

iWS1000

Water jet cutting machine

- no thermal stresses
- no hardenings
- no tensions
- no dust or smoke emission
- almost burr-free cuts
- direct piercing at any position



iWS1000 | Water jet cutting machine

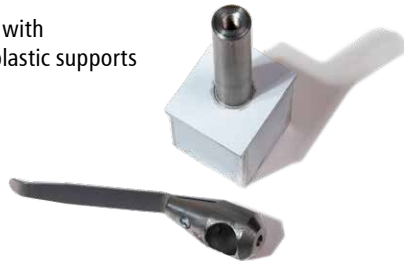
The iWS 1000 is the first choice for small series, educational institutions as well as in the workshop. Our goal was to realize a compact and inexpensive waterjet system that can be set up, maintained and operated with as little effort as possible. The machine can be connected to a regular 16 A power connection and works cleanly and quietly due to its enclosure. Designed and manufactured in Germany, the pump is fully integrated into the machine. On the iWS 1000+ model, an external pump of up to 22 kw can multiply the cutting power even further.

Features iWS 1000

- machine & pump "Made in Germany"
- including completely integrated cutting pump
- operator protection (enclosure made of break-proof acrylic glass)
- 3-plunger high-pressure pump with an efficiency of 90
- abrasive cutting possible without pressure vessel
- compact design
- settling tank for waste water pre-cleaning integrated
- power supply through standard 16 A connection
- low weight (only 800 kg incl. water)
- low noise level (only < 78 dB in cutting mode)
- easy to operate control software

Options

- pure water equipment with sapphire nozzles and plastic supports
- material tensioner



iWS 1000+

- machine „Made in Germany“
- operator and splash water protection by an acrylic glass hood
- compact design with a cutting performance like a "big" waterjet machine
- low weight of the guiding machine (only 750 kg incl. water)
- free choice of external pumps with power from 15 - 22kw by well-known brand manufacturers such as ThyssenKrupp UHDE, KMT or BFT
- easy to use control software
- integration into an existing pump park is possible
- pump and machine can be placed independently of each other in a completely variable way
- no space-consuming whip construction, the high-pressure piping is directly integrated into the machine

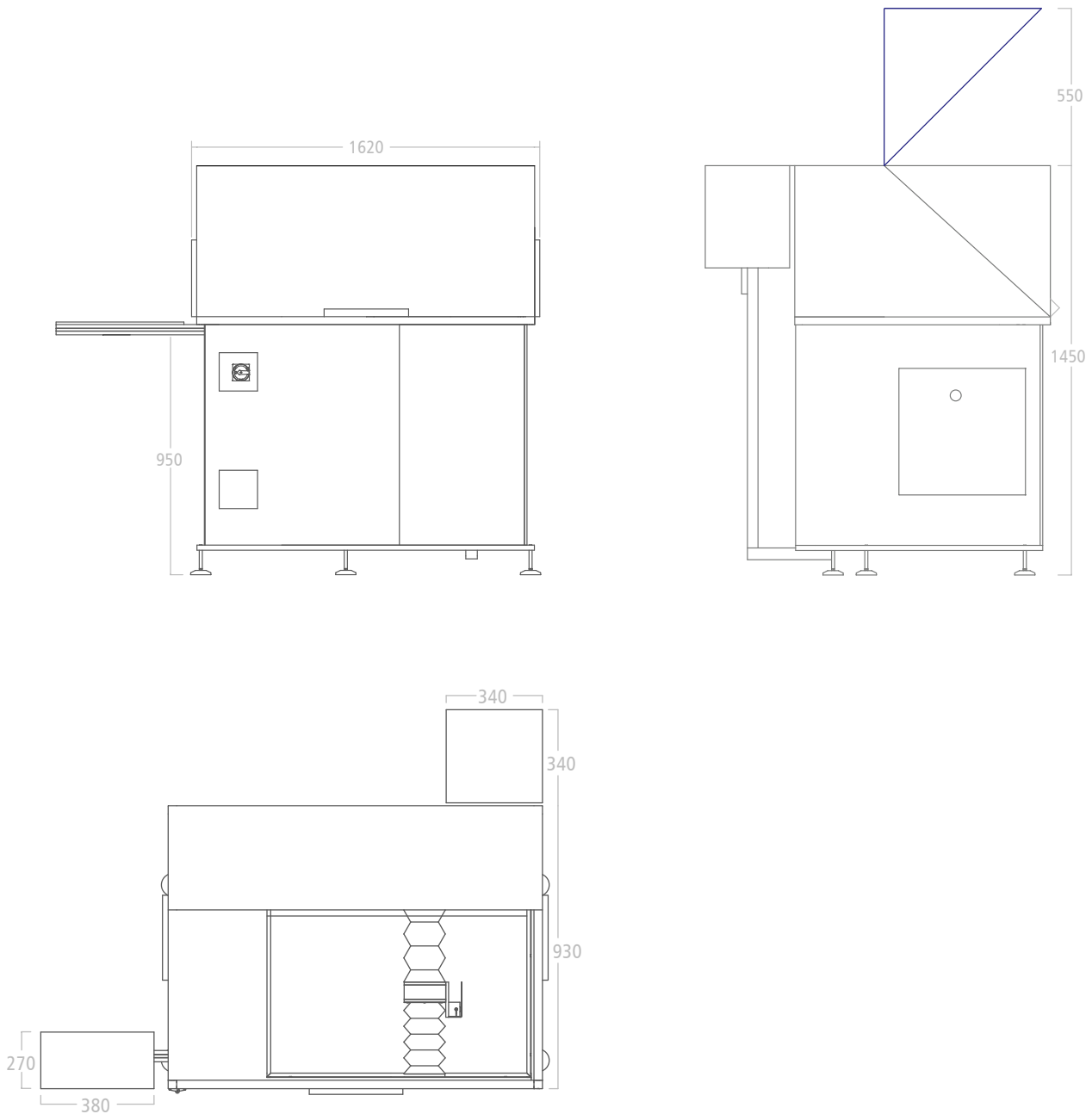


Technical data

	iWS1000	iWS1000+
Travel ranges X/Y [mm]*	1000 x 500	
Dimensions WxDxH [mm]	1610 x 1070 x 1450 (2000 opened) incl. pump	1610 x 1070 x 1450 (2000 opened) plus pump
Drive system	Ball screw precision class C7	
Travel speed [mm/min]	0 - 4,000	
High-pressure pump	7,5 kw	bis zu 22 kw
Repeatability [μm]	< 0.04 mm/m	
Positioning accuracy [μm]	+/- 0,08 (20°C) mm/m	
Weight [kg]	ca. 800 incl. water	750 kg plus water
Electrical specifications	16 A / 400 V	63 A / 400 V
Part No.	444630 80502	444630 80503

Machine dimensions without control panel or additional accessories. Travel ranges without machining unit and other attachments (tool changer, length measuring probe, etc.).

iWS1000 | Dimensional drawing [dimensions in mm]



iWS1000 | Application areas

Typical materials iWS 1000

up to 10 mm	stainless steel / steel, titanium, composites (various designs)
up to 12 mm	brass
up to 15 mm	copper, plastics (various types), natural wood, plexiglas
up to 20 mm	aluminum, glass / laminated glass, marble / ceramic tiles
up to 25 mm	marble, rubber
up to 40 mm	various foams

iWS 1000+

up to 40 mm	stainless steel / steel, titanium, composites (various designs)
up to 40 mm	brass
up to 40 mm	copper, plastics (various types), natural wood, plexiglas
up to 40 mm	aluminum, glass / laminated glass, marble / ceramic tiles
up to 40 mm	marble, rubber
up to 40 mm	various foams



Application examples

- micro machining
- precision machining
- medical technology
- electronic industry
- watch industry
- jewelry industry
- automotive supply industry
- tool/mold making
- electrode production
- training and apprenticeship
- prototype construction
- tensile specimen production
- universal workshop machine
- auxiliary machine for contract manufacturing
- semi-finished product production