



1410 LASER WELDING MACHINE

The **1410 Laser Welding Machine** is used to connect fine plastic tubing. This machine is ideal for welding of balloon catheters. This connection technology allows short, soft and flexible welding-connections without endangering the balloon by radiating heat. The result is precisely reproducible. The high-resolution camera with zoom option, makes the positioning of the products easy and accurate. The focus position can be changed during the process, allowing for tapered welds and tip forming.

The product is easily accessible and close to the operator. All movement axes are highly accurate and the machine is optimized for quick and easy maintenance. The touch screen user interface enables process data and user management.

Options

Second Camera: external camera for simplified alignment and positioning of the product using the marker bands.

Work Order Management: The optional software package "Work order management" for BW-TEC HMI is used to tag the process with work order relevant data like material number or batch number. This package ensures the traceability of the process.

OPC database connection: OPC database allows for easy communication and connection of the machine to the company database.



Product Clamp



Product Axis



Laser Nozzle

Technical Specifications

BW-TEC HMI touch screen

parameters to set: power, welding time, rotation speed, focus position, distance

data storage and network capability with integrated PC parameter management with customisable reference lines

manage authorisations and access rights

digital camera for active inspection, screenshots and film of production process

air cooled CO₂ laser

wave length 10.57 to 10.63 μm

power output 5/10 W

power stability +/-2 %

closed loop controller/stabilizer

spot diameter variable 0.2– 4.0 mm

adjustable focus distance

headstock with pneumatic collet closer for collets \varnothing 0.4–5.0 mm

linear slide with removable product fixture

travel x-axis 350 mm

dimensions (L x W x H): 1000 x 504 x 860 mm

weight: 100 kg

power: 100–230 VAC, 50/60 Hz, 700 W

air pressure: 6–10 bar (0.6–1.0 MPa)