

Tool design and prototyping



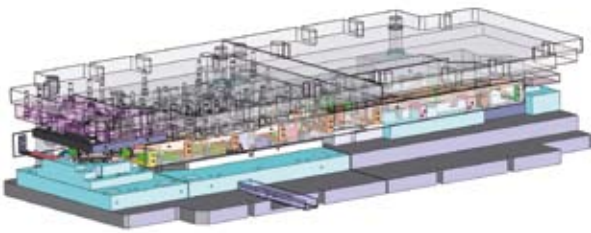
CoolCase is your ideal partner for the development and production of cutting, forming and complex progressive dies. Qualified employees with longstanding experience handle all your needs on a broad spectrum of modern machines. Our expertise covers the whole process chain from method planning and design, through to manufacture and subsequent acceptance of the finished tools on the customer's premises. Satisfied customers in consumer electronics, the automotive industry and electrical engineering are testimony to our competence and quality.

Test our services for yourself!

- Complex computer-assisted design and manufacture
- Cutting, forming and complex progressive dies with sheet thicknesses from 0.2 to 4.0 mm
- Tools with lengths up to 2.5 m and weights up to 5.0 t
- Sample parts, prototypes and small batches
- High precision and a robust design
- Short and reliably observed delivery times
- Contract production on high-quality CNC milling and EDM erosion machines

Tool design

CAD/CAM



Design

- 3 Solid Works workstations
- 3 Pro Engineer workstations

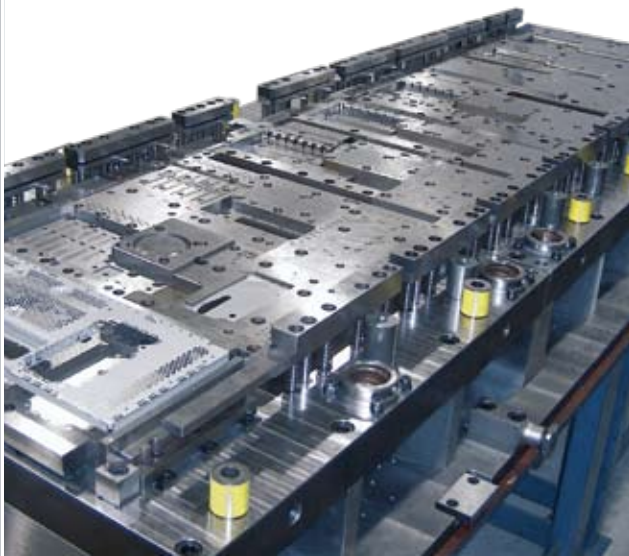
Milling

- 2 MasterCAM Version X programming workstations

EDM erosion

- 2 DCAMCUT 4.0 / hyperCAD 2005.1 programming workstations

Complex tooling



Complex tooling

Complicated tooling is our speciality. Alongside stamping and bending, all typical metal-forming technologies are integrated into our solutions, for example beading, deep drawing and folding. In addition, we also realise complex technologies such as clinching or demanding part geometries (lateral cutting and forming) in a progressive die. In all these endeavours, we attach great importance to ensuring problem-free maintenance.

Tool for coated sheet

We have been supplying progressive dies for coil-coated materials to the case and housing industry for many years. On this basis, even difficult forming technologies, such as drawing, embossing and folding, can be realised without damaging the paint surface. In the production of such tools, which place particularly high demands on the surface quality and geometry of the active parts, we are able to rely on a wealth of long-standing experience.

Inexpensive solution for smaller batches

To cater for small component batches up to approx. 50,000 cycles, we have developed a tool concept which cuts tool procurement costs by around 1/3. This is made possible through shrewd reductions in material and component use and the targeted application of state-of-the-art technologies in the fields of milling and EDM erosion.



Prototypes for new innovations

In our quest to support our customers in every possible way in the development and implementation of their new ideas, we are also glad to produce sample parts, prototypes and small batches. To this end, we make use of our full machinery base. At the same time, we can call upon the services of excellently trained employees with many years of experience in the field of sheet metal-working.

Tool design

Machinery

Machine type	Type	Table size (x, y)	Working area (x, y, z)
Milling			
Hermle machining centre, 5-axial-millings	Hermle C 30	800 × 800 mm	600 × 500 mm
High-precision surface and profile grinding machine (Firm Jung)	Haas VF-3 Dapache, lateral change 40 tools	1015 × 480 mm	1016 × 508 × 635 mm
CNC machining centre Vertical Hartford	V-MC 500 Fanuc OM	900 × 500 mm	500 × 350 × 500 mm
Grinding			
High-precision surface and profile grinding machine (Firm Jung)	JF 525	600 × 200 mm	600 × 200 × 500 mm
Surface grinding machine	Danobat RT 1200	1200 × 600 mm	1200 × 750 × 450 mm
Presses			
Hydraulic tool-testing press (Stenhoj Hydraulik A/S)	Design model VWP 200, Type Nr: 502 139	Column passage: 1010 × 400 mm, table height: 975 mm	Pressing force: 2000 kN Pressing speed: 10 mm/s
Automatic stamping machines	Kaiser 400 t Kaiser 100 t	2500 × 1000 mm	Coil processing up to 800 mm width
Automatic stamping machine	AP&T 320 t	2000 × 1000 mm	Coil processing up to 800 mm width
Stamping and nibbling machines Amada	Fibros King / EM3510NT		Sheets 1250 × 2000 up to 3,0 mm sheet thickness
EDM erosion			
Wire erosion machine	Matra alpha 1i 180is-WBC	800 × 700 mm	550 × 370 × 310 mm
Wire erosion machine	Matra alpha 0iB, Type: A04B-0113-B001	700 × 550 mm	320 × 220 × 180 mm
Cavity erosion machine	Exeron 303K	850 × 550 mm	520 × 320 × 300 mm
Turning			
Universal centre lathe TOS Galanta with 2-axial-digital display, ACU-Rite „DRO 200T“	SUI 32 VACx 750		Length: 750 mm Aperture: 340 mm
Bending / cutting			
Sheet shears (Diósgyöri Gépgár)	Building type: 0L-3x 1250 F	Cutting force: 37 kN	Cutting length: 1250 mm Cutting width: 500 mm Sheet thickness: 0,5-3,0 mm
Trumpf bending machines	V85 / V130 / TruBend7036	up to 3 m tool clamping or bending	6-axis CNC machine
Measuring			
3D measuring machine (Firm Wenzel)	Portal measuring machine LH		800 × 600 × 500 mm
Laser machining			
3D laser machine Trumpf	LaserCell 7020	2000 × 1000 mm	2,7 KW Laser
Combi-maschine Trumpf (Stamping, lasing, embossing, bending)	TruMatic7000	Sheets 1250 × 2500 mm, bending up to length 55 mm and height 25 mm	2,7 KW Laser