

SCALEBREAKER

**Tank mounted descaling and chemical cleaning pumps
- purpose built to handle the strongest descaling chemicals.**



**Professional and
safe to use**

Cycle time down ? -
Inconsistent moulding? - Have
you checked your cooling
channels?

Many moulds are running at very poor
cooling efficiency without you even
knowing it. Over months and years layers
of lime scale, rust or other debris slowly
reduce the bore size of your cooling
channels, which can have a dramatic
effect on the overall performance of each
tool.

- I HIGH PERFORMANCE TO ENABLE DESCALING OF SEVERELY FOULED EQUIPMENT.
- I DESCALING CHEMICALS SAFELY CONTAINED AT ALL TIMES WITHIN INTEGRAL TANK.
- I SELF PRIMING FOR EASE AND SAFETY.
- I FLOW REVERSAL FOR FASTER AND MORE EFFECTIVE DESCALING.



- I COMPACT AND PORTABLE.
- I NO SEALS TO LEAK.
- I MAINTENANCE FREE.
- I SUPPORTING RANGE OF
SCALEBREAKER DESCALING CHEMICALS.



C10 descaling pump

The advantages of flow reversal when descaling and chemical cleaning

During descaling limescale dissolves
with the evolution of gas. The resulting
effervescence and foaming can create
a barrier which impedes, and in some
cases prevents descaling chemical
from further reaction with the deposits.
Reversing the direction of flow and
return with the flow reverser (see

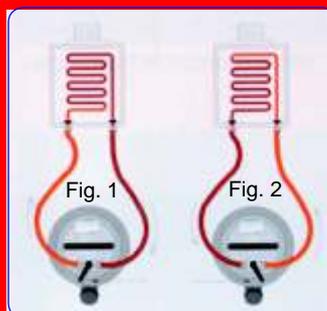


Fig.1 and Fig.2) allows the foam and gas to
discharge through the tank, eliminating the
barrier effect. Apart from allowing deposits to
be attacked from both sides, penetrating and
breaking up their structure and speeding the
descaling process considerably, flow reversal
often enables previously blocked tubes and
heat exchangers to be successfully descaled.

SCALEBREAKER tank mounted descaling pumps

Models available and technical data

Model	Tank capacity	Motor (HP)	Max. output (l/min)	Max. head (mt)	Weight (kg)	Max. diameter (cm)	Max. height (cm)
C10	13 litre / 2.6 gallon	0.20	40	9	6	33	44
C15	15 litre / 3.3 gallon	0.20	50	10	7	35	46
C30	35 litre / 7.6 gallon	0.45	80	22	9	45	60
C130	100 litre / 22 gallon	0.45	80	22	12	53	63
C190	100 litre / 22 gallon	0.75	150	24	14	53	65
C230	200 litre / 44 gallon	0.75	150	24	16	68	85

Which pump should you use?

A guide to the appropriate pump for a given application may be given by noting the approximate volume of the equipment to be descaled. If this volume were 300 litres of water, then approx 30 litres (10%) of descaling solution would be used.

In such a case, a descaling pump of 30+ litres tank capacity would allow all the descaling chemical to be placed directly in the pump tank, without any need to first drain out a

corresponding volume of water from the equipment. A descaling pump with a smaller tank would require water to be run from the equipment before commencing. The pump tank would need to be filled with descaling chemical several times, each time operating the pump briefly to transfer the chemical into the equipment to be descaled.

Typical applications

1. C10 - domestic boilers and water heaters, and occasional small industrial descaling

applications.

2. C15 - domestic and small industrial applications, plastics machinery.

3. C30 - medium size applications - boilers, direct-fired water heaters, chillers and condensers. Larger plastics machinery.

4. C130 - medium size applications - boilers, calorifiers, and chillers.

5. C190 - large commercial and industrial boilers, calorifiers, chillers, and water heaters.

6. C230. As for the C190.

General information

Pumps are of the self priming positive drive centrifugal type.

Hoses and connections

All pumps are fitted with reinforced PVC flow and return tubing, fitted at the outer ends with polypropylene chemical resistant BSP threaded female couplings.

C10, C15, C30, and C130 models have 2 metre hoses with 1/2" couplings, whilst C190 & C230 models have 3 metre hoses with 1 " couplings.

Customers may specify longer flow and return hose lengths to suit their individual requirements.

C10, C15, C30 and C130 models include a kit of BSP threaded adapters to enable easy connection to valves, and heat exchangers.

Operational and temperature capabilities
C10, C15 and C30 models have run-dry capability, but temperature must not exceed 50°C.

C130, C190 and C230 models have a PTFE shaft support bearing, above the impellor, and this is lubricated and cooled by the liquid being circulated.

C130, C190 and C230 pumps **must not be run dry**, and temperature must not exceed 50°C.

Motors

Electric motors are totally enclosed fan-cooled type, to IP54 motor protection rating, continuously rated, with integral plastic membrane covered switch and warning light. 220 or 110 volt, 50 Hz motors are available, with 110 volt 60 Hz motors available to special order.

Portability and handling

C10, C15 and C30 models are fitted with carrying handles, whilst C130, C190 and C230 models have hand holds and a grip bar for easy manoeuvring and emptying. All pumps are designed for on-site use, with low weight and good stability.

Flow reversal device

C15 to C230 models have an instantaneous flow reverser valve to change the direction of flow of the descaling liquid. Regular flow reversal whilst descaling can halve the time taken to descale boilers and heat exchangers, and is extremely effective in flushing out loosened deposits.

The C10 pump has a reversable motor to achieve flow reversal.

Chemical handling capabilities

Scalebreaker pumps are acid-proof, and may be used with all acids in common descaling use - hydrochloric, phosphoric, sulphamic, citric, formic, acetic, etc., and also with alkalis, and chlorine solutions as used for sterilisation purposes. For compatibility with other chemicals, please call to check..

Technical support

Comprehensive instructions for use are included with every SCALEBREAKER pump, and the telephone help line service ensures that pump users can obtain advice on using both equipment and chemicals.

Materials of Construction

Motor support flange & body, flow reverser, volute, and impellor - polypropylene.
Drive shaft (C10-C30) - steel, sleeved in PP.
Drive shaft (C130-C230) - polypropylene.
Shaft bearings (C130-C230) - PTFE.
Tank - HD polyethylene, translucent, to enable liquid level to be monitored visually.
Hoses - reinforced transparent PVC.

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