

iselGermanyAG



the abrasives

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



www.**isel**-germany.com

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illisiooo | the abrasive

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

iWS 1000+

- Machine "Made in Germany
- · Operator and splash water protection by an acrylic glass hood
- Compact design with a cutting performance like a 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

Options

- Pure water equipment with sapphire nozzles and plastic supports
- Material tensioner

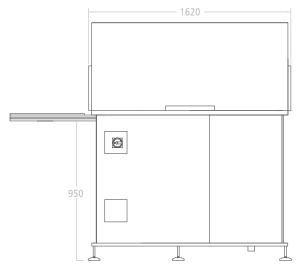


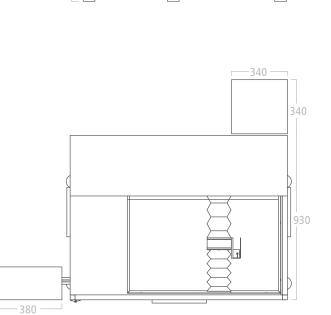
Technical data

| | iWS1000 | iWS1000+ |
|---------------------------|-----------------------------------------------|----------------------------------------------|
| Travel ranges X/Y [mm]* | 1000 x 500 | |
| Dimensions WxDxH [mm] | 1620 x 930 x 1450 (2000 opened) incl. pump | 1620 x 930 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 | |
| Connection values | 16 A / 400 V | 63 A / 400 V |
| Weight [kg] | ca. 800 incl. pump | 750 kg plus pump |
| Part No. | 444630 80502 | 444630 80503 |

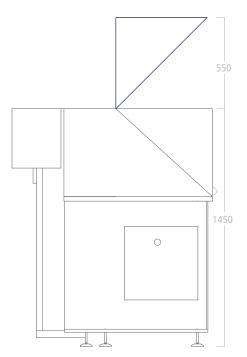
Machine dimensions without control panel or additional accessories. Travel ranges without machining unit and other attachments (tool changer, length measuring probe, etc.).







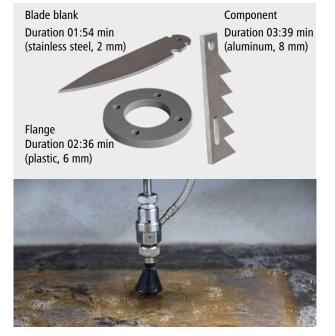
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illsiooo | Application areas

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



