

babyplast The System



The micro injection moulding machine



The ideal machine for the
production of micro parts
Suitable for all types of *thermoplastic materials* up to 420° (PEEK),
metals (MIM), ceramic (CIM), wax.

Micro-injection moulding machine 10/12

Maximum performance minimum space

The smallest but greatest

Babyplast 10/12 is one of the smallest, fully hydraulic, injection moulding machines. Thanks to the unique concept of the machine platens which act as mould bolsters, the cost and dimensions of the moulds are reduced considerably. Babyplast 10/12 occupies less than 0,6m² of floor space and is extremely quiet (< 68dB)

Precision

Babyplast 10/12 guarantees the highest precision thanks to the injection piston and pre-plastification of the material. To obtain the optimum volume of material, there are 5 interchangeable pistons available. It is also possible to move the injection unit off centre.



User friendly

- Touch screen colour display.
- Easy to consult pages and user friendly display
- Handles and stores over 1000 tool settings
- Back-up on USB memory drive
- Ethernet connections: modbus TCP
- Optional Wi-Fi connection
- LogFile production monitoring

Standard mould parts



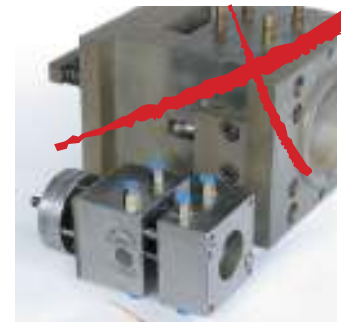
Rotating table for 2 shot applications



Fixed platen



Difference between Babyplast mould (left) and conventional mould (right).





Applications:

- Production of small precision parts
- Long and short production runs
- Laboratory tests / sample production
- Prototyping
- Medical products /clean room applications
- Technical training

MACHINE WITH ACCESSORIES
 Bench
 Chiller
 Sprue picker
 De-humidifier
 Temperature controller max. 90°C.
 Sprue separator
 Foot print of only 0,7 mq.



Included:

- Quality control (Cycle time/cushion/injection time/injection pressure/Plastification Time)
- Automatic shut down in case of alarm
- De-compression
- Two injection pressures
- Possibility for off centre injection
- Temperature tolerance band
- PID temperature control
- Stand-by temperature
- Speed control on all movements
- Mould safety
- 2 clamp speeds
- Central ejector with up to 9 strokes
- Speed and pressure control on ejector
- Removable tie bars
- Ejector return sensor
- Easy to consult pages and user friendly display
- Multi-lingual
- Handles and stores over 100 tool settings
- Part counter – settings for production batches
- Integrated 4 zone cooling water manifold
- USB socket
- Intrusion programme
- Hour meter
- Sprue break
- Injection and clamp positions monitored via transducers
- Electronic transducer for pressure control
- Inverter for motor speed control
- Colour touch screen display
- 4th zone for mould temperature control
- Machine platens act as bolsters to reduce costs and time for mould construction
- Outputs for core pull
- Injection pressure plot graph

Optional:

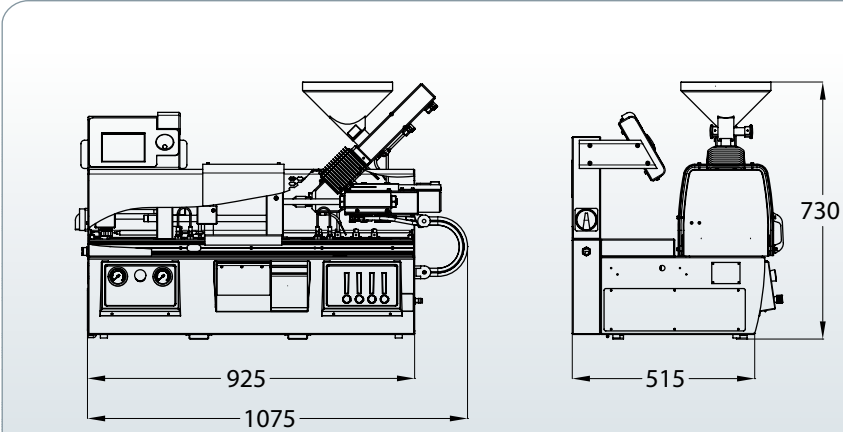
- Mixer nozzle (static mixer)
- Euromap 67
- Accumulator for injection speed
- Shut off nozzle
- Nozzle with tip for injecting directly into part
- 5th mould heater zone
- Hydraulic or pneumatic core pull
- Ethernet modbus
- Interface for second injection unit for 2 shot applications
- LSR injection unit
- Rotating table
- Air blow
- Cooling ring for moving platen
- Special spec. for high temperature materials
- Hot runners
- Euromap 62
- Wi-Fi connection
- Production monitoring programme

Accessories:

- Bench with space for chiller
- Drier
- Loader for plastic materials (electric or Venturi)
- Temperature controller for moulds
- Sprue separator
- Electrical cabinet for accessories
- Set of drawers for moulds
- Reject part separator
- Sprue picker
- Chiller

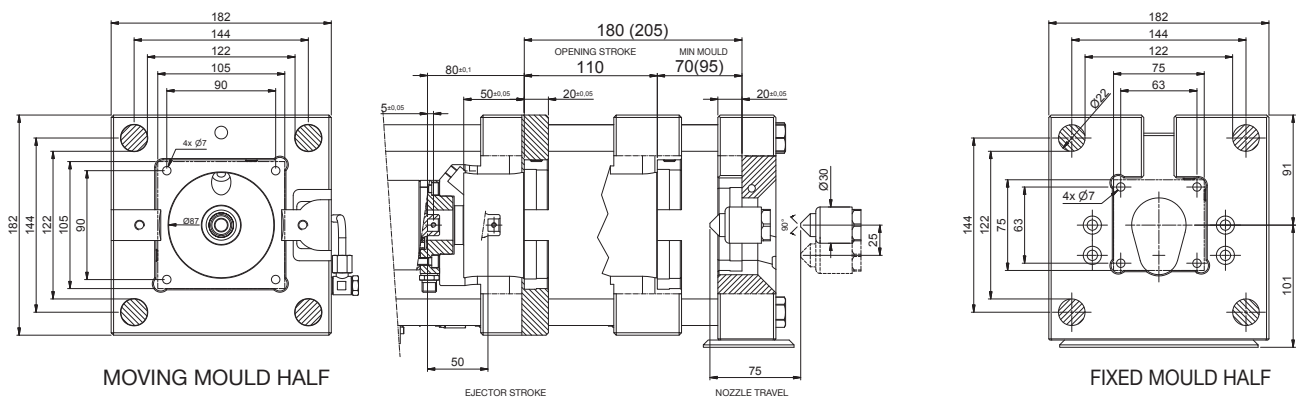
Difference between conventional sprue (SX) and Babyplast sprue (dx).



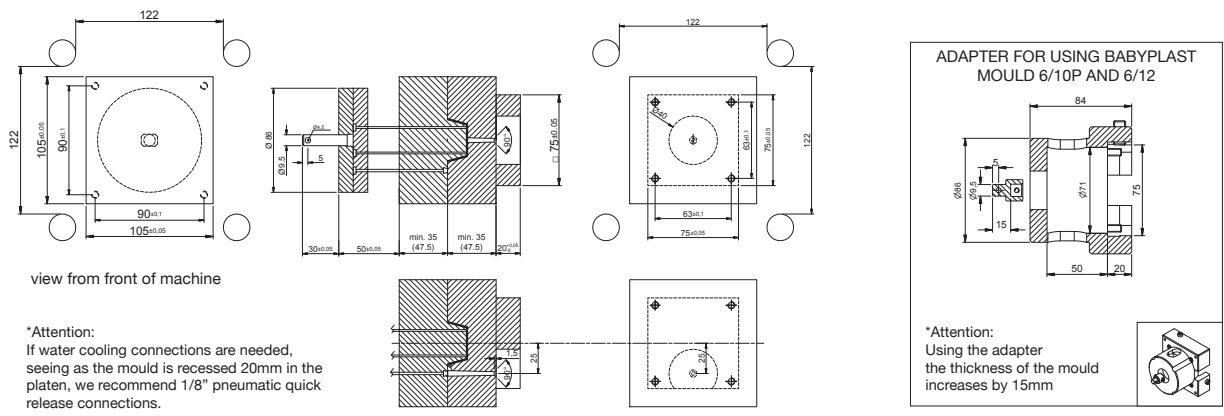


Micro-injection moulding machine 10/12 technical data

Dimensions of machine platens



Mould dimensions



100H-12

Piston diameter (mm):	10	12	14	16	18	Weight:	200 kg
Injection volume (cm ³):	4,7	6,8	9,2	12	15	Min. Mould dimensions:	75 x 75 x 70 mm
Injection pressure (bar):	2035	1830	1340	1030	815	Alimentation:	3-400V 50/60Hz + Neutral + earth 3-230V 50/60Hz + earth 1-230V 50/60Hz + earth
Clamping force:	100 kN					Hydraulic pressure:	130 bar
Opening stroke:	30 - 110 mm					Dry cycle:	2.4 sec
Ejector force:	8 kN					Noise level:	<70 db
Ejector stroke:	50 mm						
Oil tank capacity:	15 L						
Power consumption:	3 kW						