

Die making

Modular concept



Highlights

- › Modular design wizard for the selection of module plates
- › Lengths of the module guides configurable
- › Range of fastening and assembly elements

www.meusburger.com



Modular concept with high-precision standard components

The modular concept in stamping dies has been a common practice in this industry for years. A universally usable basis die, also called a base set, is made into a customised stamping die with the help of slide-in die modules. The fastest set-up times, easy handling and the highest precision are some of the advantages of modular design. Discover our wide range of innovative standard components, which are specially coordinated to your needs in modular concept.



Overview of the standard components for the modular concept

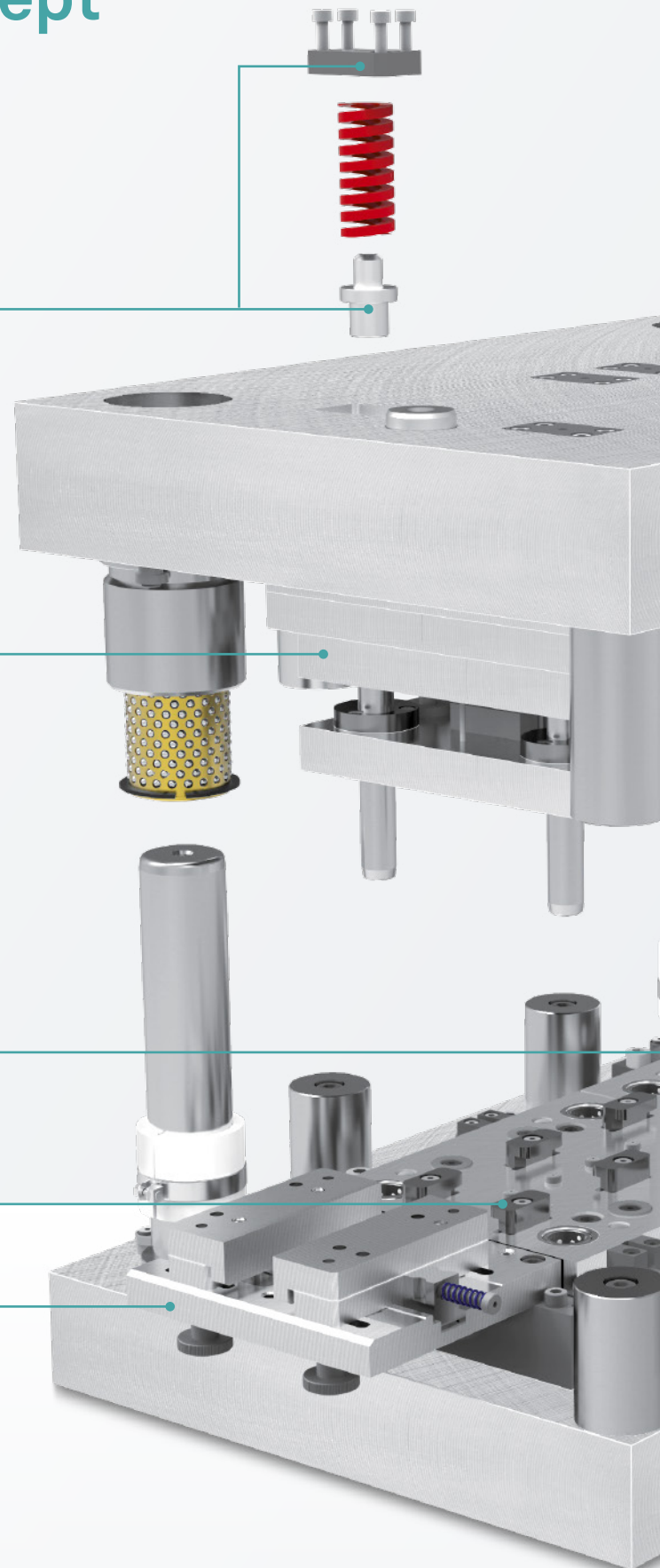
Spring cover and
spring loaded pin

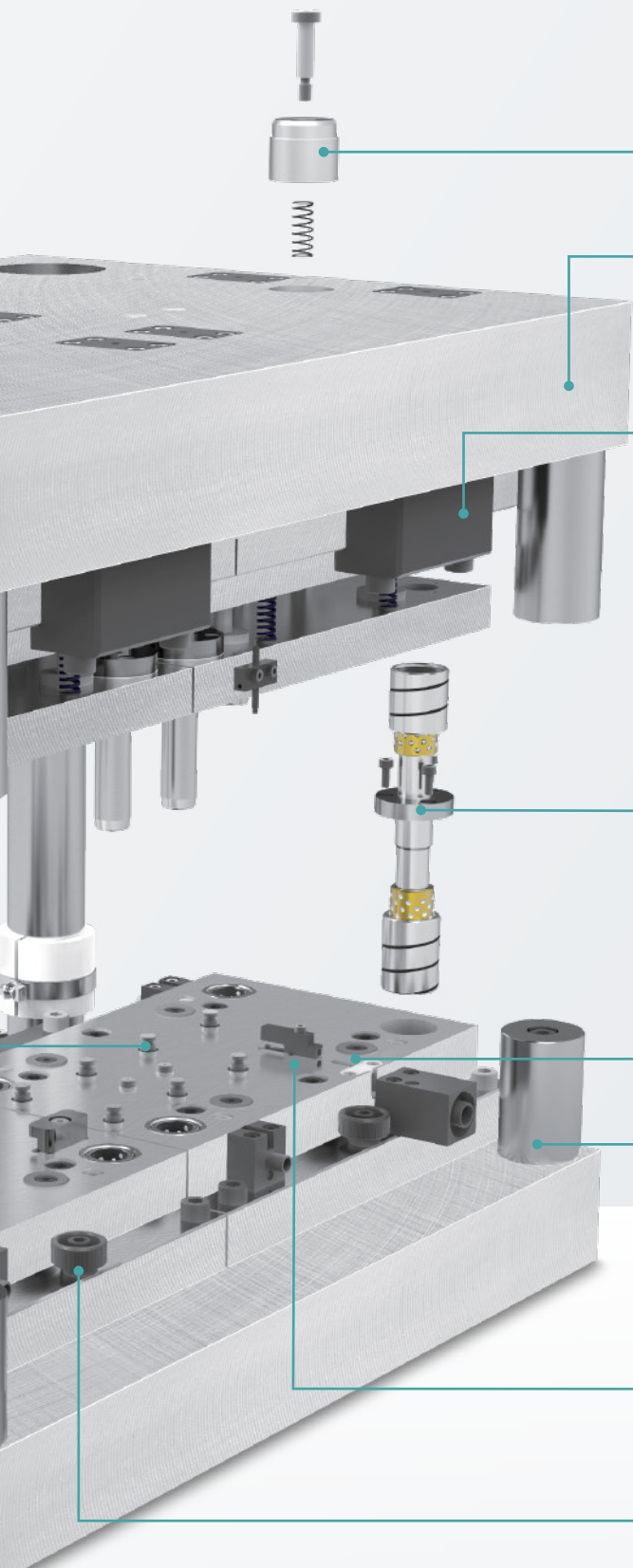
Configurable
die modules

Strip guiding
pin with collar

Strip
guiding rail

Modularly built
infeed guide





Centring unit

Two-pillar die set
as base set

Retaining and
clamping elements

High-precision guiding system for modules

- › Ball guiding bushes –
precise and smooth
running
- › For high speed and
maximum precision



Spacer disc

Spacer

Components for secure
process monitoring

Positioning unit



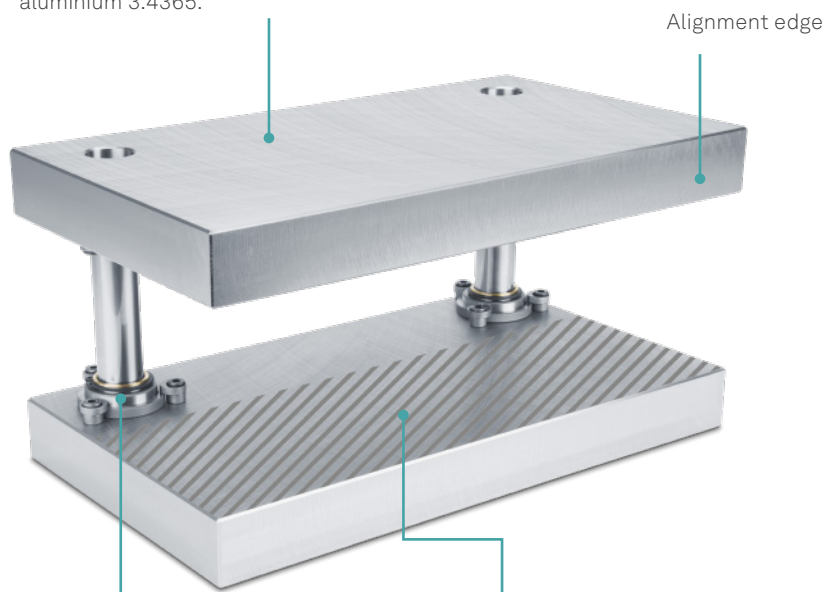
The standardised base set

Our standardised two-pillar die sets are optimally suited as base set for a modularly built stamping die. They offer ideal accessibility for inserting the die modules.

SH – Two-pillar die set, back guiding

We offer our tried and trusted two-pillar die set in sizes ranging up to 496 x 996 mm. Special sizes are available on request.

Die set plates are available in two different material grades: heat-treated for stress relief tool steel 1.1730 and high-strength aluminium 3.4365.

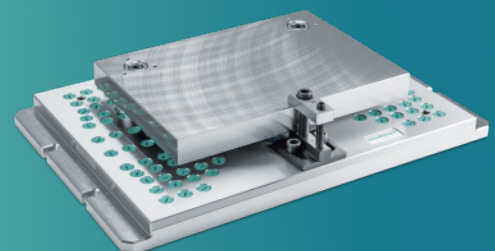


Can be combined with all Meusburger guiding elements

Maximum surface area for optimal design of your die modules

H 3000 – The innovative clamping system

Clamp die plates quickly and with complete precision.

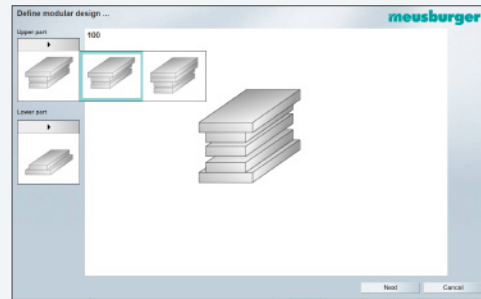


Modular design wizard

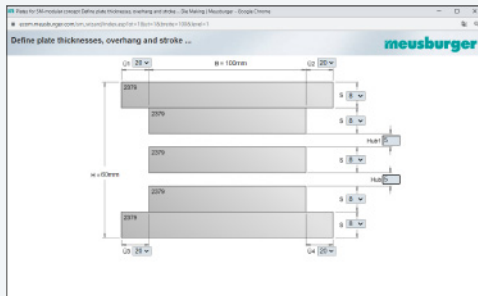
With the modular design wizard you can configure your die modules in just four steps.



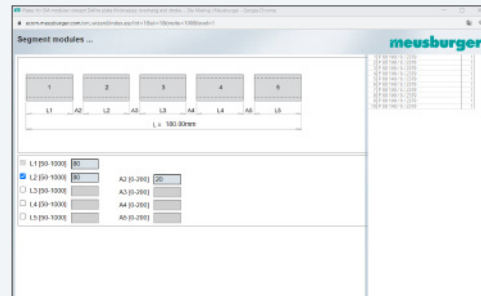
1. Select module width



2. Define module design



3. Define plate thickness



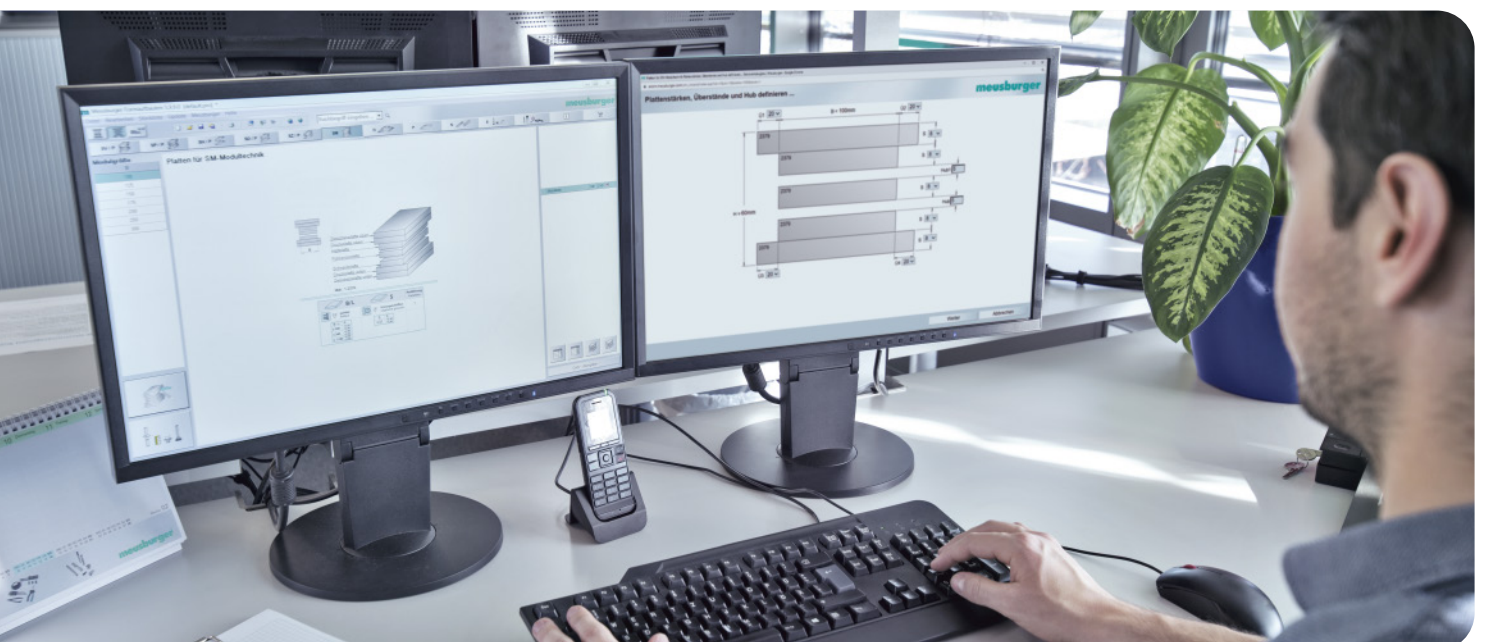
4. Segment modules

At the end, the appropriate two-pillar die set will be suggested.



You will find our modular design wizard here:

www.meusburger.com/modular-design-wizard



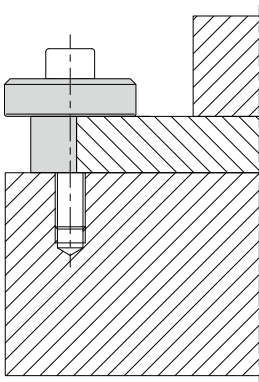


Fastening and assembly elements

For precision assembly and fastening of your die modules with repeatable accuracy, we offer standardised components in different variations and sizes.

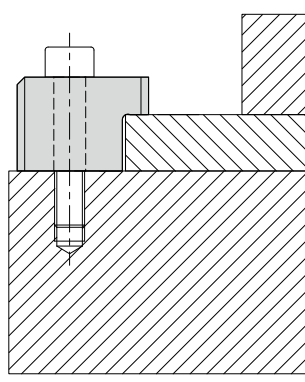
Mushroom-shaped retaining piece E 6032 and mushroom-shaped clamping piece E 6034

Space-saving design



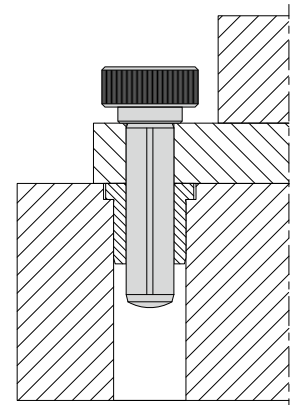
Retaining bar E 6036 and clamping bar E 6038

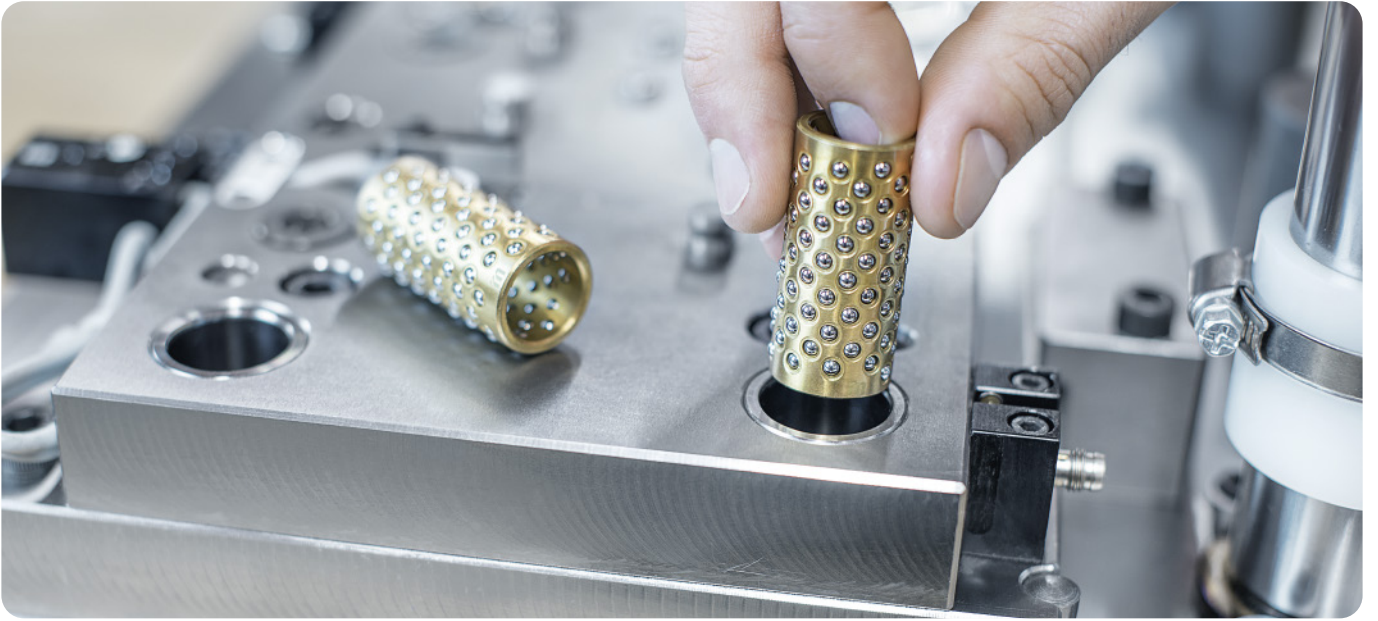
Robust design



Positioning unit E 6030

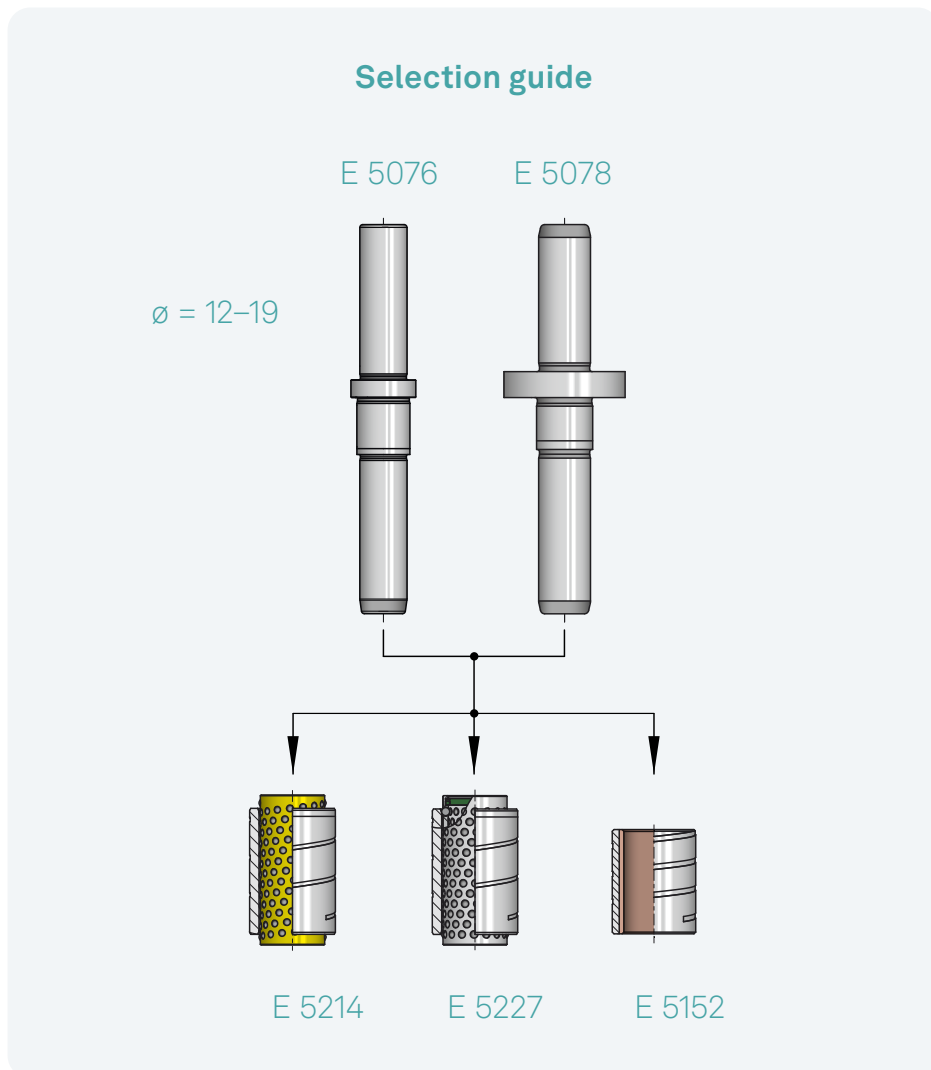
For easy and fast positioning of modules





High-precision guiding system for modules

A high-precision guiding system serves as the basis of the layout of die modules and is crucial for the quality of your stamped parts.

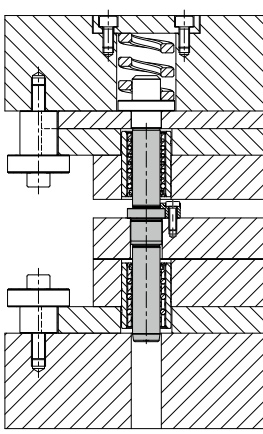


Overview and installation examples

Our guiding elements allow a high number of strokes and ensure very low vibration. This is possible through the surface quality of Ra 0.1. Thanks to the fastening in the guiding plate maximum stiffness is achieved. We are also happy to supply the guide pillars in the length you require.

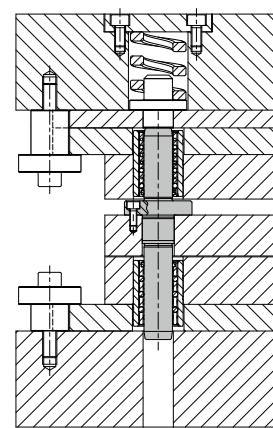
Guide pillar with centre collar E 5076

Force fit and secure with retainer clips



Guide pillar with centre flange E 5078

Force fit and secure with screws



Ball guiding bushes – precise and smooth running

For higher speeds and maximum precision.



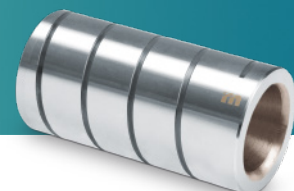
E 5214 with brass cage



E 5227 with aluminium cage

Sliding guide bush, self lubricating E 5152 – the strong alternative

Self-lubricating thanks to the oil depot and solid lubricant MoS₂ in the sinter layer.



Components for secure process monitoring

Increase process reliability during the stamping process with our precision control devices. This helps prevent damage to the die and defective stamped parts.

Feed and position control



Fork light barrier distributors E 6530, E 6532 and E 6536

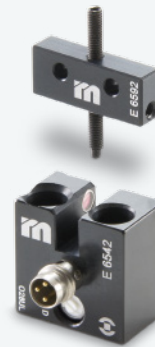


Split light barrier, infrared E 6534

Double sheet detection and tilt control



Analogue sensor, inductive E 6540



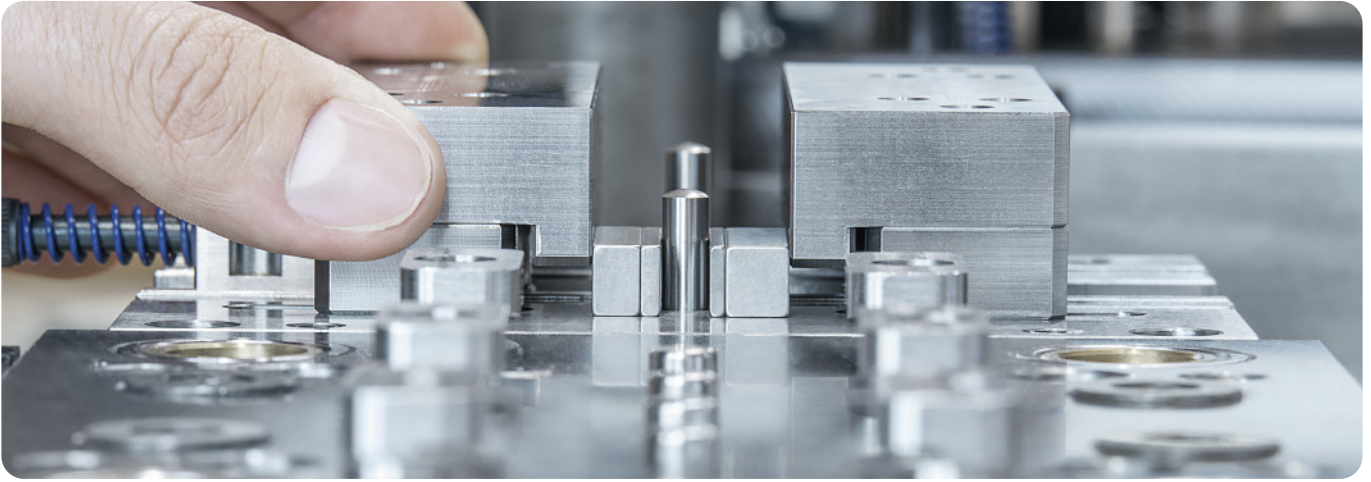
Fork light barrier, infrared light E 6542 and setting unit E 6592

Ejection control



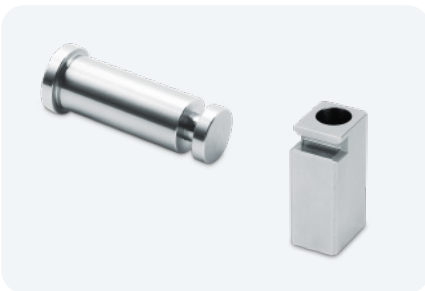
Multibeam fork light barrier, infrared E 6538





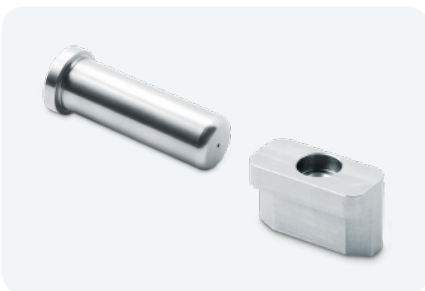
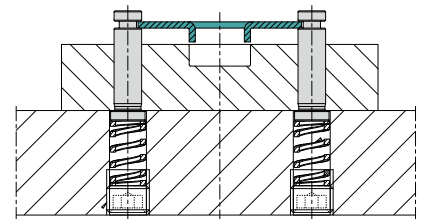
Infeed guide, strip guiding elements and strip lifters

Alongside our innovative infeed guide, we offer easily combinable strip guiding elements and lifters as well as further interesting standard components for the positioning and machining of punching strips.



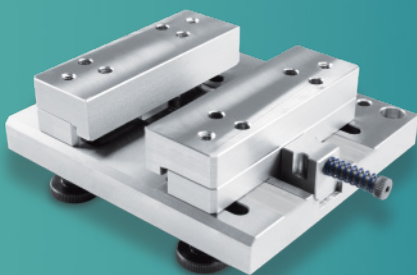
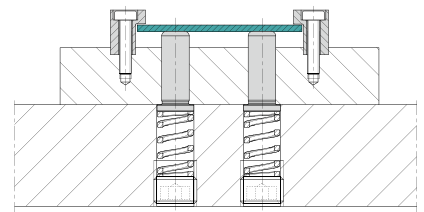
Strip guiding pin with collar, spring-loaded 5632 and blockshaped E 5634

Can be used for different punching strip thicknesses



Strip lifter with collar, spring-loaded E 5640 and strip guiding rail E 5636

Optimally coordinated



Infeed guide E 5620

- › The strip is guided on both sides by means of high-quality needle roller bearings
- › Guarantees guiding without play through spring-loaded bearing on one side
- › Continuously variable width: from 18 to 152 mm



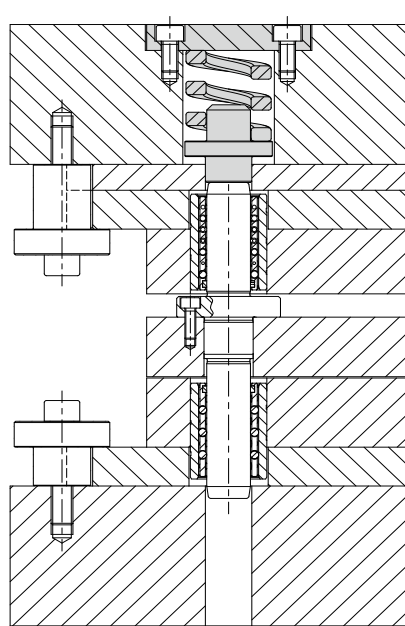
Springs and accessories

To achieve the greatest design freedom possible within the die modules, suspension through the guiding unit is recommended. In addition, the installation and removal of the die modules is made easier.



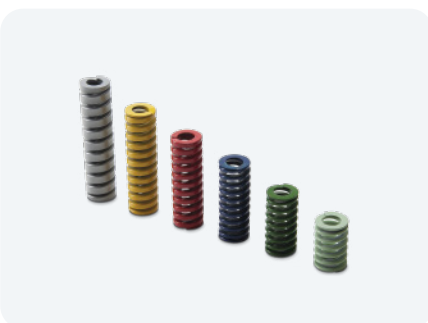
Spring cover E 1549

The spring force is absorbed by the stable spring cover



Spring loaded pin E 6040

For the transfer of spring force to the guide pillar



System compression springs

Wide range of springs with tried and trusted European quality standard

Attachments

Through the use of our attachments, you can save time and money from the design right through to the commissioning of the die.



Spacer E 5300

- › Fastening is possible from both sides
- › Case-hardened to avoid flattening from impact



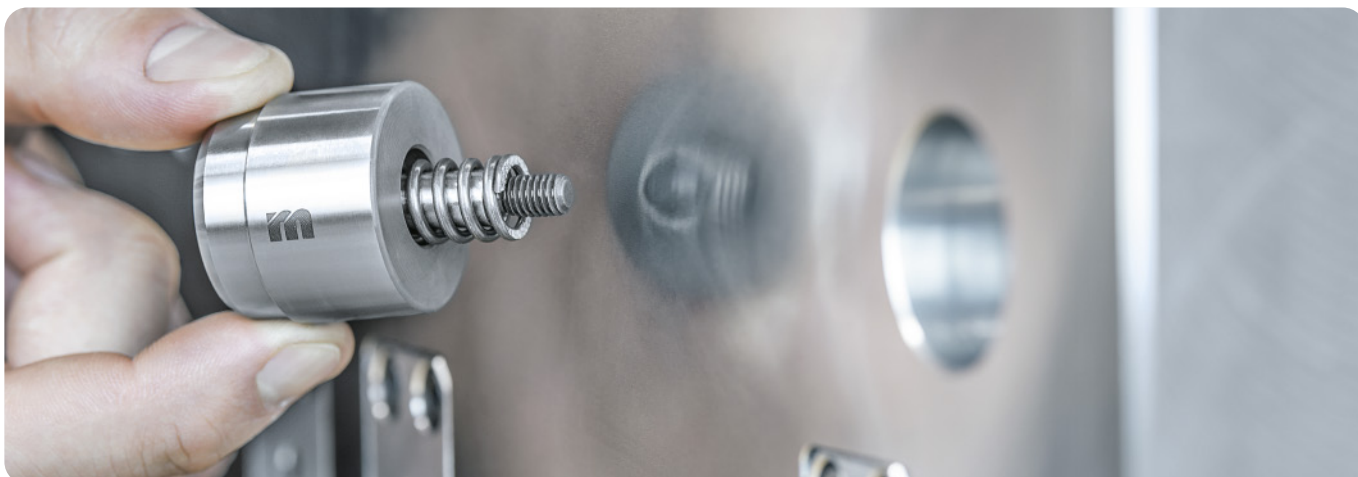
Centring unit E 5340

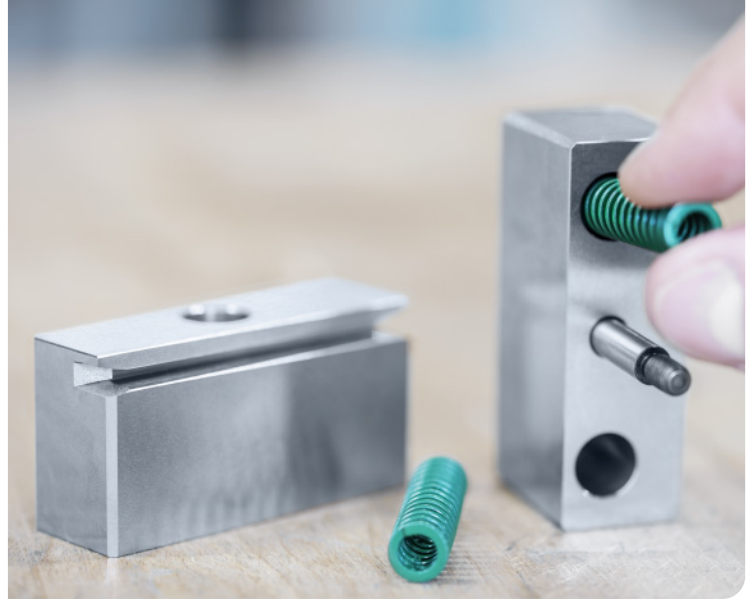
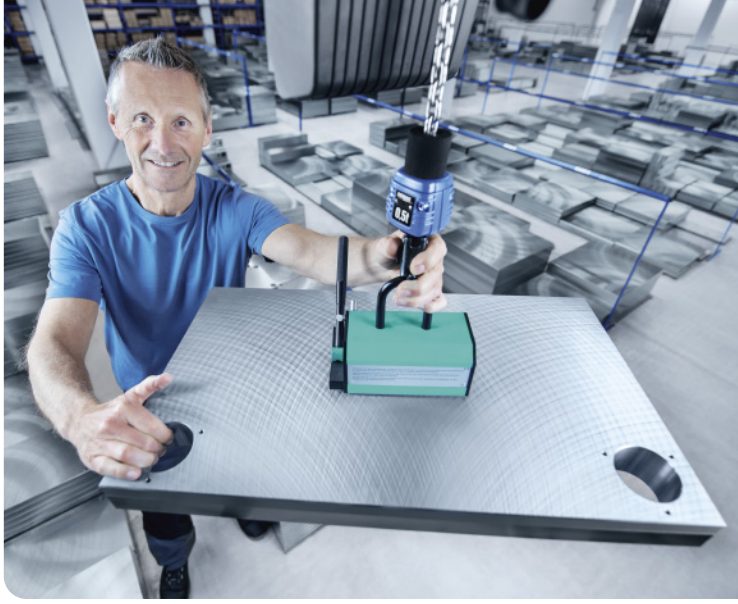
- › For quick and easy centring of the base set and the stamping press
- › Uniform installation diameters for different slots between 14 and 40 mm



Slide-in aid E 6045

- › For easier installation and removal of modules in the base set
- › Saves the time-consuming incorporation of the T-slot into the base set
- › Hardened, available in common thicknesses





Complete supplier



Continuous availability



Top quality



Online service



Personal support

Ordering – the way you prefer



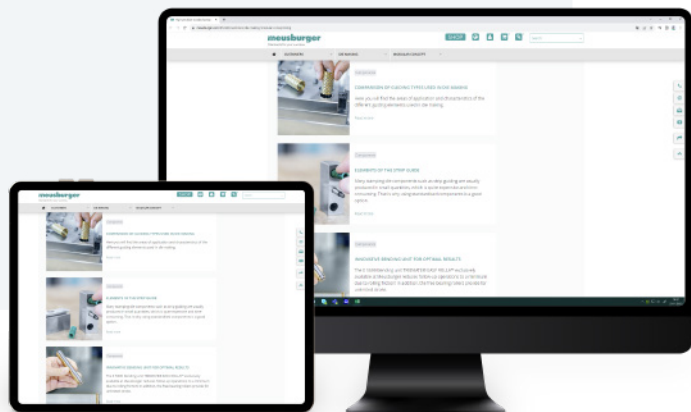
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107989109-V1-11/23-EN

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