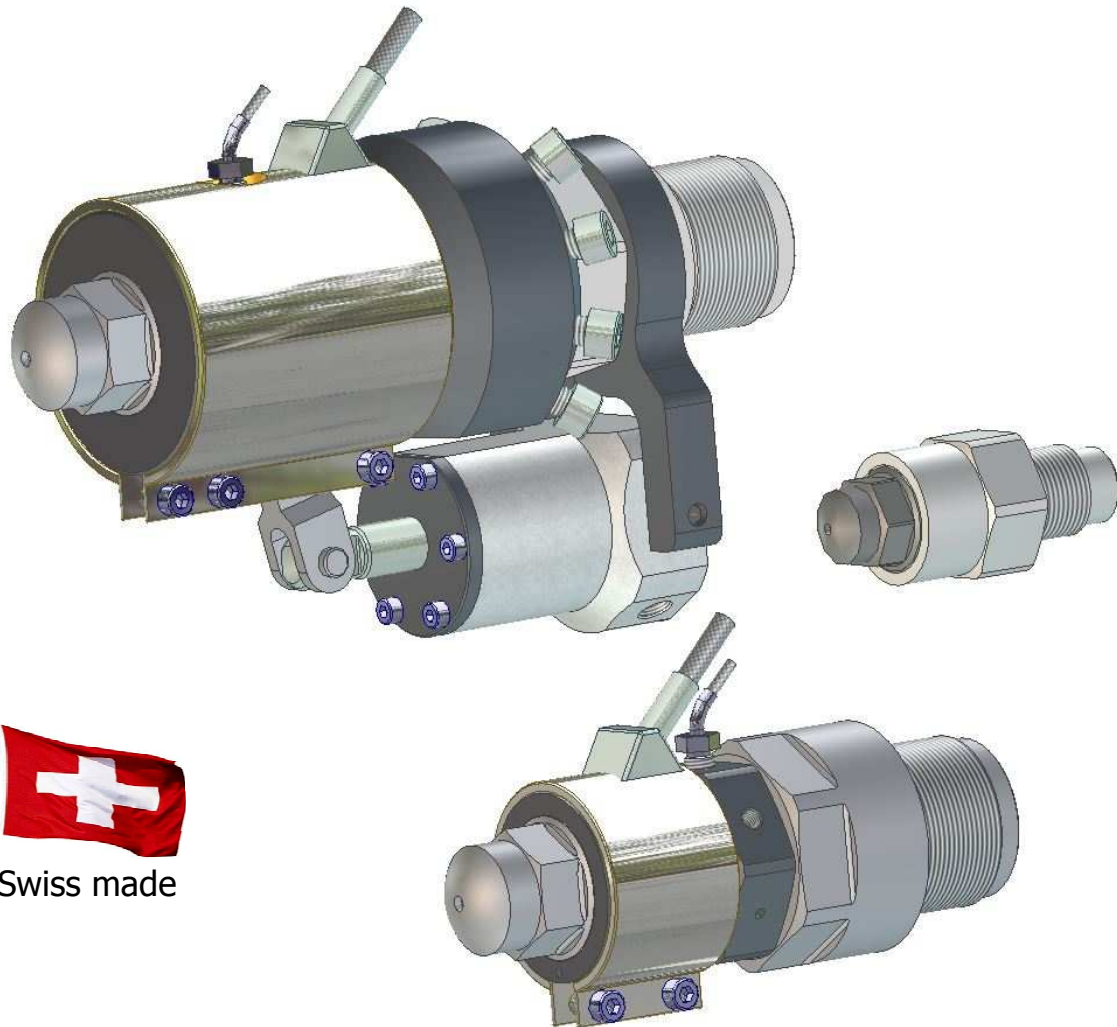
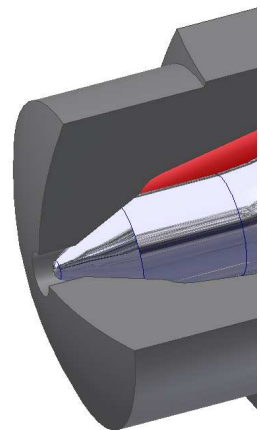


Needle Shut-off Nozzles



Swiss made

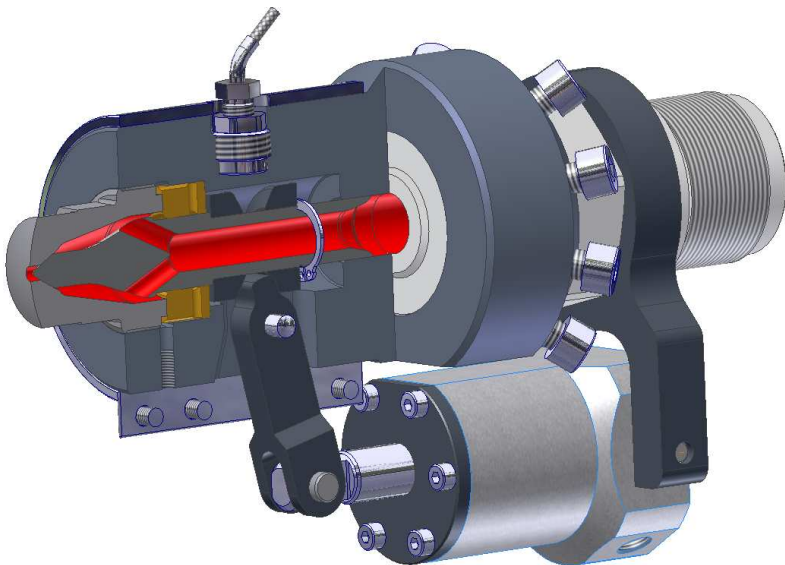
- Controlled shut-off of the melt stream
- Reduced cycle times
- Minimal pressure drop
- No sprue, no drooling
- Optimised heat transport
- Minimal shearing of melt



Hightech Needle Shut-off Nozzles

SEP series; power operated

Function type P

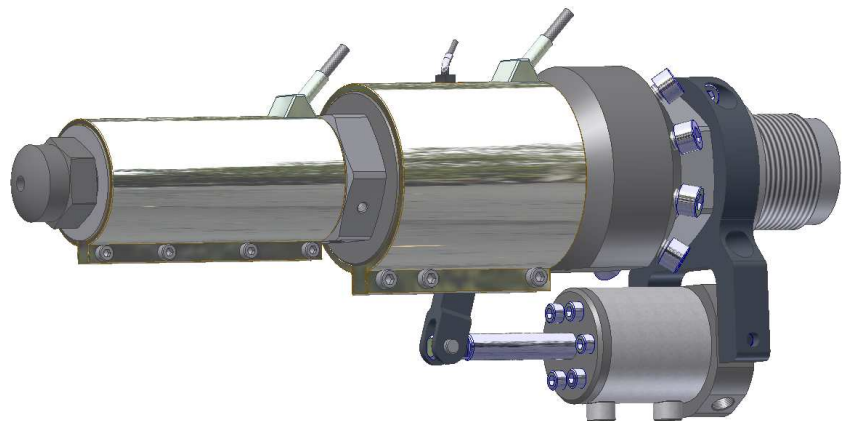


Comparing to the spring operated nozzle, the injection hole of the power operated nozzle can be opened at any time without any pressure lost. Opening and closing of the nozzle is controlled by hydraulic or pneumatic advise. The reliable shut-off system separates the melt flow at a predefined point determined by the process. The control of opening and closing is integrated into the unit and very compact. The position of the lever can be chosen at any position. It can be manipulated also by pole or cable.

If the melt pressure exceeds 600 bar, the nozzle opens automatically.(safty device)

Single hole Technology

- Minimal pressure drop
- Optimised heat transport
- Minimal shearing of melt

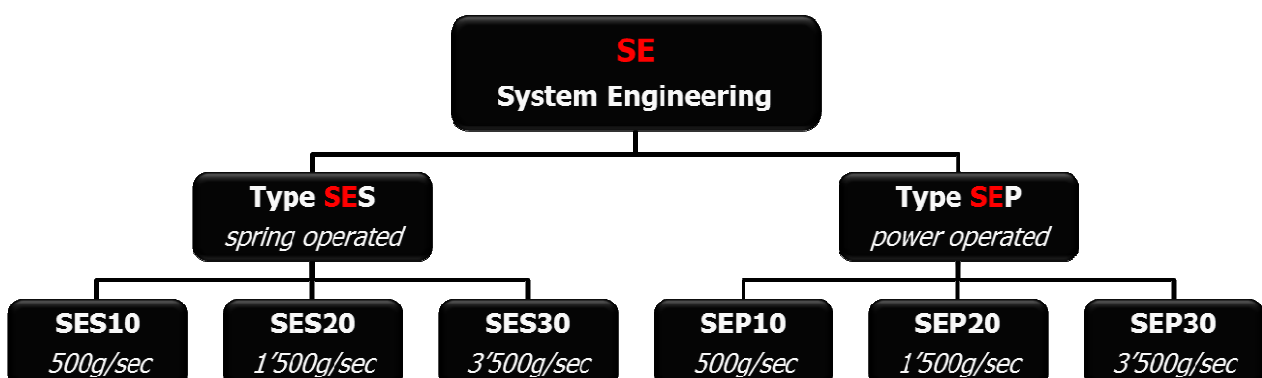


Modular system

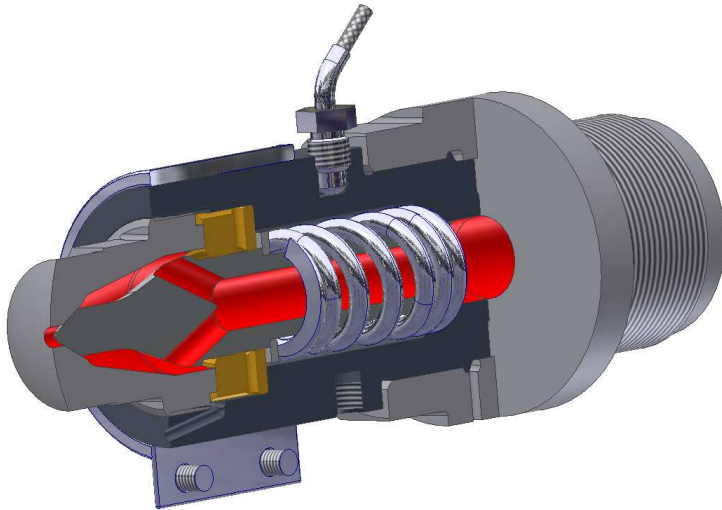
- Quick change of nozzle
- Shortest delivery time
- Most economic solution

Wear protection

- Completely wear protected with latest CVD/PVD technology



SES series; spring operated

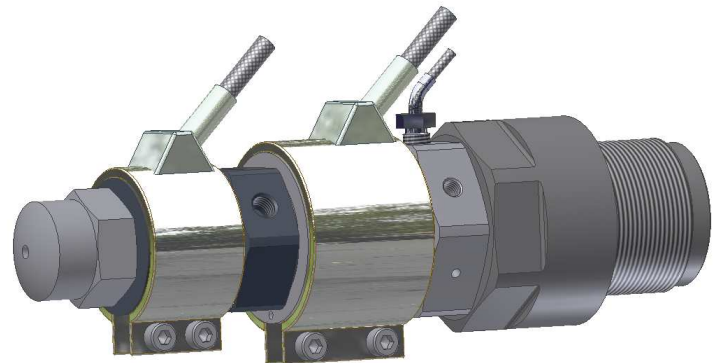


Function type S

The needle which moves axially in the nozzle is held in the closed position by the force of the spring. The melt pressure, coming out of the extrusion unit pushes back the needle and opens the hole for injection at 180 bar. After the injection process and pressure decrease under 80 bar, the nozzle is closed again, according to the movement of the spring.

Easy construction

- Easy assembling
- Quick and easy cleaning
- Trouble free production



Intelligent design

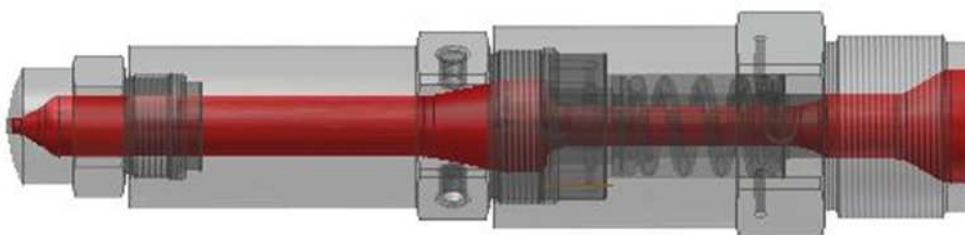
- Compact and solid design
- Integrated actuator

Flexible system

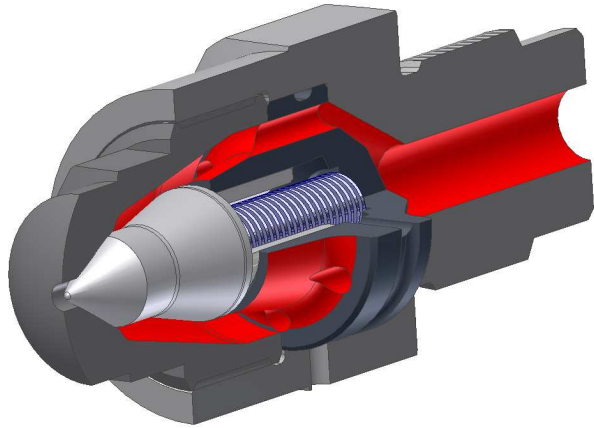
- Different tip lengths
- Filter option
- Mixer option

Hightech actuator

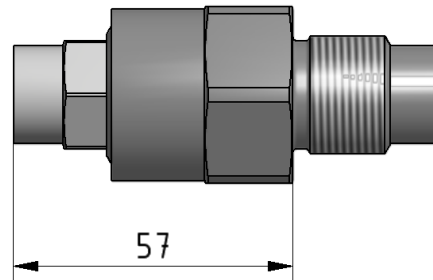
- Special hightech seals
- Water cooled hydraulic actuator
- Trouble free production



Mini Shut-off Nozzles



- Easy to install
- Inexpensive
- No filament formation
- Controlled shut-off of the melt stream
- Metering with injection unit raised



Hightech Melt Filter



- Easy handling
- Low pressure loss
- Large flow area
- CVD wear protected

	SEF1		SEF2			SEF3		
D1 [mm]	14		20			25		
D2 [mm]	8		12			17		
L [mm]	45		45			50		
Gap size [mm]	0.6	0.8	0.6	0.8	1.2	0.6	0.8	1.2
Flow opening [mm ²]	110	160	110	160	250	140	190	280
Injection rate [cm ³ /sec]	< 500		< 1000			> 1000		
Approx. pressure loss [%]	8	6	8	6	4	8	6	4