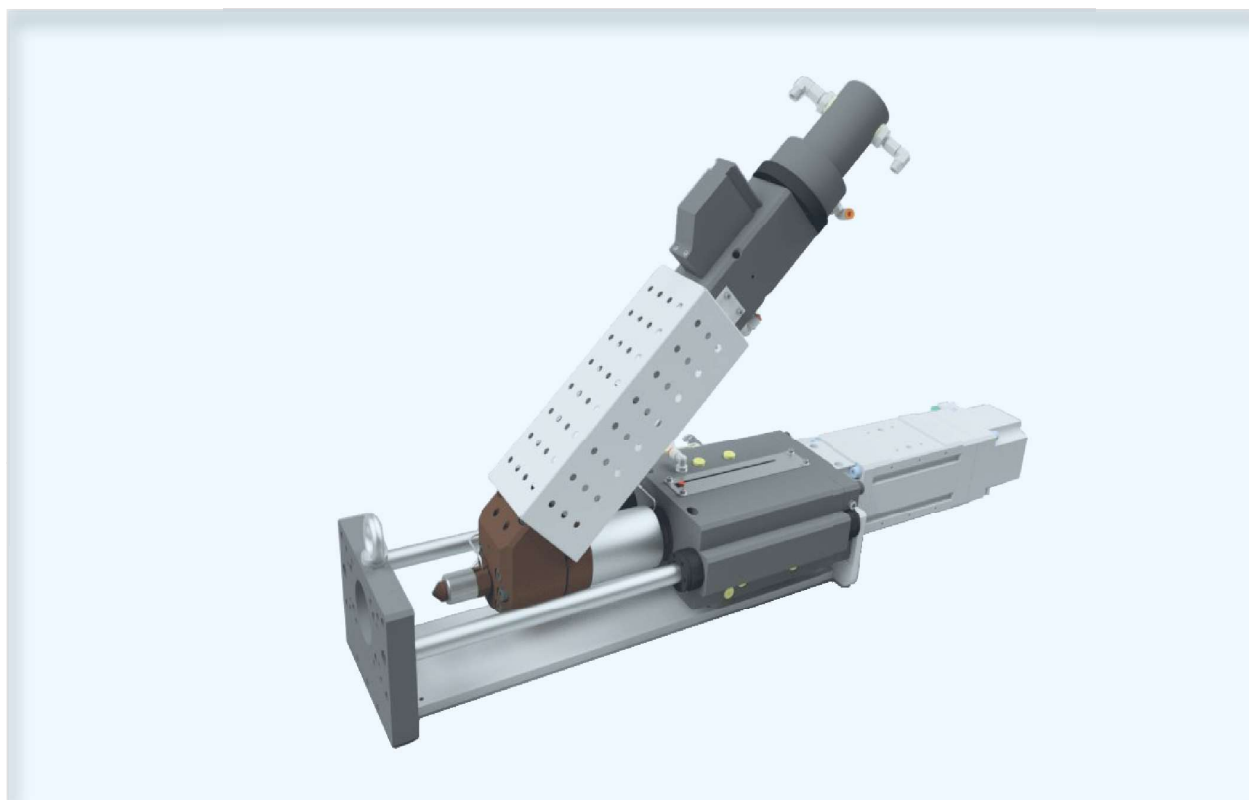


babyplast

The System



The Autonomous Injection Unit



a small unit for big machines



Autonomous Injection Unit Babyplast I/60 Hybrid

A Plug and Play solution

Babyplast

The original concept of this Autonomous Injection Unit has been developed, based on the experience accumulated from thousands of applications using the Babyplast injection moulding machine.



Easy to consult and user friendly display

- Colour touch screen display.
- Easy to consult and user friendly display
- Handles and stores over 100 tool settings
- Back-up on USB memory drive
- Record of last 20 cycles
- Ethernet connections: modbus TCP





A Plug and Play Solution

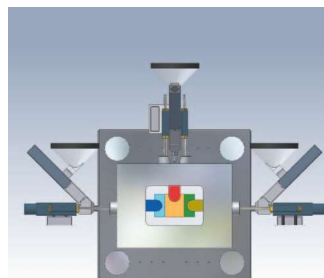
The Autonomous Injection Unit Babyplast I/60 Hybrid is comprised of an injection unit which can be installed directly onto a mould and a control unit, on wheels, which contains the electronics and the proportional hydraulics.

The connection to the injection moulding machine can be carried out quickly and easily, thanks to a simple interface using current free INPUT/OUTPUT contacts. Any injection moulding thermoplastic material can be processed with processing temperatures up to 420°C.

Add-on injection unit for multi-component injection moulding

The advantage of the Babyplast injection unit for multi-component moulding is that the unit is completely autonomous, at least as far as the electronics and hydraulics are concerned, from the main machine and, by means of a simple interface, it is possible to connect the unit to any injection moulding machine. With the possibility to inject volumes less than 20 cm³ to maximum 60 cm³ it is possible to satisfy most of the requests for the production of multi-component parts. A brushless motor is used for the injection and it gives very precise shot sizes and repeatability. On the other hand, the hydraulic plastification system and injection carriage, allows us to maintain the compact size. The Autonomous Injection Unit (UAI), offers an economical and practical solution for transforming an existing, standard, traditional single component injection moulding machine, into a multi-component machine.

Another advantage is in the flexibility when choosing the position of the unit: the injection unit of the UAI, thanks to its compact size (approx. 900x250x550mm), can be installed directly onto the mould, either horizontally or vertically, and either on the fixed half or on the moving half. This simplifies the mould construction considerably and allows the freedom to choose the best injection point for the second component. It is also possible to install the unit directly onto automatic production lines.



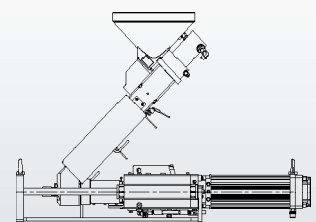
Standard features included:

- Colour touch screen display
- Quality control (Cycle time/cushion/injection time, injection pressure, plastif. time, etc..)
- Automatic shut down in case of alarm or out of tolerances
- De-compression
- Temperature tolerance band
- PID temperature control
- Easy to consult and user friendly display
- Multi-lingual
- Handles and stores over 100 tool settings
- Record of last 20 cycles
- USB connection
- Intrusion programme
- Hour meter
- Sprue break
- Injection positions monitored via encoder
- Electronic transducer for pressure control
- Inverter for motor speed control
- Alarm Log

Optional

- Mixer nozzle (static mixer)
- Nozzle with tip for injecting directly into part
- Shut off nozzle (Spring operated/pneumatic)
- Output for hot runner shut off nozzle
- Outputs for Shut off nozzles
- LSR injection unit
- Air blow
- Configuration for high temperatures
- Dehumidifier
- Material loader (electric or Venturi)
- Interface cable for Euromap 67/62

Other options can be available on request.



Autonomous Injection Unit I/60

ARBURG

FERROMATIK MILACRON

Willmann Battenfeld

HUSKY

BOY

KRAUSS MAFFEI

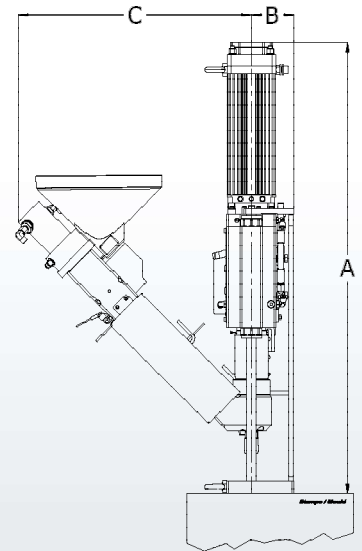
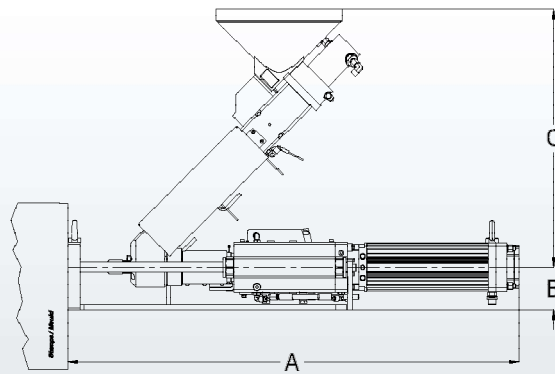
Sumitomo SHI DEMAG

NETSTAL

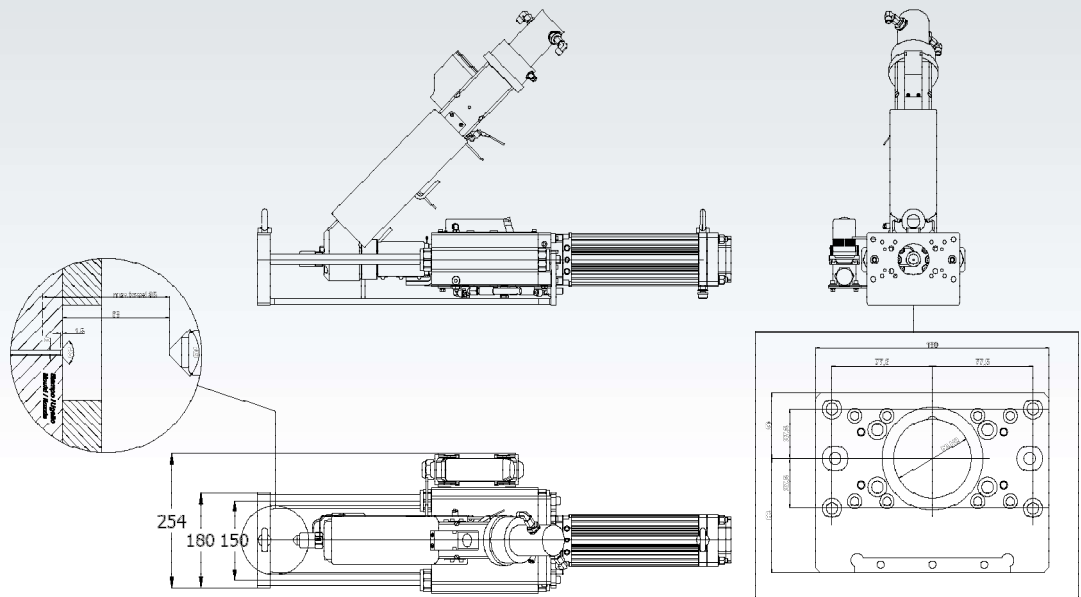
ENGEL

Installazione su linee automatiche di montaggio

| UAI Hy I/60 | A | B | C |
|-------------|-----|----|-----|
| Vertical: | 915 | 86 | 475 |
| Horizontal: | 915 | 86 | 525 |



Autonomous Injection Unit I/60 technical data



To fix the the adapters to the mould, use 6 screws M8x40,
we also recommend to use locating pins.

| Uai Hy I/60 | | | | | |
|----------------------------|---------------------------|------|------|------|-----|
| Piston diameter mm: | 16 | 18 | 20 | 22 | 24 |
| Volume (cm ³): | 27 | 34 | 42 | 51 | 61 |
| Injection pressure bar: | 2240 | 1770 | 1430 | 1185 | 995 |
| Rated Power Kw: | 6 | | | | |
| Injection unit weight Kg: | 70 | | | | |
| Total weight Kg: | 190 | | | | |
| Hydraulic pressure bar: | 130 | | | | |
| Oil tenk capacity l: | 15 | | | | |
| Power supply: | 3 Phase - 400V - 50/60 Hz | | | | |
| Control unit dimensions : | 790 x 500 x h 1030 mm | | | | |

*over 16 cm3 is recommended for low viscosity materials only