





Reasons for use

- Subrunner free article production
- High part quality stress-free material flow
- No preliminary cross linking of LSR
- Less shear

Your benefits at a glance

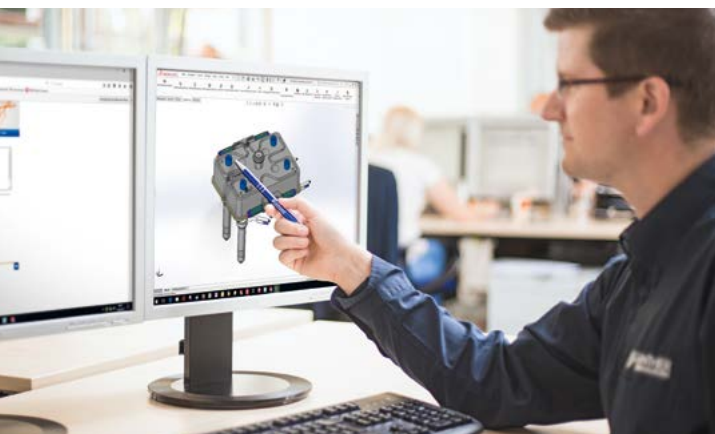
- Good thermal separation of the cold runner nozzles to the hot cavity plate
- Moveable fixation of needle guiding elements
- Universal applicability of all nozzles individually or in collection housing
- Variable needle stroke to compensate for filling differences
- Split manifold with runner design that is gentle with the material
- Easy assembly and disassembly
- Easy maintenance and cleaning
- Convenient replacement of wear parts



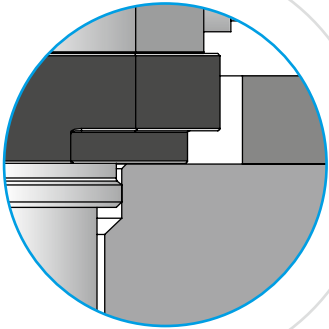
More than 20 years in cold runner technology – for success in the future

GÜNTHER – Your strategic partner for future-oriented cold runner technology

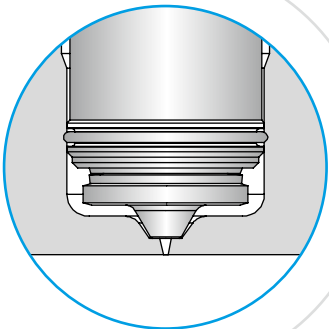
We configure cold runner systems for processing the inorganic, two-component elastomer material LSR (liquid silicone rubber) with the same passion we have for designing and manufacturing hot runner systems. Simple construction, modular nozzle design, and excellent thermal separation between the nozzle and cavity are the key features of our exceptional cold runner system solutions that we continue to refine with you in mind.



System structure with stepper motor



A
Thermal separation at the nozzle head



B
Thermal separation in the gate area

Clamping plate

Stepper motor

Frame plate

Top plate manifold

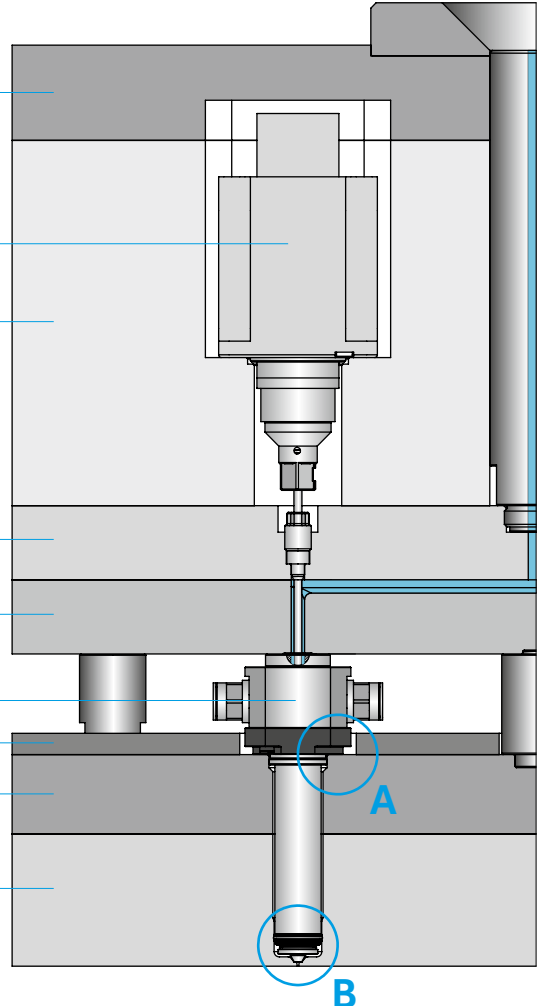
Bottom plate manifold

Cold runner nozzle type NKW

Insulation plate

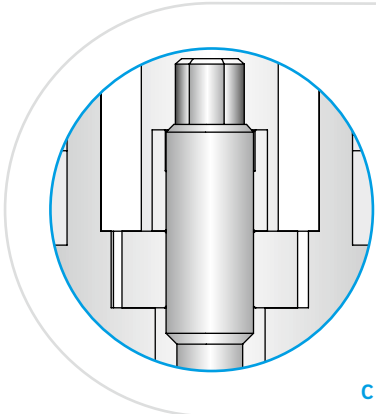
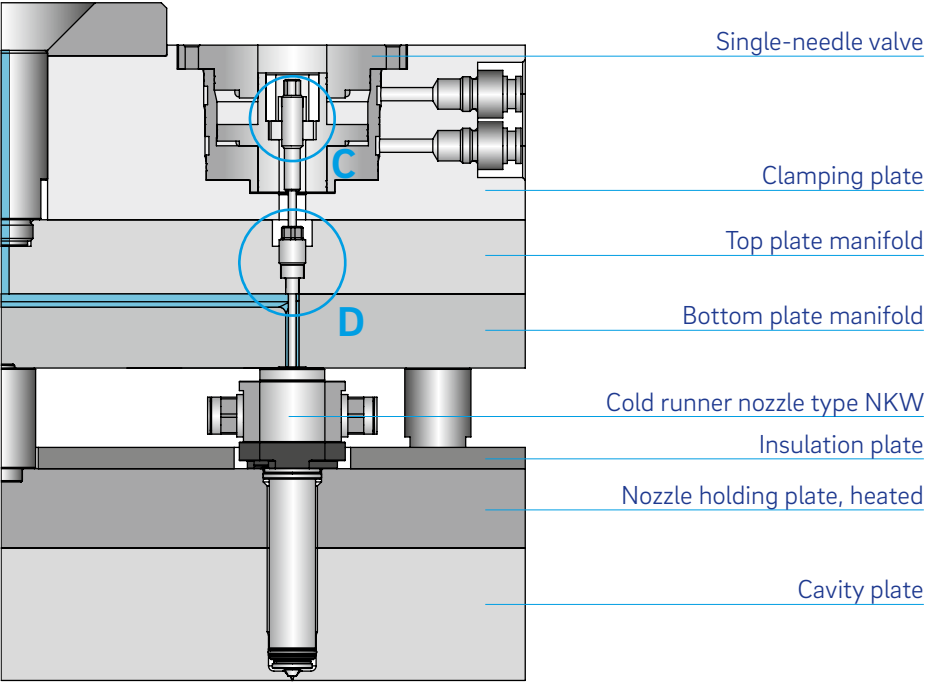
Nozzle holding plate, heated

Cavity plate

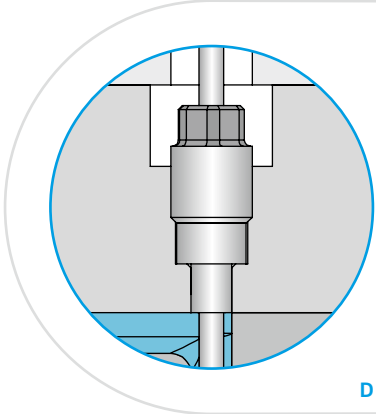


All nozzle heads are equipped with an insulation disc to ensure optimal thermal separation from the hot nozzle holding plate. The nozzle holding plate with an insulating plate ensures minimised thermal radiation. The metallic contact between the needle guide and the heated tool inserts is designed to stay at a minimum, in order to transfer as little heat as possible to the cold runner nozzle. The nozzle shaft, is equipped with a sealing ring, secures against leaks and ensures additional thermal separation.

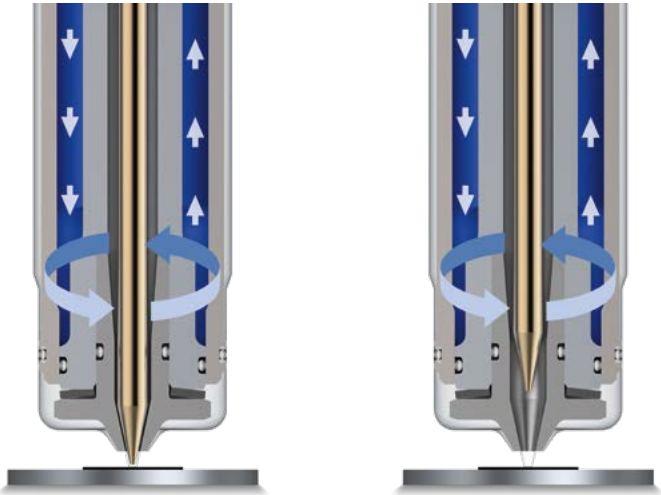
System structure with single-needle drive



Needle adjustment



Needle guide and seal in the manifold



Flow control to control any filling differences

When using cold runner systems for silicone processing, the cavity filling can be influenced by flow control with different needle position in the material channel.



Single cold runner nozzles

The simple construction, modular nozzle design and excellent thermal separation between the nozzle and the cavity enable exceptional solutions for cold runner systems. The GÜNTHER product portfolio offers you two kinds of cold runner nozzles.



5NEW single valve gate cold runner nozzle

The compact design of the single valve gate cold runner nozzle features easy assembly and disassembly as well as quick maintenance and cleaning. The compact pneumatic drive unit is mounted on the standard NKW system cold runner nozzle.



5DEW single cold runner nozzle

The open cold runner nozzle allows direct injection onto the intermediate gate. The connection geometry is designed for immersion nozzles. The immersion nozzle prevents leakage out of the gating point in the parting line.



System cold runner nozzles

The system coldrunner nozzles with material channel diameter 3 mm, 5 mm and 8 mm are available in lengths 50 mm and 80 mm.



System cold runner nozzle type NKW

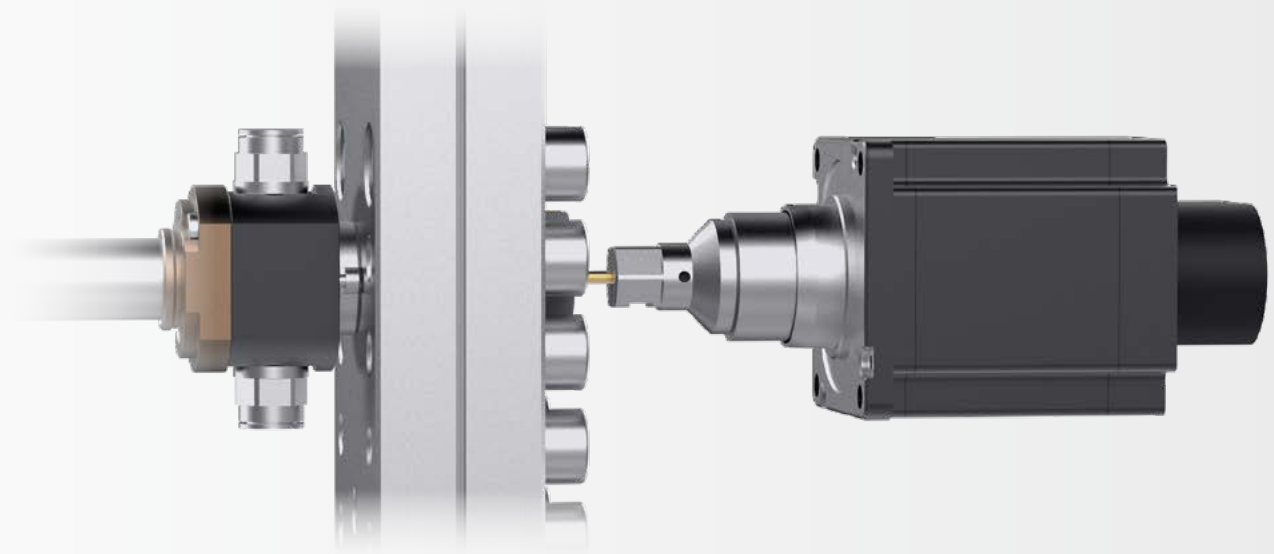
The NKW valve gate cold runner nozzle is used with a manifold. The nozzles can be individually tempered. Plug-in couplings enable easy mounting and dismounting of the cooling hoses. The modular system configuration ensures quick and easy cleaning.



System cold runner nozzle type NMW

The valve gate cold runner nozzle type NMW is also used with a manifold. Up to four nozzles can be controlled in one cooling circuit and placed close together.





DPE control unit

For stepper motor type SMA, single needle drive

DPE4 to DPE16 for electric drive

With clear and fully coloured touch screen navigation, the current needle positions as well as the incoming and outgoing signals can be easily read at any time. The control unit can be parameterized according to the application. Memory function for 64 tools is integrated.

- Operation of up to 16 stepper motors to drive shut-off needles
- Signals from the encoder are read out to ensure correct positioning
- Cascading the connected needles can be easily implemented
- Valve gate control as a closed loop
- All actions and events are logged in the internal memory
- Data export via USB interface
- Needle positions individually adjustable
- Needle adjustment in the range of 1/100 mm
- The shut-off needles can be closed at the same time from different positions



Single-needle drive

Stepper motor type SMA 10

Electric needle adjustment and flow control

The drive can be used for complex applications with up to four different needle positions per cycle. With the DPE control unit, up to 16 SMA 10 stepper motors can be controlled with high precision. This allows the position of each shut-off needle in the tool to be set individually. Needle adjustments can be implemented in the range of 1/100 mm.



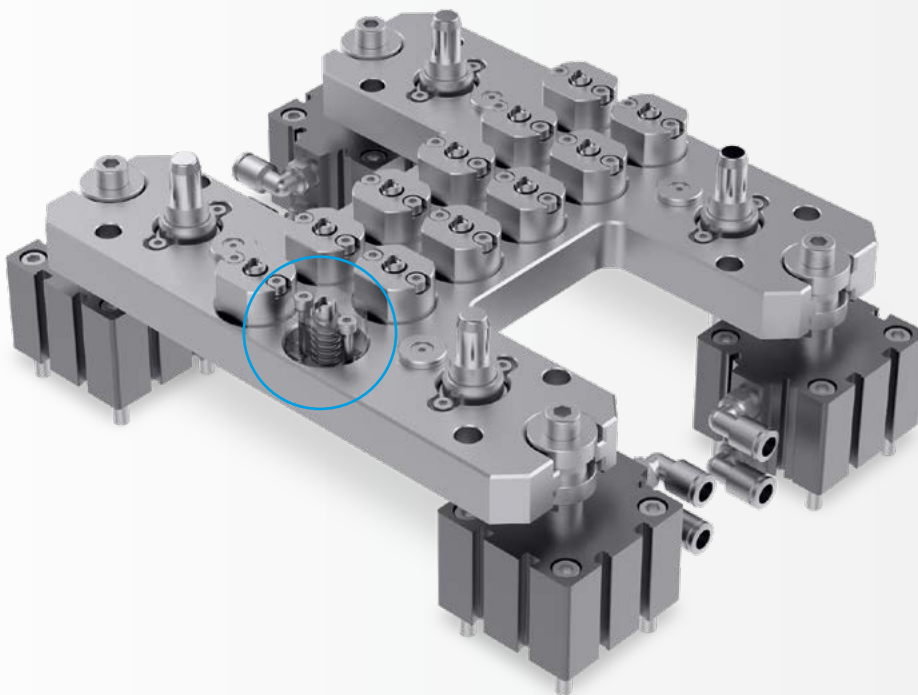


Stroke mechanism

Multi-needle drive type ANEH,
pneumatic

Stroke mechanism type ANEH

The exact simultaneous movement of the needles ensures a reliable injection process. The outer cylinders can be replaced without removing the tool. The needle position can also be adjusted while mounted on the machine.



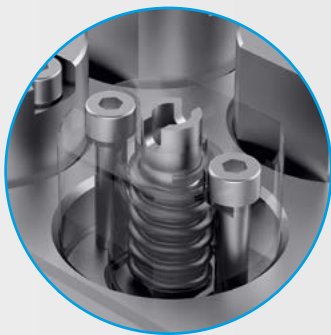


Sliding mechanism

Multi-needle drive type ANES,
pneumatic or electric

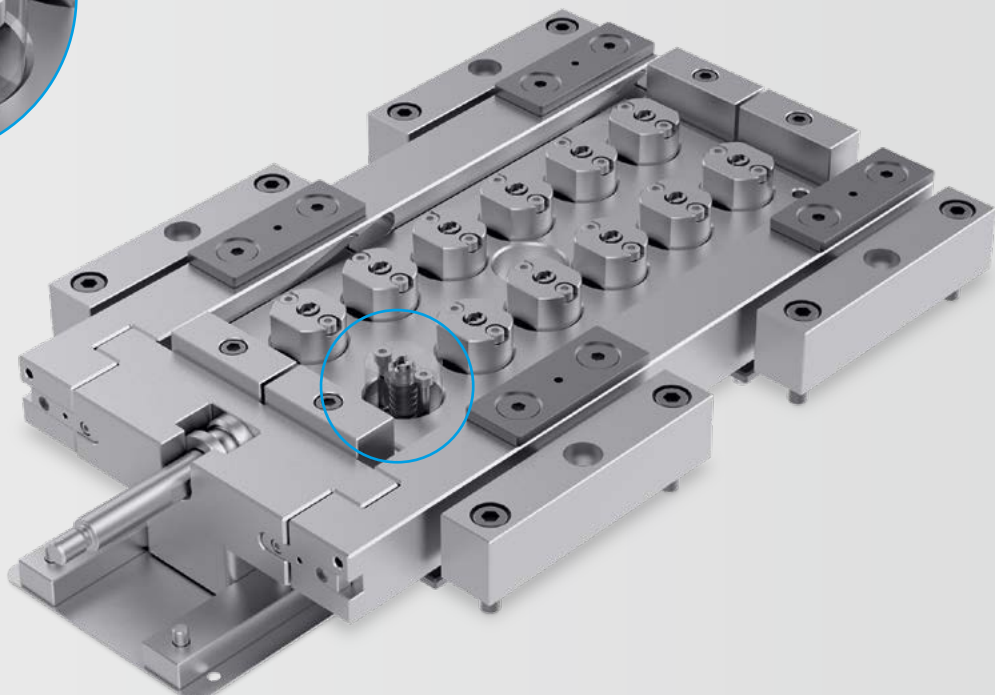
Sliding mechanism type ANES

This drive technology enables precise and intelligent needle control with simple mounting and connection technology. The simultaneous movement of the individual valve gate nozzles ensures that the injection process is reliable even with the smallest shot weights. Sliding components are wear-resistant thanks to a special coating and can be replaced on site. The needle position can be adjusted while mounted on the machine. Many closely positioned nozzles can be controlled via a sliding mechanism.



Spring-loaded needle fixing

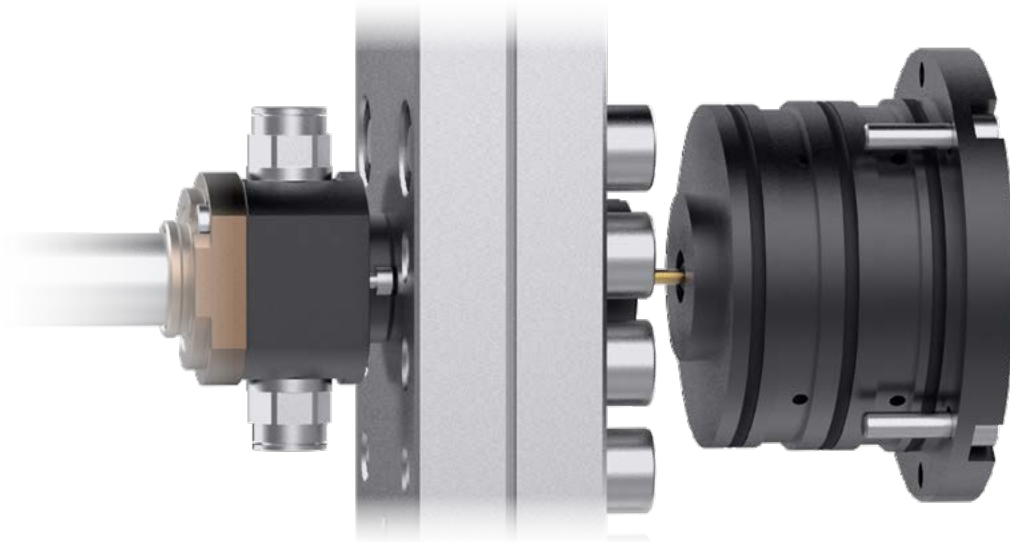
The spring-loaded needle fixing ensures secure closure of the cavity via the conical needle seal.





Single-needle drive

Single-needle valve type ENV, pneumatic



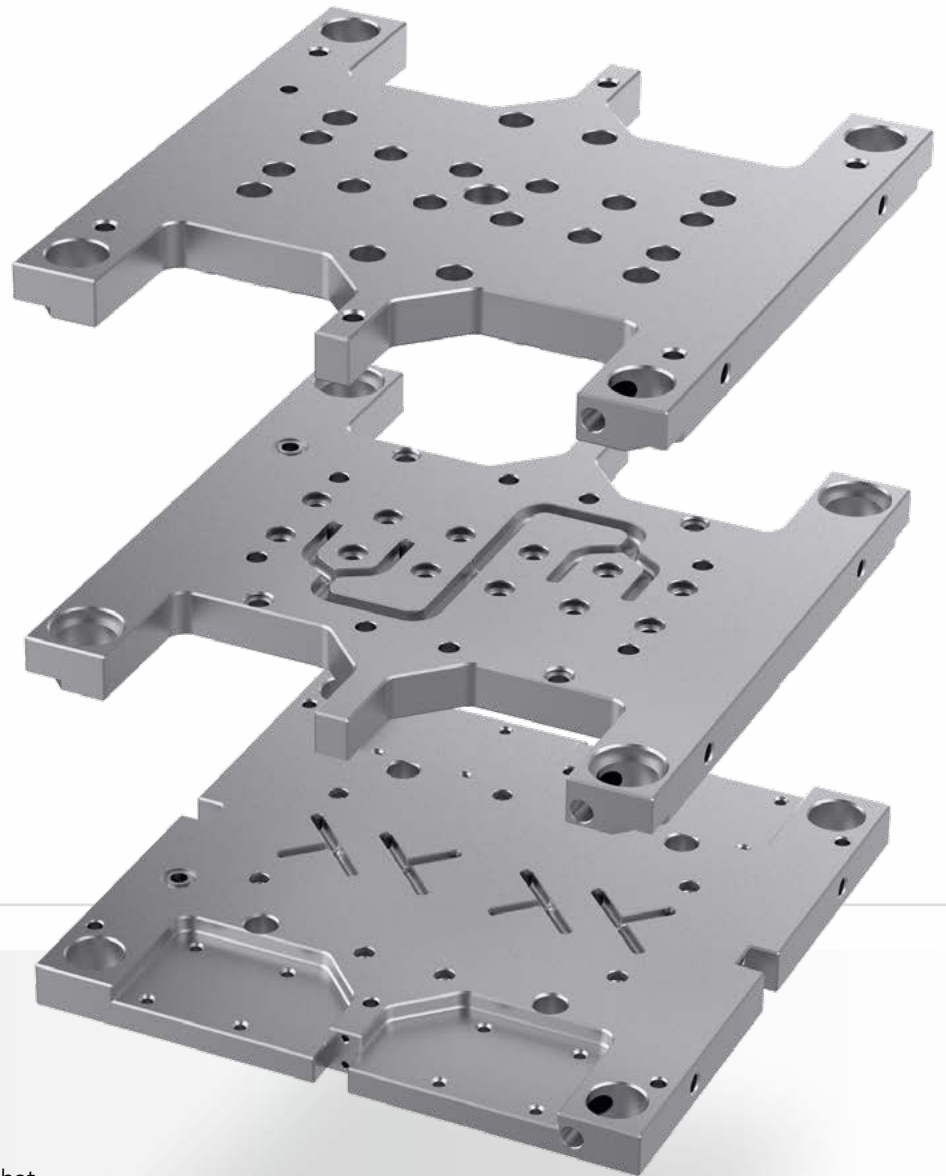
Single-needle valve type ENV

This type of drive unit allows movement of each needle. Cascade injection moulding is possible. The single-needle valve is mounted along with the housing in the clamping plate. The needle position can be adjusted while the tool is mounted.



Cold runner manifold

The design of the manifolds is customised.



Manifold system

Ease of maintenance and a channel layout that gently guides the material are the primary factors in the design of the manifold systems. Balancing is based on the requirements of the respective application.



Cold half

The GÜNTHER cold half is a complete solution for your LSR applications.

Features

- One cooling circuit supplies up to four nozzles.
- The heated nozzle holding plate is used for coupling and decoupling the cavity plate. It is not suitable for heating the cavity plate.
- The needles can be adjusted when mounted.
- Wear parts can easily be replaced.



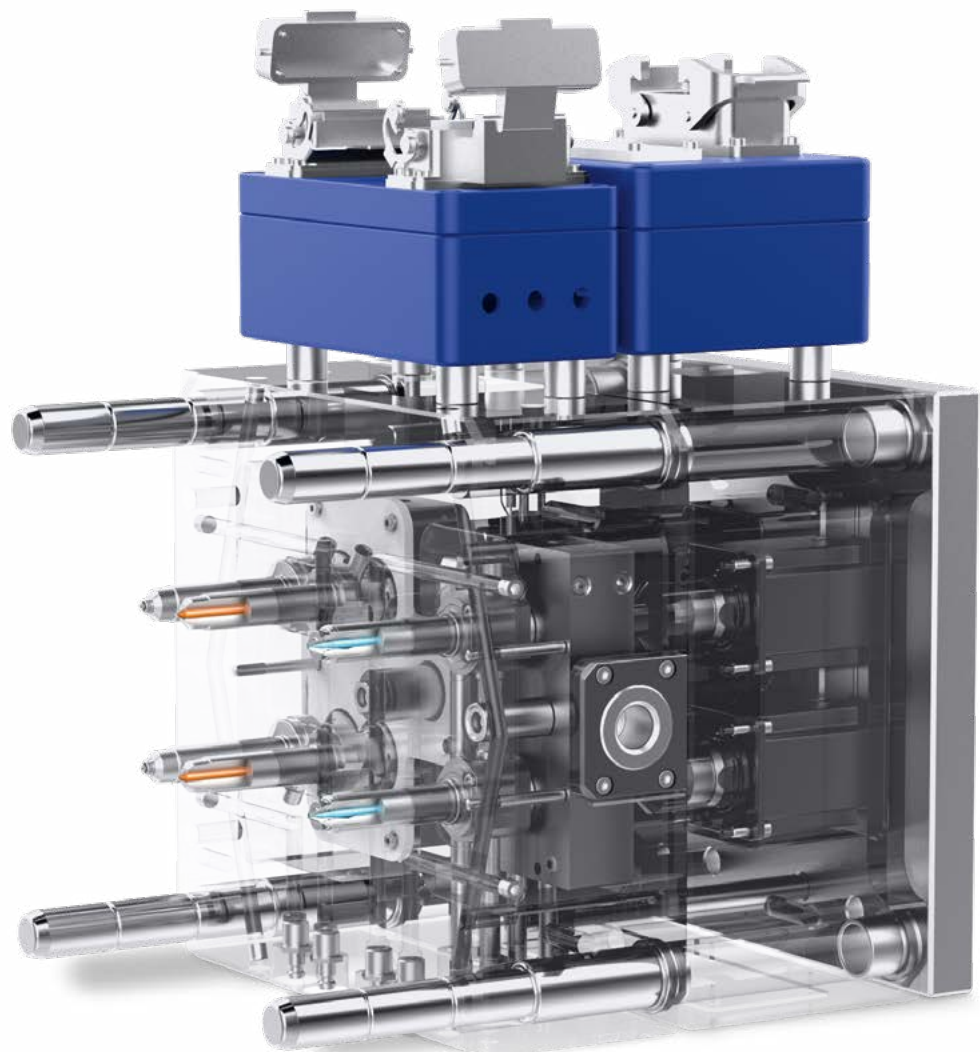


Hot-cold half

All from one source – the hot-cold half is your solution for two component moulding of LSR and thermoplast.

Taking your specifications into account, we design a compact, ready-to-install solution for process-reliable and material-saving production of moulded parts that is also gentle on the material. All components are compatible, fully wired, and tested for functionality. The needle movement of the individual components can be controlled with a high level of precision thanks to the GÜNTHER control unit. Excellent thermal separation ensures optimised cycle times.

One contact partner for the perfect solution – from project start to series production.



GÜNTHER is a technological leader in the field of hot runner technology and stands for both innovative engineering and outstanding precision in solutions for cold runner systems. With more than 220 employees at our Frankenberg plant, we produce innovative and user-friendly hot and cold runner nozzles and systems for the plastics processing industry, which we distribute through over 40 agencies worldwide.

Our international customers include leading companies in the automotive, electrical/electronics, medical technology, packaging, and consumer sectors. Be it modular standard systems or custom special solutions: we develop and manufacture tailor-made products – geared towards the applications of our customers.



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