



## PulsePoint™ Laser Welder

with TransLogic™



Whether you have a large manufacturing facility or a single repair workshop, reliability, service and value for money are key factors when selecting equipment. The PulsePoint™ Laser Welder built, by Neutec/USA® in Albuquerque New Mexico, with quality components and materials will provide constant reliability for many years of service.

### The TransLogic™ Advantage

In developing the PulsePoint™ Laser Welder, Neutec/USA® have focussed their attention on efficiency to produce a machine that uses less energy to produce higher average power.

- TransLogic™-enhanced optics enable a higher-duty cycle output (average power) with fewer joules. For example: most 100 to 120-joule machines without TransLogic produce 35–50 watts of average power; the 100-joule PulsePoint™ with TransLogic delivers 75 watts of average power.
- TransLogic™ transfers energy from source to target with far less loss.
- Super-high TransLogic™ refractive index optics deliver more energy to the target piece.
- With TransLogic™ higher-efficiency components, the machine runs cooler with less stress so that critical-wear parts deliver a significantly longer service life and less maintenance.
- With excess energy reduced through TransLogic™ efficiency, flash lamps can deliver up to twice as many pulses as those in systems with lower efficiency.
- The stabilized light path created by TransLogic™ requires no adjustment.
- TransLogic™ ensures tight, repeatable control over lens parameters.



WELD Titanium – Silver – Gold – Platinum – Stainless Steel. Repair Stone-Set Jewellery, Antiques, Spectacle Frames, Timepieces,

Create seamless welds without the colour distortion often found in solder joints. Repair metal defects in castings

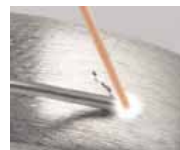
Assemble components more quickly



Repair delicate pieces and antiques



Correct surface porosity with wire filler.



Weld seams and joints.



### Advanced Ergonomics

The advanced ergonomics built into the PulsePoint™ Laser Welder minimizes physical stress to the operator and maximizes effective use of floor space.



Easy to use internal and external controls



Extra wide access ports provide for increased maneuverability and allow larger items into the welding chamber.



### Specifications:

	Model 200	Model 150
Laser Crystal:	Nd:YAG	Nd:YAG
Wavelength:	1064nm	1064nm
Input Power (both):	240volts - 10 amps	Single Phase
Output Energy in joules:	0.25 – 100	0.25 – 75
Max. Power:	5.0Kw	5.0Kw
Average Power:	75W	65W
Pulse Frequency:	0.5 – 20Hz	0.5 – 20Hz
Pulse Duration in milliseconds:	0.5 – 20	0.5 – 15
Spot Diameter:	0.2 – 1.4mm	0.3 – 2.0mm
Parameter Memory:	1 to 99	1 to 99
Dimensions (both):	510mm W x 930mm D x 1200mm H	

## Sparkle Welder

Ref: 24-311-000

Sparkle Welder is a small easy to handle precision welding machine. Temperatures are similar to heat created during laser welding. Select from 10 broad and 10 fine settings to get just the right amount of energy and impulse periods.

A temperature of approx. 3000°C is reached in just a few milli-seconds. This fast weld-up time means low heat transference so you can weld right next to a stone or pearl. By using protective gas, (an optional accessory) such as Argon, during welding, oxidation can be eliminated. This requires approx 0.4L of Argon per weld. A 10L gas bottle contains 2000L of gas, which allows approximately 5000 welds per bottle.

Precious metals and precious metal alloys, stainless steel, titanium, bronze, copper, and tin alloys can be welded. In addition to welding, it is also possible to melt ball shapes, weld loops or weld smaller joints. This lets you create stable and long lasting connections, especially in places where soldering is not possible. The Sparkle Welder can be used for retipping claws and repairing porosity holes up to 1.0mm deep.

Features include;

- As the metal is being fused by this machine no solder is used at all
  - Observation of the welding process through the magnified viewing window
  - Illumination of the workspace with built-in energy saving 9watt fluorescent light
  - Automatic weld view protection filter protects the operators eyes from spot welding flash
  - Built-in handpiece rest - supplied complete with welding table and Welding plier clamp
- This precision welding machine will be a valuable addition to almost every workshop

**No accidental welds from this machine!**

The Operator uses a foot control to enable 'spark' activation when the electrode is in position, so there are no false starts.



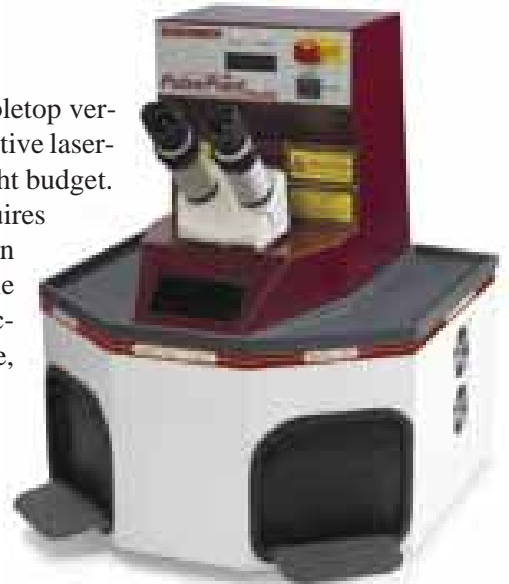
## PulsePoint<sup>TM</sup> Studio



The new PulsePoint - Studio laser welder from Neutec/USA is a small, tabletop version of the PulsePoint floor models. This small machine puts powerful, effective laser-welding on your benchtop at a price point that will fit neatly into even a tight budget. Especially ideal for shops where space is limited, the PulsePoint Studio requires little space and weighs less than 30Kg. It's easy to set up, easy to use, even easier to maintain and will deliver up to five million laser pulses on a single flashlamp. The 25-joule output of the Studio will easily handle all the production, repair, assembly and fabrication needs of smaller shops with dependable, repeatable, professional results.

Some of the benefits Neutec engineers have built in include:

- Small footprint requires only 600mm of workspace
- Affordable - start taking advantage of laser welding for an initial cost that is truly budget friendly
- Specially engineered optics enable a higher-duty cycle output (30 watts average power) from fewer joules.
- Vertical inverter power supply ensures constant voltage and eliminates spiked or erratic power delivery.
- Tight, repeatable control over lens parameters.
- High optic refractive index concentrates more energy on the target piece.
- High-efficiency components run cooler, reducing stress to critical-wear parts so they deliver a notably longer service life with little maintenance.
- The stabilized light path created by Neutec engineers requires no adjustment.
- Long-life flash lamps deliver up to twice as many pulses as those in systems with lower efficiency.



Laser crystal:	Nd:YAG
Wavelength:	1064nm
Input power:	110-230VAC, 50/60Hz, 15 amps, single-phase
Output pulse energy:	25 joules
Maximum power:	5.0kW
Average power:	30W
Pulse frequency:	0-3Hz
Pulse duration:	0.5-8.0 milliseconds
Spot diameter:	0.3-1.6mm
Dimensions in mm:	410 W x 380 D x 510 H