

Let us briefly introduce our company Gyrus, s.r.o.

Gyrus, s.r.o. is engaged in the design and manufacture of pressing tools, jigs and standards, single-purpose machines and tools for the extrusion of plastic products. The company is certified according to ISO 9001.



We use a 3D environment and simulation in the SolidWorks software when designing our products. Subsequently, the components of these products are manufactured by highly qualified operators using state-of-the-art machine tools. We produce shaped components according to programs generated in HSMWorks.

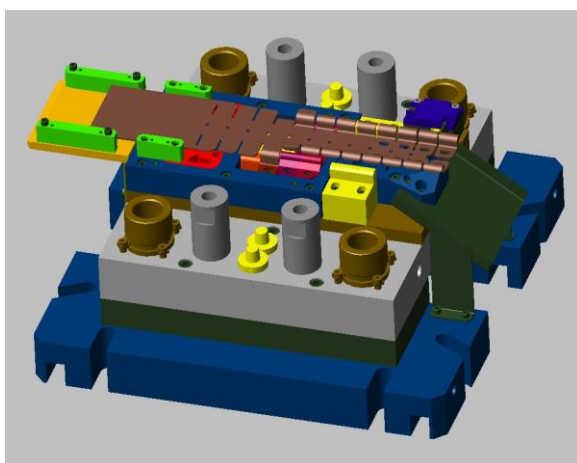


Fig. Two-row phrase-pressing tool – model

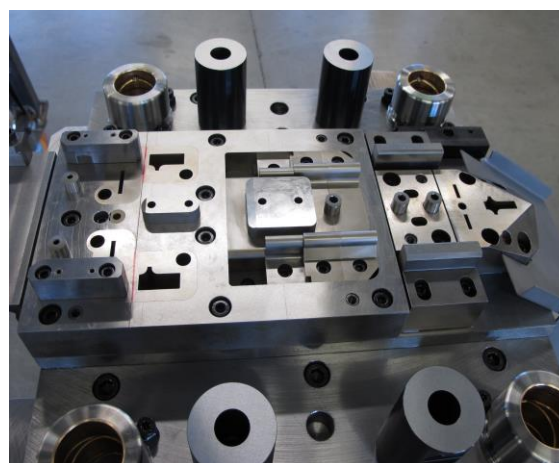


Fig. Two-row phrase-pressing tool – assembly

Our machinery covers virtually all the equipment required for our production. We use standard lathes and milling machines, CNC lathes, CNC machining centres, surface grinding machines, round grinding machines, hole grinding machines and coordinate grinding machines for holes with precise spacing. We also have EDM machines for burning starting holes, wire cutting and sinking.

The manufactured parts are inspected at our own inspection workplace.

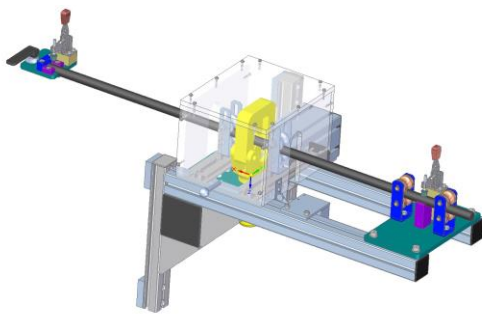


Fig. Cable cutter assembly – model



Fig. Power cable assembly

We subcontract only the production of covers for single-purpose machines (laser-cut shapes from sheet metal with subsequent bending, welding and painting), the thermal treatment of materials and surface treatment.

We also produce complex tools with integrated mechatronics, such as a transfer press tool for sleeves, where a manipulator built into the tool and controlled by its own control unit, which communicates with the press control unit, is used to transfer the part for further bending operations.

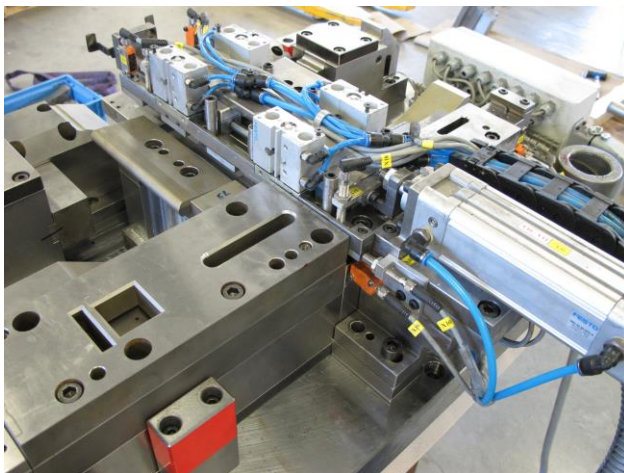


Fig. Transfer press tool for sleeves

Tools and machine components constructed by us are also used in other areas.



Fig. Cutting tool for food product packaging unit



Fig. Cutting unit for packaging machine with waste removal after cutting

Our designers can find solutions for any unusual and unique applications, such as pressing tools for ceramics, where the abrasive effect of the pressed material must be compensated for by a suitable choice of material and its thermal treatment.

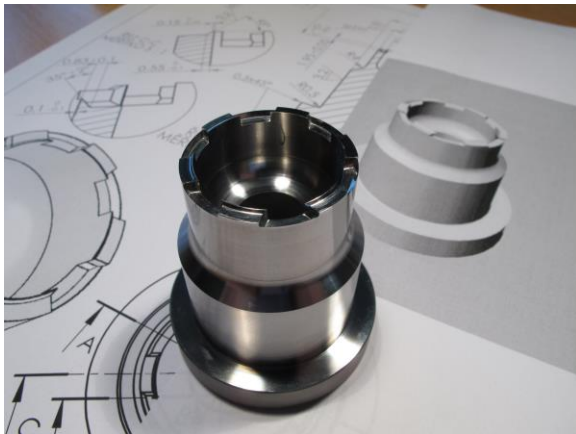


Fig. Ceramic pressing tool

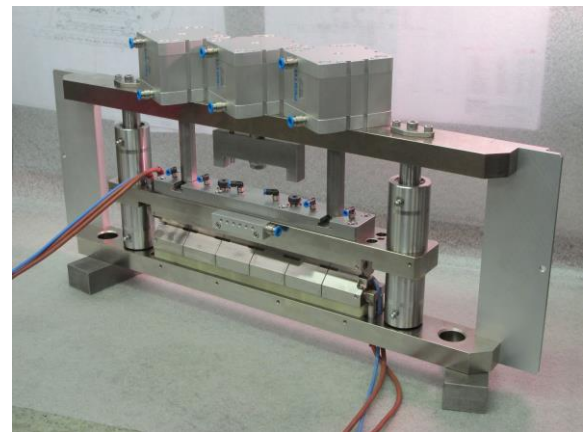


Fig. Cutting tool with integrated bag welding

We can also meet hi-tech challenges, such as a nanofibre drawing unit for the production of non-woven fabrics.

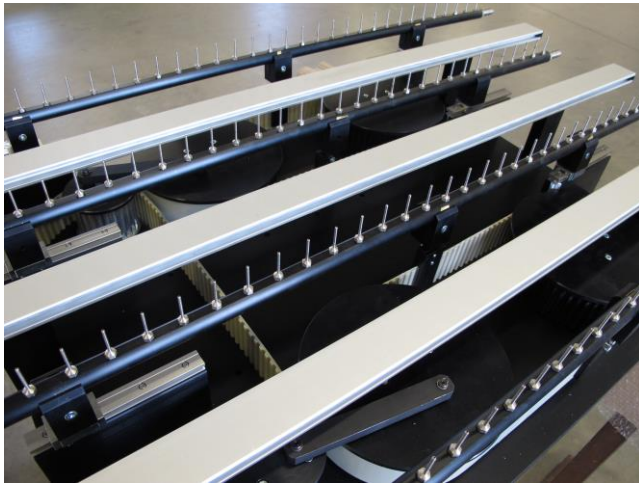


Fig. Nanofibres

Our most common products are various progressive pressing tools and accessories (control jigs, welding jigs).

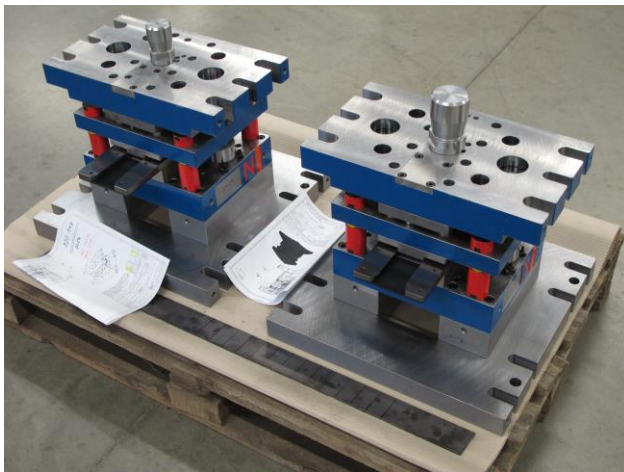


Fig. Progressive pressing tools ready for testing

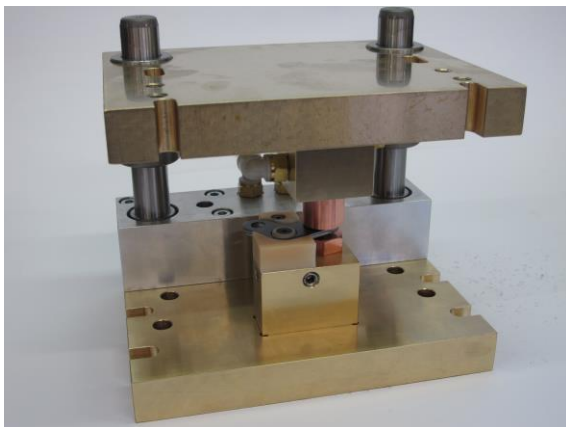


Fig. Resistance welding tool



Fig. Example of progressive pressing tool products

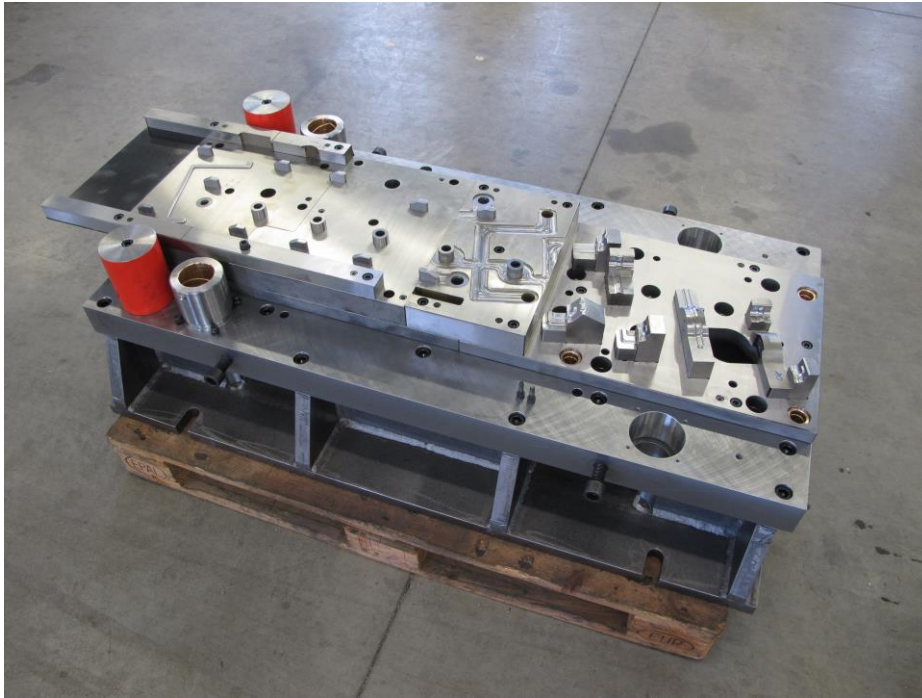


Fig. Assembly of progressive pressing tool

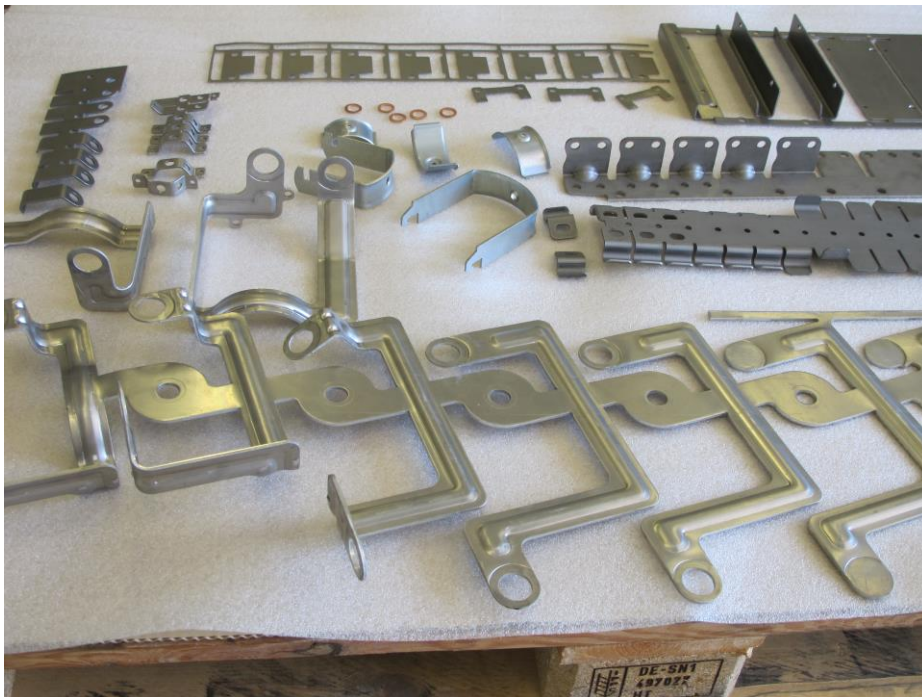


Fig. Example of progressive pressing tool products

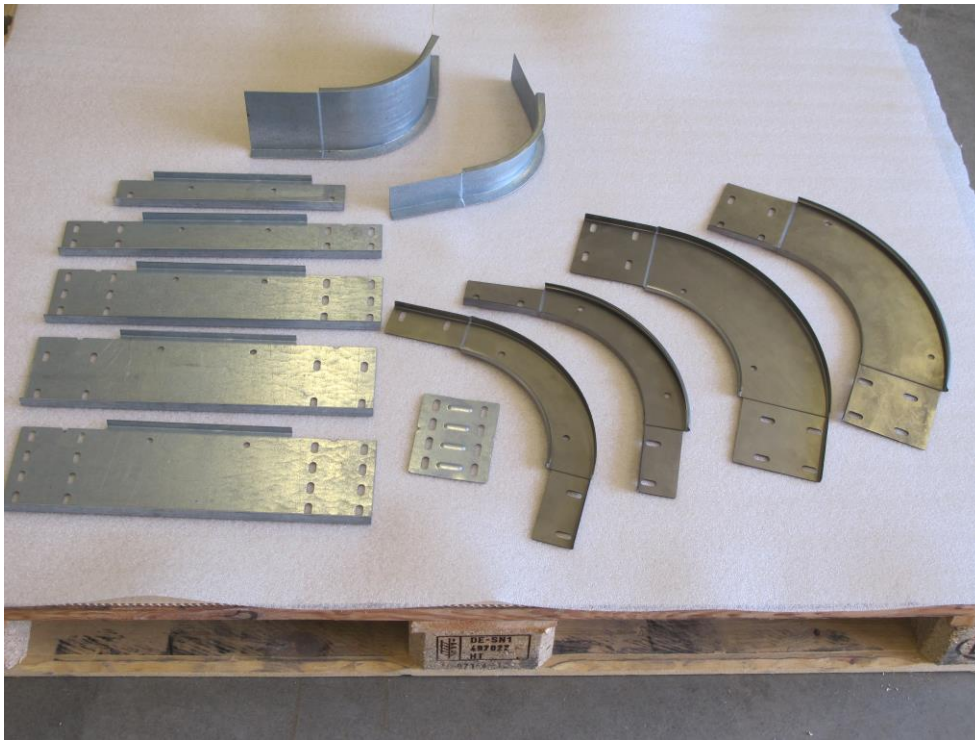


Fig. Sheet metal stampings

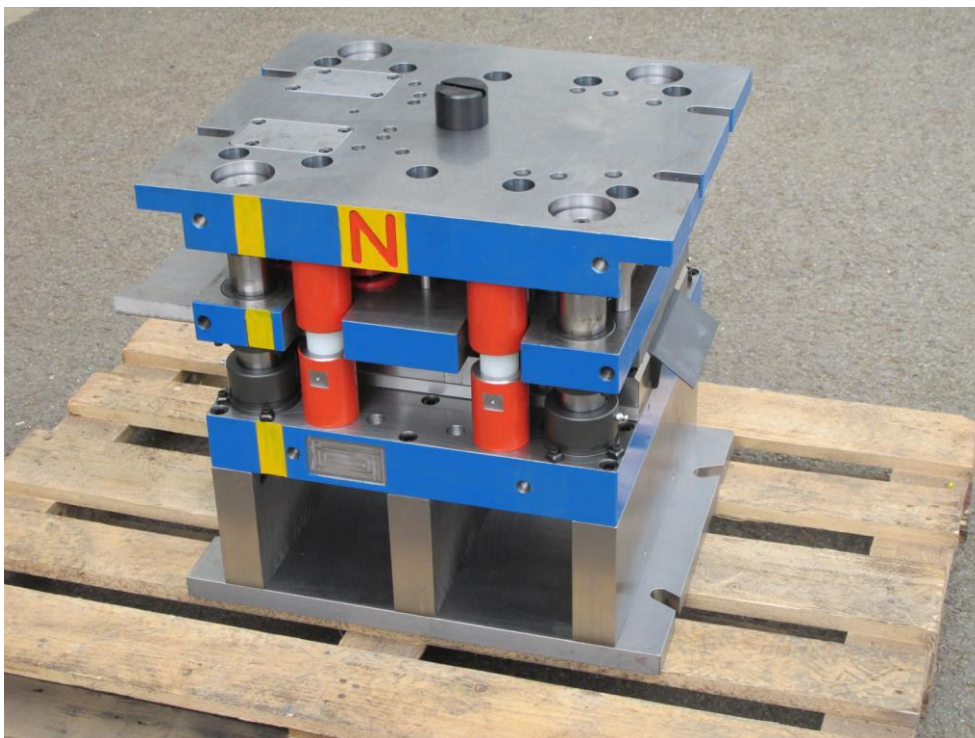


Fig. Pressing tool ready for testing

We also manufacture jigs for machining and other applications.



Fig. Jig



Fig. – Coil winding mandrel

Tools for the extrusion of plastic profiles and equipment for the plastics industry are an important part of our production.



*Fig. Extrusion tool nozzle 1
View from the extruder*



*Fig. Extrusion tool nozzle 2
Output side*

A number of design and technological issues have to be addressed when designing and manufacturing these tools. We supply these tools either individually, customized to the extruder, calibration table and on-site exhaust, or as part of the delivery of the entire extrusion line.



Fig. Rolled exhaust unit



Fig. Foil line

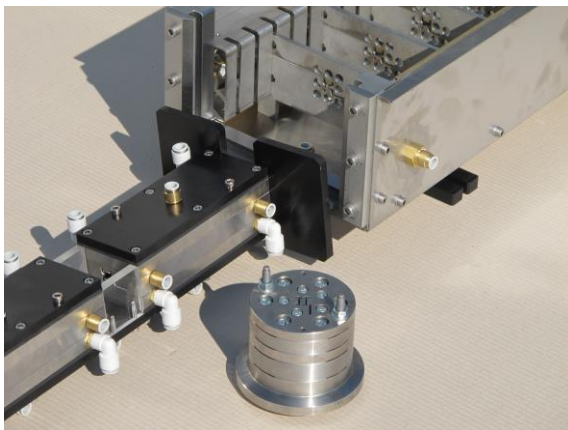


Fig. Extrusion tool – nozzle, calibration and cooling bath



Fig. Calibration and cooling parts of extrusion tool ready for delivery to customer tests



Fig. Nozzles and packaged extrusion tool accessories



Fig. Foil winding device

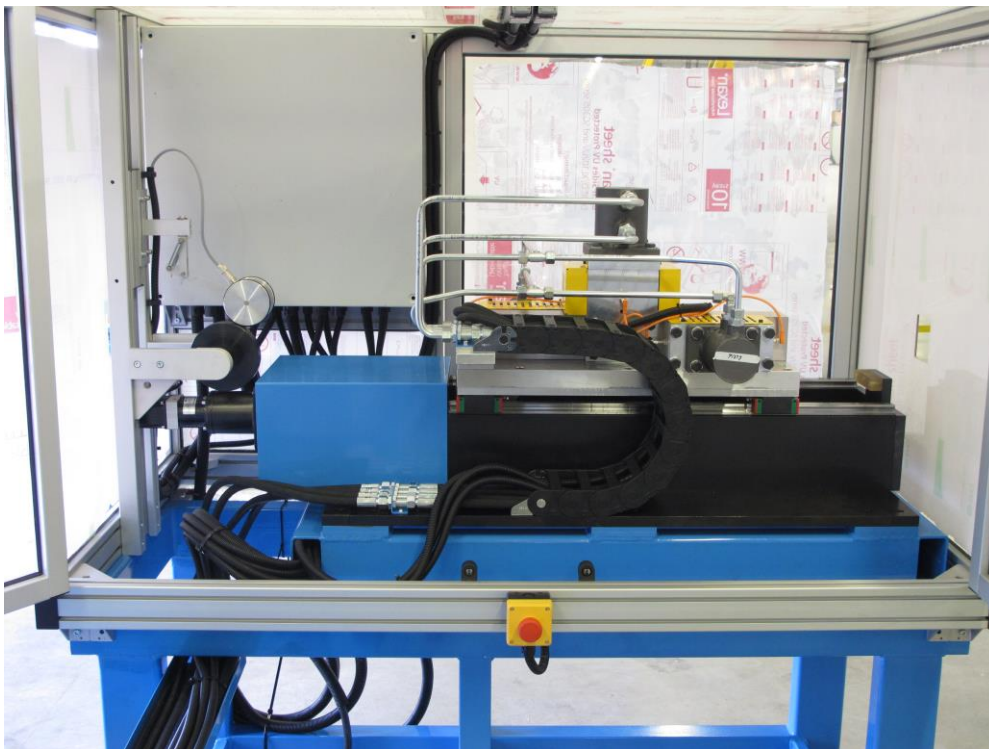


Fig. Machine for punching of continuously extruded plastic profiles

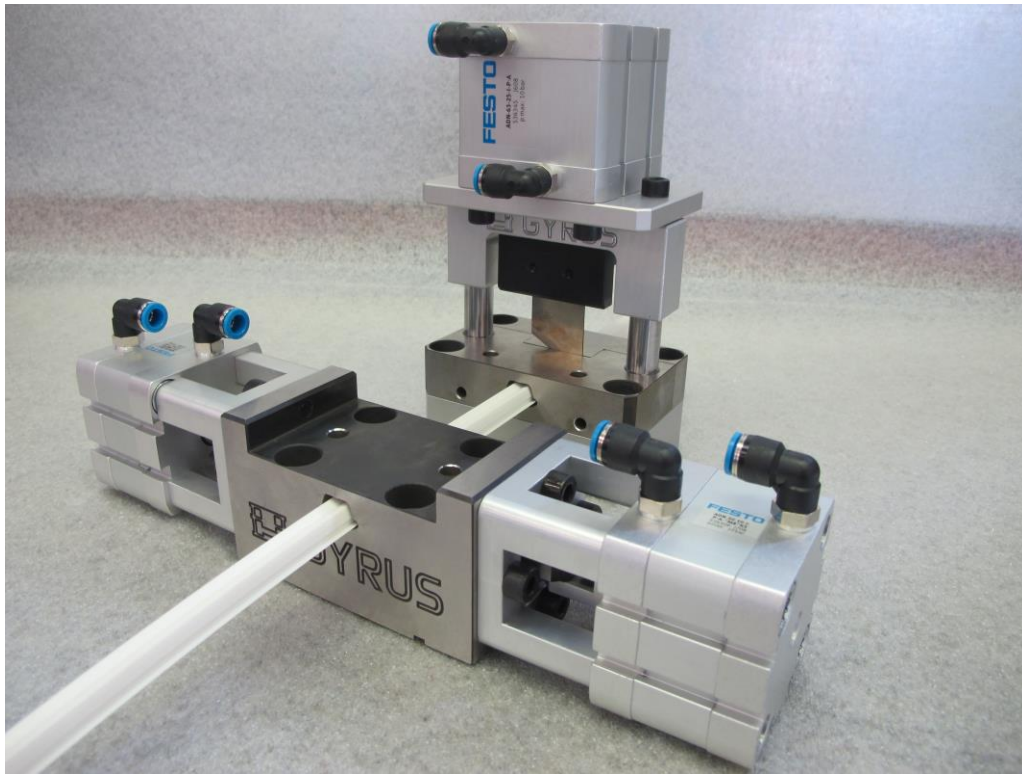


Fig. Tool for cutting plastic profiles

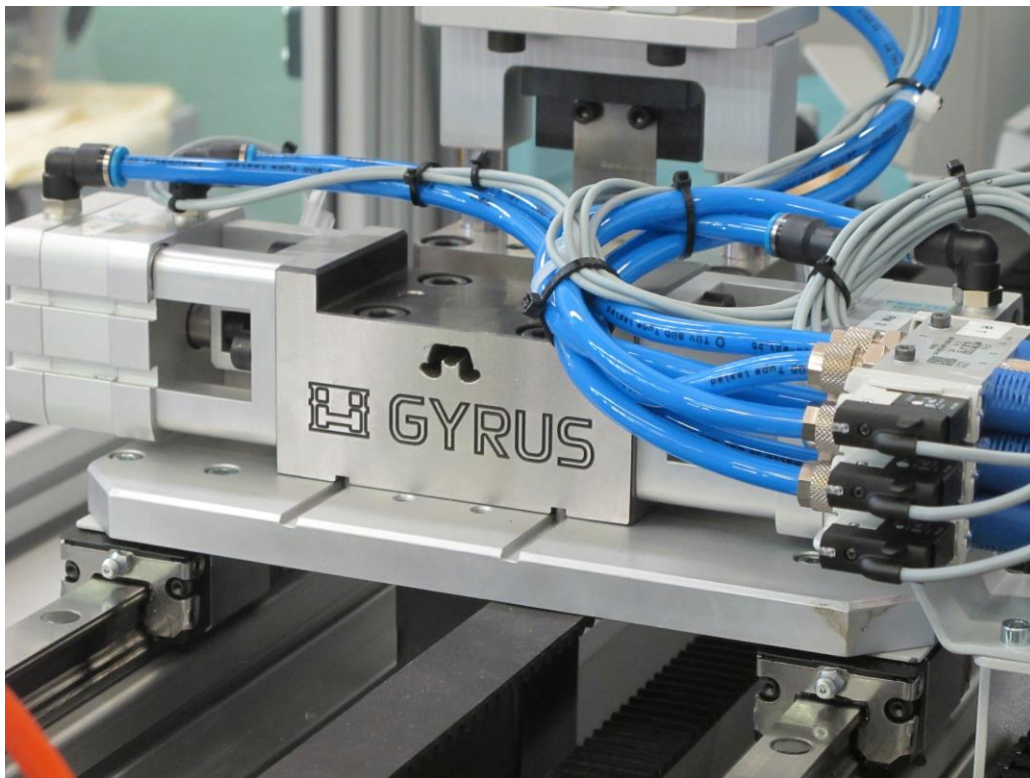


Fig. Machine for cutting plastic profiles

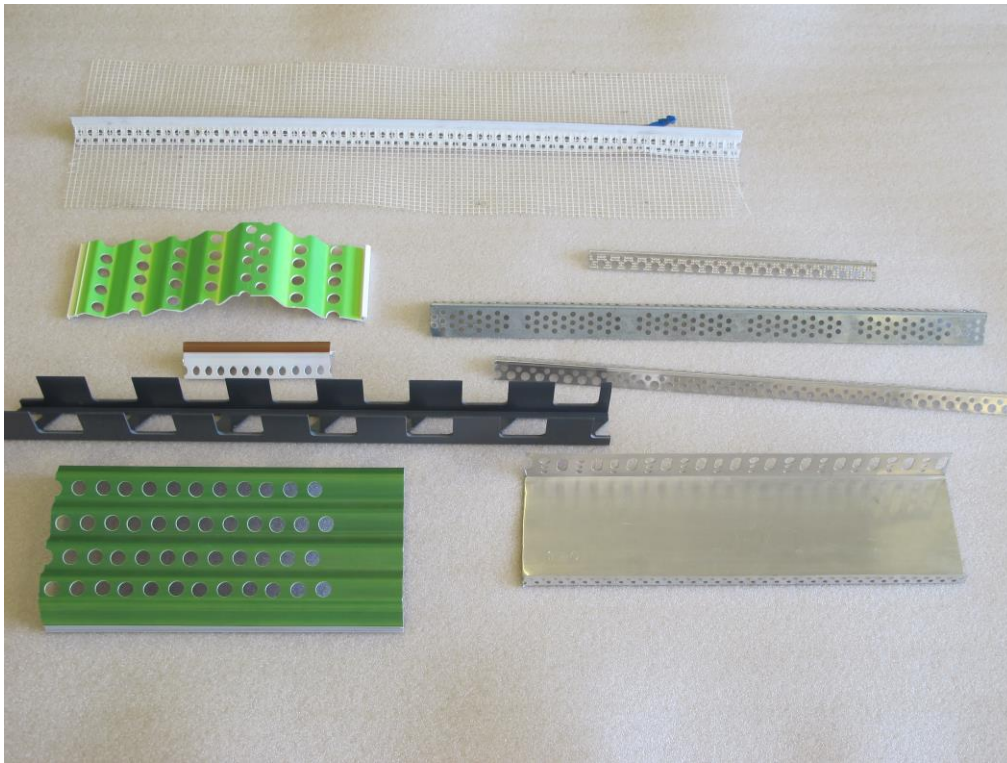


Fig. Samples of punching tools for plastic and sheet metal profiles

Our production range includes the production of extremely precise parts for manufacturers of state-of-the-art machine tools and control jigs.

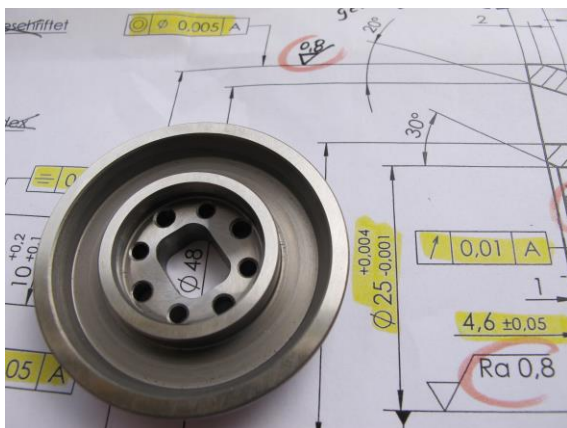


Fig. Shift ring



Fig. Jig for measuring bottle perpendicularity in the glass industry

As the above production examples show, we focus on manufacturing small and medium-sized parts. The maximum dimensions of the tool plates we produce are 1200 x 600 mm, rotary parts up to a diameter of 300 mm, or a length of 1000 mm. With our equipment we can work with individual parts up to approx. 600 kg, or assemblies up to 3 tons.

The basic philosophy of our work is the maximum satisfaction of the customer's needs at a reasonable price.

Within our current capacities, we will do our best to offer the shortest possible deadlines.

The quality of our production is our priority.

We believe that we have much to offer and we will be happy if your company becomes our satisfied customer and partner.