



**aczel**<sup>®</sup>  
... Since 1986

**Desktop Laser Spot Welders**  
Cutting-edge Welding Technologies



**Solution Simplified**

[www.aczel.com](http://www.aczel.com)



**Innovative new technologies to deliver powerful yet stable Laser shots!**

Aczet Micro Laser Spot Welder lets you accomplish extraordinary welds in difficult places. if you can see where a weld needs to be, you can reach there with an our Micro Laser Spot Welder. The new upgraded version guarantees quality laser spot yet is Energy efficient. With a laser, no electrode maintenance interrupts your work, saving time -money and improve productivity. We offers different power options to suit your budget and type of work.

Our New Laser welding is a technique that uses a focussed collimated high-intensity beam of light to melt and fuse metal parts, sometimes with extra material from a filler rod.

**Jewellery**

Design - Manufacturing - Repair



**Medical**

Dental - Surgical Tools - Devices



**Industrial Welding**

Die Mould Repair- General Mfg.

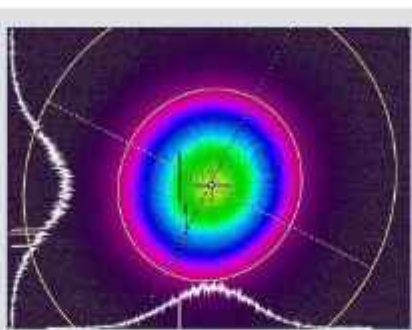


### Wide Opening



- 180-degree wide opening
  - Bigger mouth opening
  - Large Welding chamber
- Not only suites to any large size component for welding but also allows for better manoeuvrability of larger or complex work pieces.

### Innovative Smoother Spot



- Optical configuration such that it allows to have even energy spot which help better surface finishing of welds and better distribution of filler material.

### Double Cooling System



- Thanks to the double cooling system is designed to manage heat generation during the welding process efficiently. It will ensure work will never halt in any environment at any temperature.



### Precision Targeting



- Leica 10X Stereo Microscope offer advanced optics and clear and sharp images for accurate micro welding operation without strain your eyes and improve overall productivity.

### 3D Vision System - LYNX



- More improved 3d Vision stereoscopic view make it most comfortable for operator to weld difficult surface.
- Clear and strain free sample viewing help achieve higher productivity in welding as well as tire free long operating hours for operator.
- Operator can weld with his spectacles along.

### Spacious Work Chamber



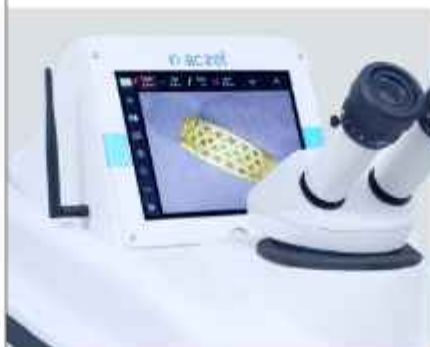
- A wide chamber with Joystick for dynamic change in laser parameter help extensive productivity.
- Bright LED lighting inside chamber makes it clear sample realisation in microscope.
- Connection for gas/argon

### Touch Screen Display



- 8" Large Colour Capacitive Touch Screen display provides an intuitive and user-friendly interface.
- Capacitive touch usually offers high sensitivity and responsiveness which in turn provide a smooth and seamless interaction experience.

### High CCD built in Camera



- Integrated CCD camera make it possible save photos /videos for welding result and process for later analysis.

### 100 Memory to Store Presets



- Possibility of saving 100 different types of welding programs with different parameters, make it easy for welder not required to remember for dynamic need of parameter depending upon type of metal.

### Silver / Reflective Welding



- Resonator made out of special material and novel cavity design ensure no problems when you weld over reflective material or silver.

### Die Cast Laser Rail



- Die cast laser rail give overall sturdiness and accuracy to laser assembly in turn yield powerful laser shot with great depth and stable right from first shot.

### 250J High Peak Power



- Large laser rod with powerful laser lamps backed with strong power electronics and capacitor bank guarantee highest peak power energy in each laser shot yet it is energy efficient.

### Wide Internal Vision



- Allowing for clear visibility of the welding process and work area.

### Integrated Arm Rests - Stout



- Integrated armrests for added comfort and usability.

### Foot Pedal



- Foot pedal offers hands-free control for operating laser machines, providing convenience and flexibility.

### Ergonomically Design



- A perfectly suited angle between the microscope and welding point allows comfortable user posture to help him to work long working hours without any tiredness
- A Well-designed workstation with joystick and Touch screen display for adjustment of laser parameters, lets operator better focus and attention to detail.

### Sanitization Safety



- Safety sanitisation of the environment thanks to dust filter which eliminates dust and odour once the process is finished.

### Multi Language



- 8 built-in languages for international operation  
- English, Italian, Dutch, Spanish, Turkish, French, Russian, Thai

## Optional Accessories

### External Water Chiller



### Internal Wrist Arm



### Motorised Table





Model	Stout 180	Stout 225	Stout 180-3D	Stout 225-3D
Laser Source	Nd: YAG			
Wavelength	1064nm			
Laser Power	90 W	100 W	90 W	100 W
Pulse Duration	0.1 - 20ms	0.1 - 25ms	0.1 - 20ms	0.1 - 25ms
Pulse Frequency	0.5 - 30 Hz			
Max Peak Power	9 kW			
Max Pulse Energy	180J	225J	180J	225J
Microscope	10x Leica Stereo Microscope		Lynx Stereo 3D Vision	
Spot Diameter	0.2 / 2mm Motorised (0.1mm optional )			
Smooth Spot Tech	Yes			
Modes (Theme)	Light, Dark			
Argon / Air Nozzle	Yes			
Cooling System	Double Cooling			
Internal Chamber Control	Joystick			
Wave Programs	Pulse Shaping 6 Preset			
Programable Memory	100			
Display	8" Colour TFT Touch Screen			
Power Supply	230V AC, 50/60 Hz (110V available on request)			
Dimensions (L x W x H)	780 x 500 x 600 mm			
Weight	52 kg	52 kg	58 kg	58 kg



Model	Forza 160	Forza 180	Forza 180-3D
Laser Source	Nd: YAG		
Wavelength	1064nm		
Laser Power	70 W	90 W	90 W
Pulse Duration	0.1 - 20ms		
Pulse Frequency	0.5 - 30 Hz		
Max Peak Power	7 kW	9 kW	9 kW
Max Pulse Energy	160J	180J	180J
Microscope	10x Aczet approved Stereo Microscope	10x Leica Stereo Microscope	Lynx Stereo 3D Vision
Spot Diameter	0.2 / 2mm (0.1mm optional)		
Smooth Spot Tech	-	Yes	
Modes (Theme)	Light		
Argon / Air Nozzle	Yes		
Cooling System	Single Cooling	Double Cooling	
Internal Chamber Control	Joystick		
Wave Programs	Pulse Shaping 6 Preset		
Programable Memory	100		
Display	8" Colour TFT Touch Screen		
Power Supply	230V AC, 50/60 Hz (110V available on request)		
Dimensions (L x W x H)	860 x 500 x 580 mm		
Weight	50 kg	50 kg	55 kg

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