

## Power

Lasertype	Nd: YAG	Nd: YAG	Nd: YAG	Nd: YAG
Max. mean power	120 W	160 W	200 W	300 W
Pulse peak power	6 kW	7,5 kW	9 kW	13 kW
Max. pulse energy	60 J	80 J	100 J	150 J
Pulse duration	0,4 – 20 ms	0,4 – 20 ms	0,4 – 20 ms	0,4 – 20 ms
Pulse frequency	1 – 20 Hz (100 Hz)	1 – 20 Hz (100 Hz)	1 – 20 Hz (100 Hz)	1 – 20 Hz (100 Hz)
Focus diameter	0,2 – 2,0 mm	0,2 – 2,0 mm	0,2 – 2,0 mm	0,2 – 2,0 mm
Line voltage (V/Ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50

## System equipment

### Laser system

- Laser resonator inclusive resonator mechanics
- Laser rod
- Cavity
- Resonator mirror
- Safety shutter
- Beam expansion
- Mains supply including mains fuse
- Mains isolator
- Emergency stop
- Motor circuit breaker
- Low voltage power supply 24 VDC
- Interface with hardware monitoring function
- Lamp switch
- Industry controller for setting and display of power, pulse duration, pulse repetition frequency with external trigger via footswitch
- C-bank
- Water/air Cooling system

### Processing optics

- Variable beam expansion
- Beam deflection
- Safety glass
- LCD anti-glare
- Binoculars 10x
- f ocussing lens

### Linear system

- z-axis for mounting the resonator
- Swiveling unit for resonator for the motor-controlled welding of large molds
- Operation via joystick
- Shielding gas supply direct
- Traverse range z-axis: 570 mm controlled via solenoid valve
- x-y axis for positioning the resonator
- Positioning speed 0,5– 15 mm/s
- Stable construction made of aluminum sections adjustable via step motors with powder-coated steel plate covers
- Massive steel substructure mounted on heavy duty rollers
- Traverse range: x-axis: 700 mm / y-axis: 400 mm
- LED lighting

### Dimensions and weight

Dimensions: width 950 mm x height 1550 mm x length 1250 mm

Weight: 370 kg net

