

# **imG1010**

**5 axes simultaneous milling machine  
for wet and dry machining**

**The steel one**

- 5 axes simultaneous CNC machine
- wet/dry machining
- workpiece zero point clamping system
- servo drives equipped with absolute encoder
- integrated control equipped with touch screen



## IMG1010 | Efficient to the power of 5

The IMG1010 is a compact solution for processing workpieces up to a size of 100x100x100 mm. With its basic structure made of polymer concrete, it enables precise processing of numerous materials such as titanium, steel, CoCr, ceramics, sapphire, zirconium or aluminum. Particularly noteworthy is the arrangement of the Y-axis that thanks to its installation positions ensures high stability and a very elevated vibration dampening. Almost all positions on the workpiece may be reached without any reclamping. The selection of workpiece clamping devices and holders in connection with the zero point clamping system makes the machine a versatile machining centre. Their structure enables wet and/or dry processing without any time-consuming conversion. The CNC machine can be expanded with an optional loading and unloading system, which accesses the machine room from the right, left or from above. This means that workpieces can be changed automatically.

The zero point clamping system serves as an interface by guaranteeing the precise and repeatable positioning of the workpiece. The system can be integrated into network-controlled automated manufacturing processes by making use of software interfaces. The maintenance-friendly design and the long-life direct spindle drives save service costs and time and offer a reliable machining system. During the construction process, care was taken to ensure that all elements are easily accessible and yet protected from any external influences so to guarantee a long service life.

The mature system offers many expansion options.

### Options

- machine base
- various zero point clamping devices: T-slot plate, four-jaw chuck, precision vice and blank holder
- automatic assembly system
- 3D measuring pushbutton

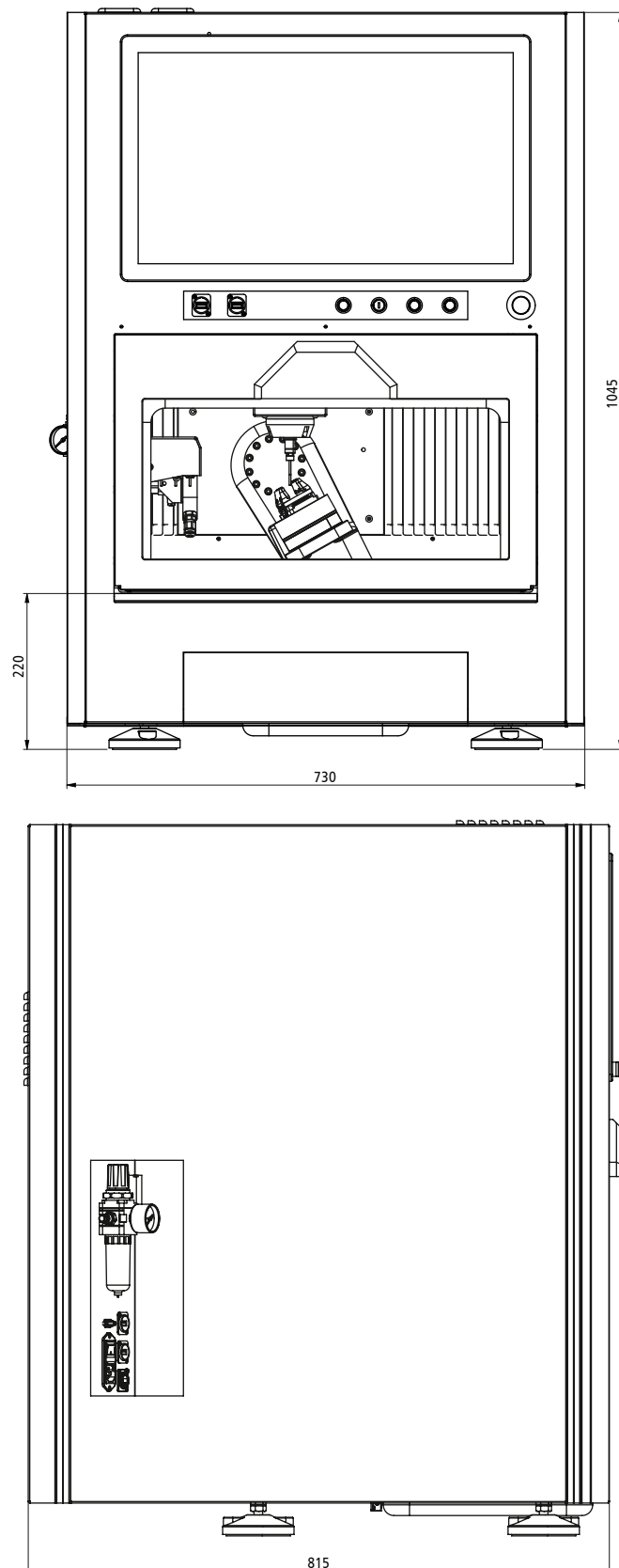
## Technical data

### IMG1010

|                                     |                                                       |
|-------------------------------------|-------------------------------------------------------|
| Travel ranges X/Y [mm]*             | 110 (215 including the tool changer) x 110 x 110      |
| Rotary swivel unit A/B              | A = endless / B = 130° (-30° + 100°)                  |
| Workpiece dimensions [mm]           | Ø 100 x L 100                                         |
| Dimensions WxDxH [mm]               | 730 x 815 x 1045                                      |
| Drive motors                        | AC servo of 200 watts equipped with absolute encoders |
| Drive elements X/Y/Z                | 16 mm recirculating ball screw without clearance      |
| Tool changer                        | 23-fold with length measuring pushbutton              |
| Milling spindles                    | 1 kW 60,000 rpm                                       |
| Pressure compressed air supply      | 6-8 bar                                               |
| Coolant tank                        | 5 litres                                              |
| Operation                           | Touch screen display                                  |
| Software                            | WinRemote and ProNC                                   |
| Basic structure of the base support | Polymer concrete                                      |
| Weight [kg]                         | approx. 310                                           |
| Electrical specifications           | 110V / 240V 16A                                       |
| <b>Part No.</b>                     | <b>283004 0001</b>                                    |

\*without installed components on the axes.

## img1010 | Dimensional drawing [dimensions in mm]



## img1010 | Areas of application

The machine can be used flexibly for a wide variety of materials. Metals and plastics may be processed under wet and dry conditions without retooling. The zero point clamping system facilitates the handling of the workpieces.

### Accessories



The practical coolant container has a capacity of 5 liters. For cleaning and filling, it can simply be pulled out and removed through a drawer positioned under the machine. The multi-stage filter system prepares the cooling lubricant for the system cycle by reliably holding back chips and particles. The removal and cleaning of the filter system is very easy.

### Typical materials

- titanium
- steel
- CoCr
- aluminum / light metals

### Application areas

Precision components for:

- medical technology
- precision engineering
- micro-machining
- mold and prototype construction
- dental technology
- jewellery industry



Thanks to the massive construction and the high quality-level of the used components, the machine enables high precision. By means of the control integrated in the housing and the high-quality servo drives, excellent surface qualities are achieved on all materials.

### Base table for img 1010

- stable base table
- dimensions [WxDxH]: 728 x 680 x 814 mm
- storage space for suction & cooling lubricant system
- storage volume:  $\approx 0.25 \text{ m}^3$
- integrated levelling elements

