



PC570

H I G H P R E S S U R E C A S T I N G

WORLD LEADERS IN PRESSURE CASTING TECHNOLOGY

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INTRODUCTION

The PC570 is PCL's most popular high pressure casting system and has been in use worldwide for over 25 years for large scale Sanitaryware production. This powerful overhead single beam machine is capable of producing a full range of solid and hollow cast sanitaryware products. With the IMSC (individual mould station control), developed by PCL, the PC570 can cast both solid and hollow cast products at the same time. It is suitable for casting vitreous or fine fireclay slip.

This machine has a fully automatic casting cycle and generally operates on a cycle time of 20 to 25 minutes. The PC570 can produce over 1,000 tanks, 1,000 lavatory basins or 2,600 covers in only 24-hours with just a single operator per shift to demould and finish the pieces ready for drying. The PC570 can also be used to manufacture a wide range of products, including pedestals, urinals, pans and other 2 part moulds. The standard machine has a nominal 5-metre active beam length on which up to 16 single or

multi cavity 2 part moulds can be hung. A machine with an increased beam length is also available for increased output if needed.

The PC570 machine is supplied as a pre-fabricated unit including a skid mounted 1000Lt heated slip tank and a water wash system to minimise the time required for onsite installation.

Demoulding of the PC570 can either be manual, manually assisted or fully automatic. Demoulding systems are available from PCL and can be supplied as part of a system package.



PC570 CASTING PRODUCTS

Our 2 part mould high pressure casting system typically includes a PC570 casting machine, skid mounted 1000Lt heated slip tank, water tank, mould development, mould supply, shipping (optional), and supervision of installation and commissioning. This system is suitable for casting the following products;

- Tanks
- Covers
- Lavatory Basins
- Pedestals
- Squat Pan
- Bowl Rims
- Urinals

PC570 STANDARD KEY FEATURES

2 part mould overhead beam casting system

- Customer specified PLC and HMI, 10" touchscreen colour graphical interface
- 1000Lt heated slip tank, agitator and level sensor
- Water washing tank system
- Low pressure slip fill pump and high pressure slip system
- Skid for mounting the slip and water tank systems
- Standard 70 tonne operating force
- CE certified and supplied with light guards, interlocks and safety switches with lock out
- Operates from a 6bar client supplied air supply
- System supplied with in built Slip collection tray

PC570 EXTRAS & UPGRADES AVAILABLE

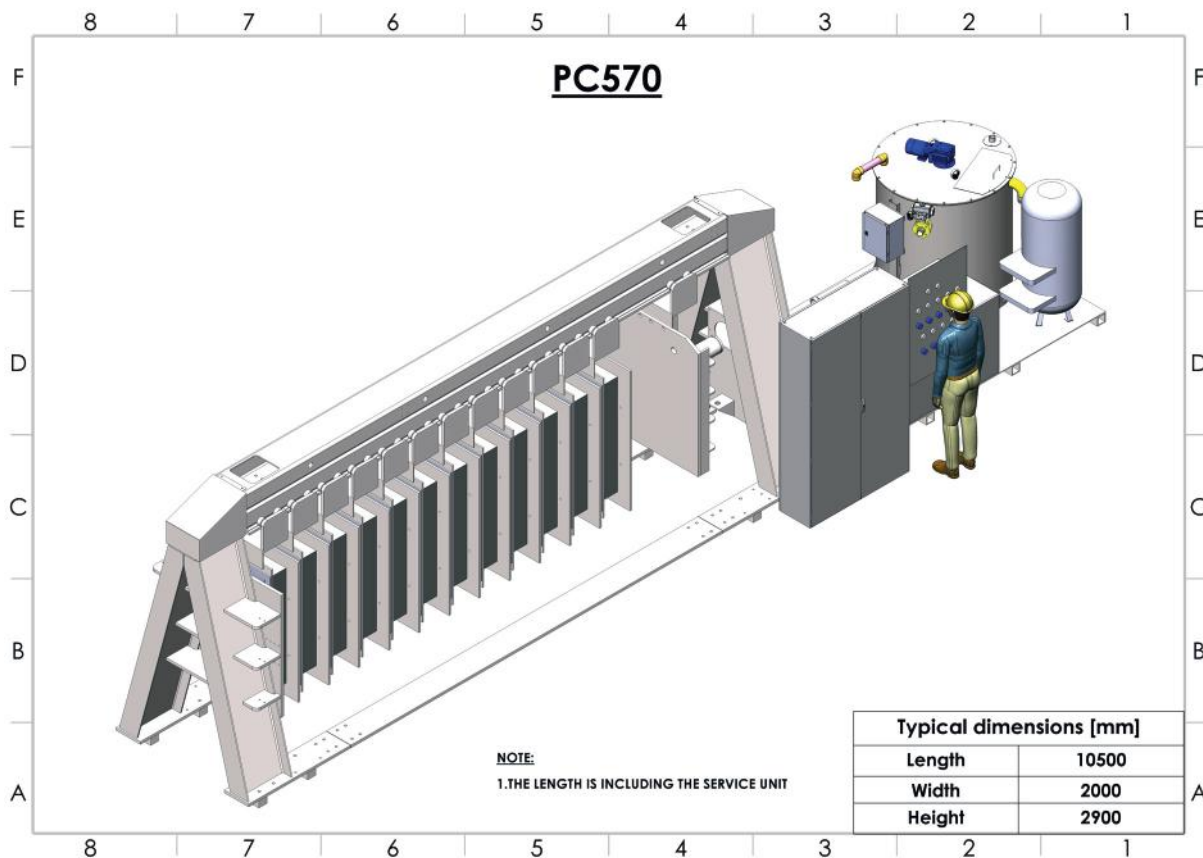
- The PLC and HMI control systems can be tailored to suit your preference
- IMSC; allowing a full range of solid and hollow cast products to be cast at the same time
- Manual, manually assisted or fully automatic demoulder systems
- Extended beam length for additional output
- 90 tonne operating force upgrade available for larger products
- Conveyor systems; gravity or powered
- Additional slip manifold for casting both vitreous and fine fireclay products on the same machine
- Air conditioned panels.

The PC570 moulds are fully compatible with the new PCLite casting system.

PC570 UTILITIES & CONSUMPTION DATA

The power, water and air consumptions are very economical and are typically;

- 350Lt water tank; average usage of 250 to 350Lts per day for mould washing
- Voltage and frequency to suit your available supply
- Electrical consumption excluding slip tank; 0.7kWh
- Electrical consumption of slip tank 4.5kWh, subject to supplied slip temperature (9kW heat capacity)
- Air 7bar, 100psi; average usage of 8 to 12m³ per hour
- No vacuum required
- Only 1 mould wash cycle per 24hrs.



TYPICAL MACHINE SCHEMATIC. The machine is supplied with its own waste collection tray so no special groundwork for drainage is required

TYPICAL OUTPUTS FOR THE PC570 HIGH PRESSURE CASTING SYSTEM

These outputs are based on the following assumptions: 350 days per year, 24 hours per day, 95% utilisation.

Typical Cycle Time (minutes)	Mould Type	No. of Moulds	Cavities per Mould	Casts per year
25	Large Lavatory Basins and Squats (drain cast)	10	1	191,520
25	Small Lavatory Basins and Pedestals (drain cast)	10	2	383,040
25	Covers (drain cast)	16	3	919,295
20	Tanks (solid cast)	8	2 or 3	383,040 / 574,560

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