

Laser welder**Craft-Laser 2000 WS**

water-cooled, 20nm single-mode laser welder for heavy-duty applications.
Uncompromising performance and process reliability.

**Article number**

1390020

Brand

Craftweld

☑ Ordering: from 1
units

**Description**

The Craft-Laser 2000 WS is a water-cooled, hand-held laser welding machine, built for the highest demands and heavy-duty applications. Maximum focus stability at 100%ED guarantees maximum process reliability.

Technical highlights

- Water-cooled 2,000W single-mode laser source with 100%ED
- Specially developed, water-cooled laser gun and improved optical systems guarantee maximum focus stability
- **Program selection via laser gun possible**
- High-performance water cooling from the laser cutting area guarantees maximum process reliability

Operation

- Extremely simple operation thanks to synergy characteristics
- Three steps to the finished welding result. Automatic adjustment of power, wire feed, oscillation width, oscillation frequency, laser frequency, PWM, hot start, etc.

- High-resolution display enables optimum readability of all necessary parameters. Integrated help ensures better understanding of the setting options
- Fully integrated operation in the wire feed case - optional operation via machine or wire feed

Technical features

- 25µm single-mode laser sources. Double the power density of the standard 50µm multi-mode laser sources of many competitors ensure significantly higher penetration depths and beam qualities.
- High-performance laser cells paired with gas-cooled torches ensure maximum power and focus stability.
- 2-in-1 machine: welding and cleaning: Laser cleaning is perfect for paint stripping, rust removal and scale removal
- Optional: Ethernet-IP interface for robot applications
- Optional: double wire feed

Safety and security

- 2-channel emergency stop system
- 2-channel safety interface for access monitoring (door contact switch)
- Key switch to prevent unauthorized use
- 2-channel fiber breakage detection and monitored QBH connection
- Safety instructions and manual activation of laser release at each start
- Double push button prevents unintentional activation of the laser
- Water-cooled
- Suitable for heavy-duty applications
- 3-color LED machine light for mounting on a laser safety enclosure signals the machine's current status

Advantages of laser welding compared to conventional welding processes

- Hardly any distortion, incredibly fast, incredibly good quality (even with very thin materials <1 mm)
- Consumes approx. 70% less energy
- Quick and easy to learn
- High process reliability
- Extreme time savings with greatly reduced rework at the same time
- One of the lightest torches on the market at approx. 680 g
- 2-channel safety loop for maximum safety

Advantages of the Craft laser

- Laser cleaning with up to 100 mm scan width with autofocus
- 2-in-1 machine: welding and cleaning
- Complete synergy - no more parameter lists
- Service-friendly - no more inconvenient sending in

Delivery content

- Welding gun
- VarioProtect LASER-M laser welding helmet
- 3-colour LED machine lamp
- 1 wire feed nozzle 0.8 mm
- 1 wire feed nozzle 1.0 mm
- 1 wire feed nozzle 1.2 mm
- 1 wire feed nozzle 1.6 mm
- 5 protective glasses
- 1 nozzle AS-12
- 1 nozzle ES-12

- 1 nozzle CS-12
- 1 nozzle BS-16
- 1 nozzle FS-16
- 1x nozzle C
- 1 nozzle AS-20D
- 1 cutting nozzle
- 1 laser cleaning set
- 1 feed roller 0.8 - 1.0 mm V-groove
- 1 feed roller 1.0 - 1.2 mm V-groove
- 1 feed roller 1.2 - 1.6 mm V-groove
- 1 feed roller 1.0 - 1.2 mm U-groove
- 1 feed roller 0.8 - 1.0 mm U-groove
- 1 feed roller 1.2 - 1.6 mm U-groove

Technical data

Dimensions and weights

Length (product) approx.	960 mm
Width/depth (product) approx.	600 mm
Height (product) approx.	1000 mm
Net weight approx.	150 kg
Weight power source	150 kg
Weight wire feed case	11.5 kg
Length hose packet	10 m

Electrical Data

Supply voltage	400 V
Phase(s)	3 Ph
Current type	AC
Mains frequency	50 Hz

Basic Features

Method	Laser welding
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Setting range

Setting range for 230 V	undefined
Setting range for 400 V	5-2000 W

Device data

Operating temperature	10-40 °C
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Standards and certifications

Degree of protection	IP21S
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Wire feed

weldable wires steel	0.6-1.6 mm
weldable wires stainless steel	0.6-1.6 mm
weldable wires aluminium	1.0-1.6 mm
Wire feet unit	4 Rollers
Wire feed speed	0.25-6 m/min

Electrical connections

Mains plug	CEE 32 A
Connection cable length	10 m
Input Power	7.5 kW

Laser

Wobble from to	0-5 mm
Spectrum width from to	3-4 nm
Red guide laser power	200 µW
Max. Average power Visible radiation	0.2 mW
Max. Average power Invisible radiation	2000 W
Wavelength range Visible radiation	640±10 nm
Wavelength range Invisible radiation	1080±10 nm
Laser class Visible radiation	2
Laser class Invisible radiation	4

Manufacturer infos

Manufactu- rer	Stürmer Maschinen GmbH
Address	Dr.-Robert-Pfleger-Str. 26, 96103 Hallstadt, Germany
E-Mail	info@stuermer-maschinen.de

Input

Efficiency	30 %
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Cooling

Cooling type	Water cooled
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Weldable material thickness

weldable material thickness steel	0.8 – 8.0 mm
weldable material thickness stainless steel	0.8 – 8.0 mm
weldable material thickness aluminum	0.8 – 7.0 mm

Product information EU 2023/2854

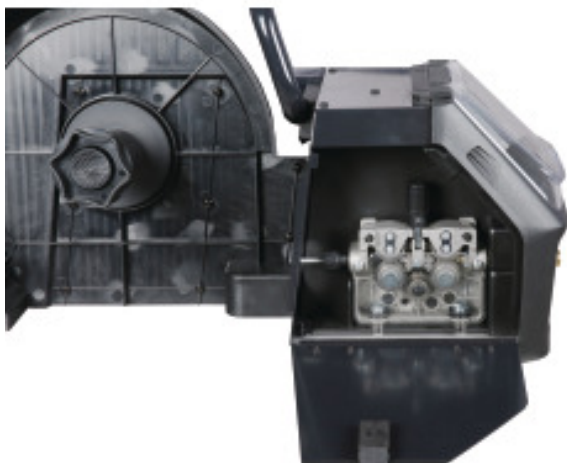
Type of the generated data	Usage data
Format of the generated data	Common, machine-readable formats such as JSON
Amount of data	Up to 5 MB
Continuous data genera- tion in real time	Yes

Media informations



Handy welding gun

- Ergonomic handle
- Easy to change lenses if necessary. These are located under the flap in the gun and can be replaced without tools.



Wire feed case

- Precise wire feeding with 4 rollers



Large color display

- Clear menu navigation
- Large display of the parameters



Shipping informations

Packaging Metrics		Weights		Delivery		Other	
Length	1.050 mm	Net	125 kg	Delivery	Carrier	DualUse	Nein
Width	620 mm	Gross	185 kg	Content	1 undefined	SCIP	
Height	1.130 mm					SVHC	Nein

Manufacturer

Stürmer Maschinen GmbH
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