

## Press unit

The press-unit has a servo-driven Ball-spindle witch drives a motor-unit to which the upper mould is attached. The stroke of the head with the upper mould is very fast and each mould set can be adjusted to the exact height of the product. The speeds are also adjustable in tree partial movements. This results in a very short production cycle and a perfectly shaped product. The 3 lower moulds are easy to place in rotary table. With software we control each mould separatly, so differences in moulds are allowable. A pump sprays releasing agent on the clay and/or into the lower mould. For finishing, a plastic wiper is pushed against the seam of the under and upper mould as it is pressing

## Vacuum-head or Pliers (Tongs) and finishing

After the product has been pressed, is it lifted from the lower mould by one of two **Vacuum-heads** attached to an arm that rotates and moves up and down. The other head puts now a product of on a conveyor. The height from the head in the lower mould and at the place where the product is put down can be controlled very accurately and easily programmed in the CNC unit. The head is quickly interchangeable. Finishing is done by a quick interchangeable Tungsten carbide 4 sided knife, while the whole assembly turns over. The clay that is cut off by the knife is collected for re-use, by a vacuum hose. With **Tongs**, the product is picked out of the mould after it has been lifted out of the mould by a liftable bottom mould part, this lifter is servo driven and thus fully controlable. For **finishing** the upper rim of the product, there is time to do so at he product conveyor, by a roller and a small vacuum-head.

## Specifications CNC-3-INDEX Press

Machine	65	120	170
<b>General</b>	Automatic machine incl. clay feed and product removal: 1000 x 1000 x 1700 height mm Main Electro control box at back of machine		
Dimensions (L.x W.x H.)			
total weight	1500 kg	1500 kg	1500 kg
<b>Colour</b>	blue (Ral 5012) and grey (Ral 7001)		
Power and rating	10 kW 25A	14 kW 25A	18kW 25 A
Max. capacity with Pliers take out (depending on Ø wet product)	<b>3300</b> pieces per hour (1,1sec) Ø 50	<b>2500</b> pieces per hour (1,4sec) Ø 100	<b>2000</b> pieces per hour (1,8sec.) Ø 150
<b>Safety</b>	according to European standards (CE); doors with interlock		
<b>Clay feed</b>			
1 System	Rolls put on clay cutter pieces of clay are cut off and with sliding rail and 2 doors. Clay falls into into lower mould		
2 System diameter clay	Extruder with with sliding rail and 2 doors. clay falls into into lower mould Ø 20 – 60 mm   Ø 40 – 80 mm		
<b>Press unit</b>			
Power mould motor (S3)	0,75 kW	1.5 kW	3 kW
rotation of spindle (variable)	1000 – 4500 Rpm	1000 – 4000 Rpm	1000 – 3000 Rpm
Max. weight of moulds	3 kg	6 kg	10 kg
Max. stroke / speed	100mm / 1000 mm/sec.	180mm / 1400 mm/sec.	180mm / 1400 mm/sec.
<b>Vacuum-head or Pliers</b>			
System: Vacuum-head	2 vacuumheads on rotary arm each with own vertical servo for taking out and drop off, both with cutting knife for pre-finishing the product		
rotation (variable)	100 – 1000 Rpm	100 – 1000 Rpm	100 – 1000 Rpm
Stroke / speed vertical	200 mm / 2000 mm/sec.		
air pressure product drop off	0 - 5 bar, 0 – 9 sec.		
vacuum	0 - 0,9 bar, 0 – 9 sec.		
cutting knife	0,0 – 9 sec.		
System: Pliers	With 2 opening, product adapted tongs, pick and place the products on a conveyor. With separate lifter pushing product out of mould		
Stroke / speed vertical	90 mm / 2000 mm/sec.		
<b>Products (wet)</b>			
Max. diameter cylinder shape products	Ø 60 mm	Ø 100 mm	Ø 150 mm
min. diameter	Ø 25 mm	Ø 40 mm	Ø 60 mm
Max. product height	80 mm	120 mm	150 mm
<b>CNC -Special Control</b>	PLC with On board axis controll, Compact flashcard, 100 programs, USB stick back-up, "feed override" 10-100%, LCD colour screen Programm: 3 moulds with each set their own product parameters.		



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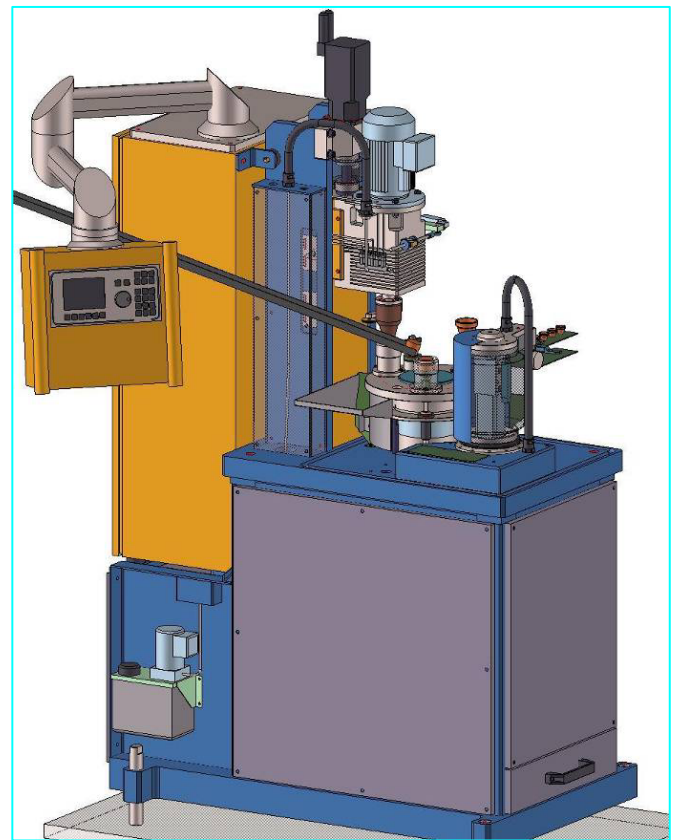
Changes without prior notice

( CNC-3-INDEX Press 2009 001 UK )

## CNC 3-INDEX-Press

### Press for earthen- and stone ware Ceramics

The **CNC 3-INDEX press series** is designed for **High SPEED** producing ceramic products with steel moulds and the use of releasing agent oil. With this press a very high product standard can be achieved: all products are identical, smooth and exactly round, have a constant wall thickness and a perfect finish. The Flex Automatic machine includes: a pressing unit with upper and 3 lower moulds, 2 vacuum-heads to pick up and finish the pressed pot or with Pliers take out of the product, and special CNC-Control unit. Options are: various clay feeding units, product transportation systems, finishing and decorating devices, etc. Its extreme high capacity combined with high quality output, is achieved by up to 5 servo drives. The CNC Control allows for a quick change over and settings in production. The press is of robust build, well finished, and all linear ways are perfectly covered and sealed from clay and pressing agent oil. The press is supplied with an automated lubrication unit. The machine has an outstanding well design and well-considered configuration of machine components. With all this a very long life span is achieved. The modular construction makes the Press easy to fit in all production lines.



The advantages of the CNC-3-INDEX press are:

- high quality products;
- many options available;
- high production capacity (up to **3300** pieces per hour);
- flexible production due to short change-over times;
- all machine settings are stored in computer program and repeatable;
- available in many configurations to meet customer requirements;
- suitable to fit in any production line because of modular construction;
- long life span and little maintenance required;
- low-noise and energy saving servo-drives;
- Internet connection to VSM for monitoring, or fault finding;
- clear list of warnings plus feedback on machine status to operator;
- turn key delivery;
- excellent after-sales service and training;
- many favourable references from customers within the EC;
- safety according European standards (CE mark).

