

LWD4 Features

- Compact size.
- Leica 16x stereomicroscope.
- Leica magnification zoom 10x to 40x.
- Inert gas shielding.
- Lighting by heat-reduced dichromic lamp.
- 100 working parameters presettings.
- Integrated system for exhausting smoke and fumes from the welding chamber.
- Integrated closed circuit fluid cooling system and an auxiliary chiller.
- Ergonomically designed.
- Laser power supply control by microprocessor.
- APM®(Automated Pulse Modulation) **NEW!**
- Self adjusting optics.
- Settings of the working parameters are controlled by either external membrane keyboard or by joystick located inside the chamber.
- Large graphic display.
- Adjustable rest for wrists to favor the best position when welding.

LWD4 Options

- Worldwide technical support and software upgrading via remote access internal modem.
- Multiple inert gas shielding diffuser.
- Enhanced warranty coverage: 2yrs.
- High performance chiller.
- Beam diameter: 0.1 mm - 2 mm.
- Optical viewing system by Cobra or ISIS liquid crystal display.
- Flatscreen viewing system.
- High quality bench.



Advantages of ZAHNTECH Laser Welding Workstation

- Compact, powerful, mobile and easy to operate.
- Eliminate the need for solder materials.
- Extreme accuracy for seam welding and next to heat sensitive zone welding.
- Adjustable beam diameter (infinite 0.2mm - 2.0mm); optional 0.1mm - 2.0mm.
- **APM®Technology Inside (Automated Pulse Modulation) NEW!** Necessary when bonding difficult to weld alloys such as titanium/gold, gold/platinum, gold/silver, multicolor gold, etc...
- Pickling acids are eliminated.
- No more concern about karat or color matching.
- The most power and reliable machine on the market.

SPECIFICATIONS

Electric Requirement

LWD4 Super Duty	ph, VAC, Hz, A	1, 230, 50-60, 10
LWD4 Heavy Duty	ph, VAC, Hz, A	1, 230, 50-60, 10
LWD4V	ph, VAC, Hz, A	1, 230, 50-60, 10

Laser Crystal/Wavelength

LWD4 Super Duty	Type	Nd: YAG/1064nm
LWD4 Heavy Duty	Type	Nd: YAG/1064nm
LWD4V	Type	Nd: YAG/1064nm

Absorbed Power, Average

LWD4 Super Duty	kW	1.7
LWD4 Heavy Duty	kW	1.7
LWD4V	kW	1.7

Power Supply, Average

LWD4 Super Duty	W	75
LWD4 Heavy Duty	W	65
LWD4V	W	75

Maximum Power

LWD4 Super Duty	kW	5 or 10
LWD4 Heavy Duty	kW	4 or 9
LWD4V	kW	5 or 10

Pulse Power

LWD4 Super Duty	Joule	0.5-126
LWD4 Heavy Duty	Joule	0.5-110
LWD4V	Joule	0.5-135

Pulse Duration

LWD4 Super Duty	ms	0.5-15
LWD4 Heavy Duty	ms	0.5-15
LWD4V	ms	0.5-15

Pulse Frequency

LWD4 Super Duty	Hz	0.5-10
LWD4 Heavy Duty	Hz	0.5-10
LWD4V	Hz	0.5-10

Spot Diameter

LWD4 Super Duty	mm	0.2-2 (optional 0.1 -2)
LWD4 Heavy Duty	mm	0.2-2 (optional 0.1 -2)
LWD4V	mm	0.2-2 (optional 0.1 -2)

Spot Setting

LWD4 Super Duty	Type	Motorized, 9 positions
LWD4 Heavy Duty	Type	Manual settings
LWD4V	Type	Motorized, 9 positions

Noise Level

LWD4 Super Duty	dBA	< 60
LWD4 Heavy Duty	dBA	< 60
LWD4V	dBA	< 60

Cooling System

LWD4 Super Duty	Type	Closed circuit & external chiller
LWD4 Heavy Duty	Type	Closed circuit & water to water
LWD4V	Type	Closed circuit & internal chiller

Maximum Dimension

LWD4 Super Duty	cm/in	53x116x53	21x45x21
LWD4 Heavy Duty	cm/in	53x116x53	21x45x21
LWD4V	cm/in	114x53x71	45x21x28

Weight

LWD4 Super Duty	kg/lb	90/198
LWD4 Heavy Duty	kg/lb	75/165
LWD4V	kg/lb	95/209