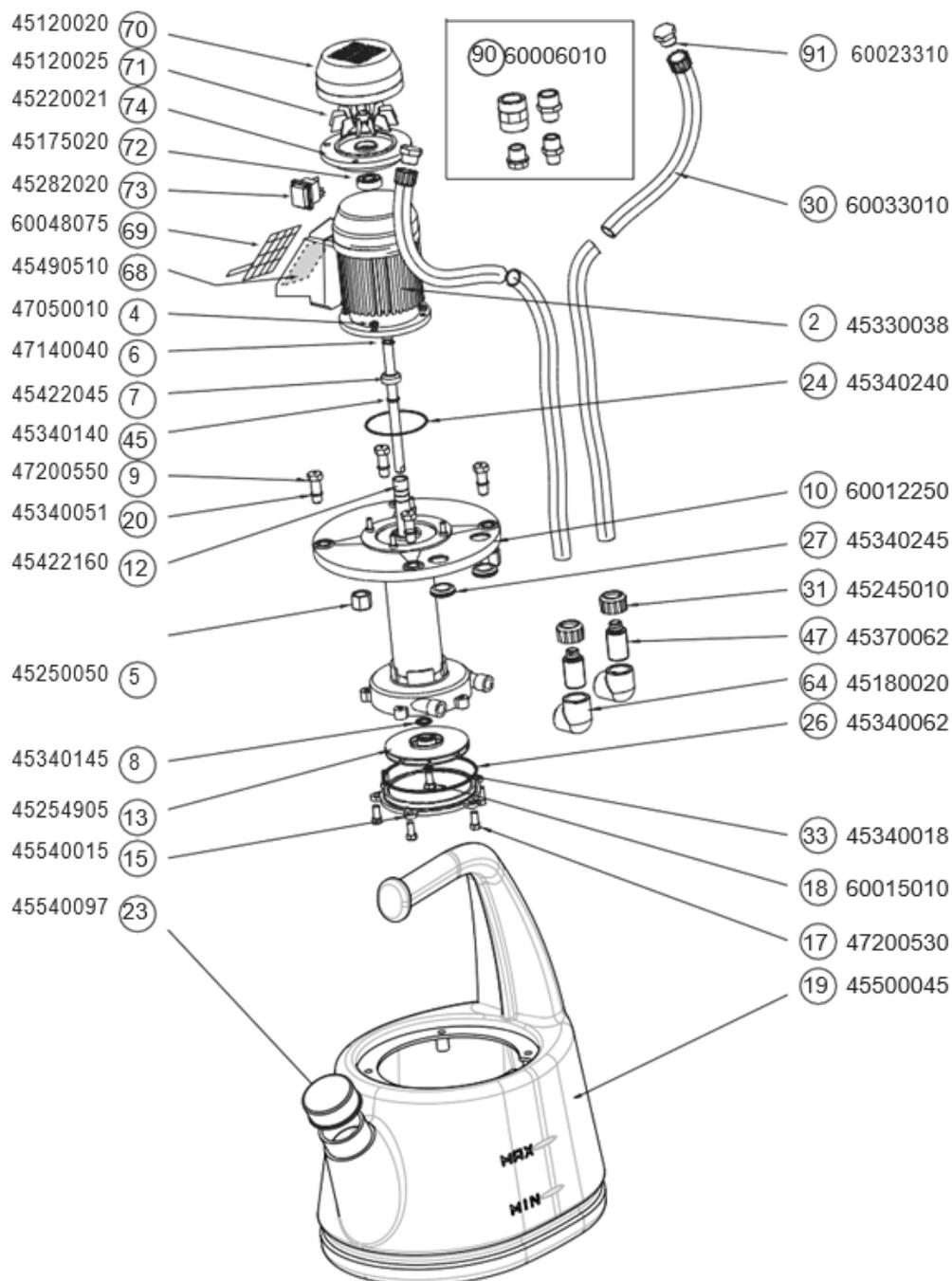




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|-------------------------------|-----------------------------|---------------------------|
| 2. Motor 220/50 | 19. Tank | 68. Electronic card |
| 4. Brass nut 6 MA | 20. O-ring, bolt M 12 | 69. Keyboard |
| 6. Circlip | 23. Tank cap | 70. Motor fan cover |
| 7. Plastic washer | 24. O-Ring for motor flange | 71. Motor fan |
| 8. O-Ring for rotor/ impeller | 26. O-Ring for rotor cover | 72. Seal bearing |
| 9. PP bolt 12 MA | 27. Fairlead for flange | 73. Switch |
| 10. Flange + pump body | 30. Transparent hose m. | 74. Motor flange |
| 12. Shaft sleeve | 2x2 + hose fitting 1/2" | 90. Thread adaptors |
| 13. PP rotor/ impeller | 31. Ring nut 3/4" | 91. Hose end fitting 1/2" |
| 14. Bulkhead | 33. O-Ring for rotor/ | |
| 15. Rotor cover in PP | impeller bolt | |
| 17. PP bolt 8 MA | 45. O-Ring for reverser | |
| 18. Bolt 6 MA | butterfly valve | |
| | 47. Pipe fitting 3/4" x 16 | |
| | 64. Elbow 3/4" | |

DP 30 A 220V

P.S.: For enquiries on spare parts, please specify always if needed for the model DP 30 A 220V.





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|-------------------------------|---|---------------------------|
| 2. Motor 220/50 | 19. Tank | 68. Electronic card |
| 4. Brass nut 6 MA | 20. O-ring, bolt M 12 | 69. Keyboard |
| 6. Circlip | 23. Tank cap | 70. Motor fan cover |
| 7. Plastic washer | 24. O-Ring for motor flange | 71. Motor fan |
| 8. O-Ring for rotor/ impeller | 26. O-Ring for rotor cover | 72. Seal bearing |
| 9. PP bolt 12 MA | 27. Fairlead for flange | 73. Switch |
| 10. Flange + pump body | 30. Transparent hose m. | 74. Motor flange |
| 12. Shaft sleeve | 2x2 + hose fitting 1/2" | 90. Thread adaptors |
| 13. PP rotor/ impeller | 31. Ring nut 3/4" | 91. Hose end fitting 1/2" |
| 14. Bulkhead | 33. O-Ring for rotor/ impeller bolt | |
| 15. Rotor cover in PP | 45. O-Ring for reverser butterfly valve | |
| 17. PP bolt 8 MA | 47. Pipe fitting 3/4" x 16 | |
| 18. Bolt 6 MA | 64. Elbow 3/4" | |



9- DIRECTIONS FOR DISPOSAL

In accordance with the WEEE directive 2002/96/EC on waste electrical and electronic equipment, the pump, when no longer used, shall be disposed of in a RAEE – WEEE collection center authorized for disposal of waste electrical and electronic equipment, or directly contact your dealer.



10- WARRANTY TERMS AND AFTER-SALE ASSISTANCE CONDITIONS

MOULDPRO guarantee that the equipment sold are free from designing, manufacturing and material defects, under normal operating conditions and according to the directions contained in the instructions manual supplied with the equipment.

In compliance with the directive 1999/44/CE valid in the EEC countries, the warranty rights apply only to the purchaser.

MOULDPRO, placed in Baltorpbakken 10, DK - 2750 Ballerup - Denmark, guarantee the equipment against any conformity defects appearing within 24 (twenty-four) months from the purchase date, even when warranty operations have been carried out during this period, if only proved by a document.

The warranty covers all components of the equipment and provides for the repairing or, if necessary, the free replacement of those parts that, according to your Dealer, have conformity defects.

The warranty does not cover the aesthetic parts, and the parts subject to wear and tear, nor does it cover all damages or failures whose cause is not due to the manufacturer, such as: transport, wrong installation or maintenance, tampering, sudden changes of electric voltage and/or hydraulic pressure, thunderbolts, corrosions, excess of humidity, accidental bumps or events beyond our control.

The warranty is valid only if the equipment have been installed, used and properly maintained according to all directions supplied by MOULDPRO in the instructions manual attached to the equipment.



Should any conformity defects of the product be found during the warranty period, the Customer should notify the Dealer to agree upon the terms of repairing and/or replacing of the product.

Change log

Date of change	Change	Version
28-06-2019	Layout	001