

MACHINING TECHNOLOGY



Pallet system for sensitive parts

Sensitive turned parts are extracted directly from the machine with a gripper and carefully placed on pallets. There, they are also cleaned and passed on to the next processing step.

Two different metal machining processes are particularly important in connector manufacturing: punching or punch-bending and machining. At ODU, we use both procedures and have been successfully applying them for decades. Machining is of particular importance to us since it plays such a key role in enabling ODU's flexibility and speed around the development and production of application-specific connectors. We're able to provide our customers with high-volume production, but also particularly smaller quantities, too, in a wide variety of different versions and within a short timeframe. This is one of our particular strengths.

03 IT ALL REVOLVES AROUND CONNECTOR TECHNOLOGY

ODU machining manufactures component parts for connectors in a wide variety of different versions including contact sockets with housing diameters from 0.3 mm to 300 mm. We produce 13,000 different articles using more than 100 machines, all of which are equipped with cutting-edge technology and specially developed high-performance tools.

ODU's machining ensures the necessary precision as well as dimensional and geometrical stability of contact pins, contact sockets and housings or housing parts. With dependable flexibility and speed.

QUALITY AND EFFICIENCY IN EVERY DETAIL

ODU's 65 million turned parts and 500 tons of processed raw material every year – from brass and aluminum to stainless steel – clearly demonstrate the high productivity of our production area. Efficient processes make it possible for ODU to provide both large-scale production and individual, customer-specific products.

Precise, versatile and flexible

The necessary raw materials are available directly in-house in bar or wire form, enabling the quick, flexible reaction to customer requests within short delivery times. Thanks to outstanding automated equipment, the production of the most varied geometries and process steps are made possible on one machine – which keeps throughput times as short as possible.

- From a few tenths up to several hundred millimeters in diameter – all geometries are included in the standard process.
- In machining processes (turning, drilling, thread-cutting, milling or cutting), ODU manufactures the connectors' turned parts – from non-ferrous metal, stainless steel or plastic.
- Axial and radial driven tools implement various drilling and milling options.
- Even forming processes, such as bending, are integrated into this step of the process.
- Particularly sensitive parts are manufactured using handling and palletizing systems.

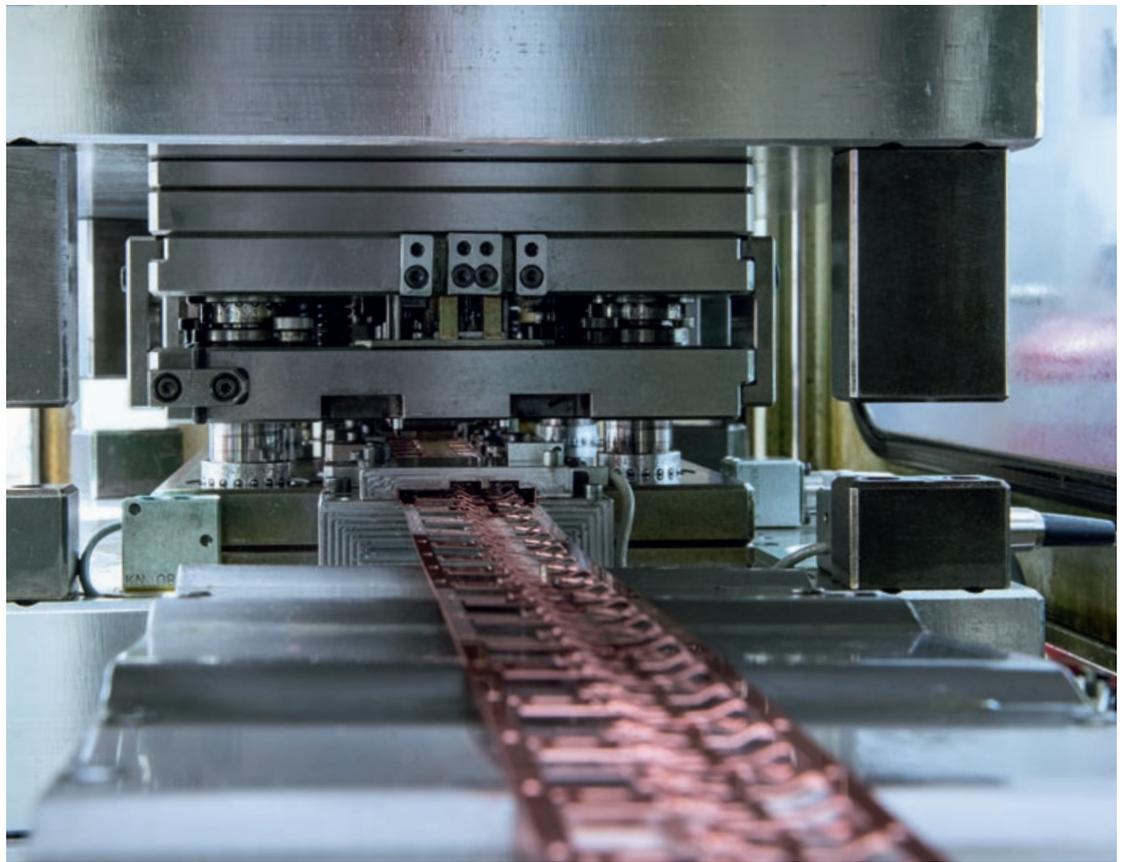


Finest workmanship for each product

In the component production for the ODU MINI-SNAP®, elaborate housing parts are sometimes used. This includes, for example, broaching, planing, polygon turning and various milling operations. Heavy-duty connectors with a diameter of up to 250 mm are entirely processed in the automatic lathe. A component made of material 1.4404 for high-vacuum use is turned, drilled and milled.

Stamping technology

High-precision, mass-produced contacts are manufactured from various materials at 1,400 strokes/min and 300 kN in material thicknesses of 0.07 mm to 1.5 mm. The tooling technologies for this are naturally from ODU.



Turning at ODU

Over 100 automatic lathes equipped with up to 12 axes, numerous special tools, some equipped with high-frequency spindles, provide significant production flexibility with consistently high quality.

