

# Mold & Die Micro TIG Welder U6

The Latest Technology in Micro TIG Welding



# Exploring the U6 Benefits

Incorporating the latest technology, the U6 Mold & Die micro TIG welder offers an easy to use solution for precision mold and die repairs. Utilizing micro TIG technology, the welder produces small, consistent spot welds that penetrate the mold surface. The welded areas are strong and can withstand the pressures and working conditions during the molding process. All heat is concentrated at the spot of the weld thereby eliminating the possibility of distortion and metal stress caused by overheating. Backed by a one year manufacturer's warranty.

## Applications

- Repairing parting lines, mold seams, and three point corners and edges
- Filling in pores and deep scratches on the mold surface
- Weld into slots, corners and ribs
- Repair slides, ejectors, and core pins
- For use on all common tool steels, stainless steels, aluminum and copper

Item #8301650, 110V

## Complete Package

The system comes complete with microscope, LED Light, electrode handpiece, sets of 0.6mm, 0.8mm and 1.0mm electrodes, electrode sharpener, ground cable and an argon gas regulator.



# Discover the U6 Advantage

## Save money

- Keep mold repairs in house! Stop sending out for laser and precision welding.
- Affordable alternative to a laser welder at a fraction of the cost.
- Standby mode

## Save time

- Repair your molds the same day.
- No pre-welding heat treatment required.
- Welds quickly: 1 spot weld every 0.3 seconds!
- Small spot welds polish out quickly.

## Easy to use

- Ready to use with pre-programmed presets for most common applications. Takes the calculations and guess work out.
- Extremely accurate weld placement. Sharp electrode tip touches the exact location of weld spot.

## Mobility

- Take the U6 welder to the press for repair!
- Magnetic microscope attaches directly to mold while still in the press!

## Minimal heat

- Prevents damaged caused by overheating of mold, thus increasing life of the tool.
- All heat is concentrated only at the spot of the weld.

## Handpiece

- 20% faster and more agile
- Higher acceleration of electrode travel compared to U5
- Increased electrode lifespan when using the 1.0 mm electrode



# Comparing the U5 vs U6

## Discover what makes the U6 Different



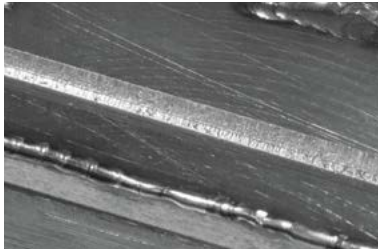
| Technical Data         | PUK U5                                | Mold & Die Welder U6                                                      |
|------------------------|---------------------------------------|---------------------------------------------------------------------------|
| Power                  | 4-630A                                | 5-1200A                                                                   |
| Welding Speed          | (Slow) 0.9-1.7 sec (Fast) 0.7-1.5 sec | (Slow) 0.78-1.750 (Medium) 0.43-1.250, (Fast) 0.3-1.9 sec                 |
| Preprogrammed settings | Steel, Aluminum and Copper            | Steel, Aluminum and Copper                                                |
| Included Electrodes    | 10 Each of 0.6mm and 0.8mm            | 10 Each of 1.0mm, 0.8mm, 0.6mm                                            |
| Impulse Length         | 0.5-34ms                              | 0.1-34ms                                                                  |
| Welding Wire Diamater  | 0.010-0.030                           | 0.005-0.030                                                               |
| Control Box            | Touch Screen                          | Turn-push controller with tilt function                                   |
| Software updates       | N/A                                   | USB Port for Software Updates                                             |
| Screen Resolution      | Low Resolution                        | Higher Screen resolution w/ improved viewing angle (800x840)              |
| Standby Mode           | N/A                                   | 80% lower energy consumption between welding jobs when using standby mode |
| Low Power Range        | No dedicated low power range          | 50% smaller welding spots                                                 |

| Accessories           | PUK U5  | Mold & Die Welder U6 |
|-----------------------|---------|----------------------|
| Handpiece SKU         | 8300938 | 8300938              |
| Ground Cable SKU      | 8300967 | 8301654              |
| Foot Pedal SKU        | 8300993 | 8300993              |
| Extension Package SKU | 8300936 | 8301660              |
| Microscope            | 8301599 | 8301599              |

# The Microscope and U6 Controller

## Pre-Programmed for Steel, Aluminum and Copper

Take the guess work out! Simply select the pre-program for your mold repair application and start welding! Each pre-program is set to the optimal weld pulse and time lapse for the specified mold repair application. Or if you prefer, manually override the pre-programmed settings to dial in your preferred setting.



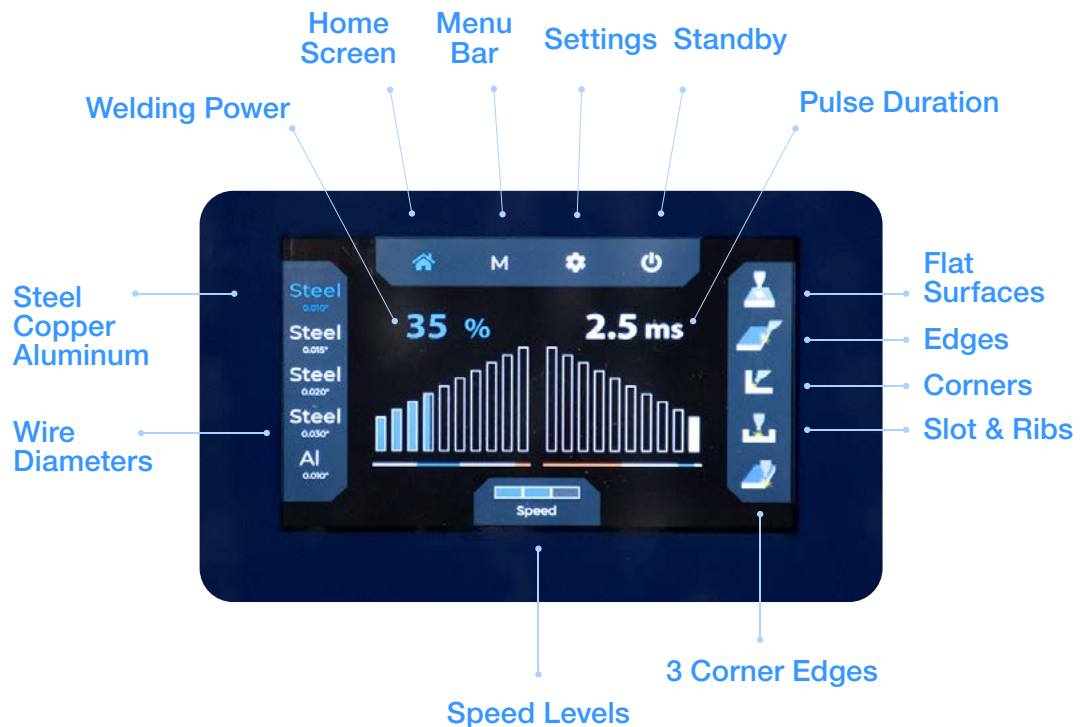
Steel



Aluminum



Copper



Weld anywhere on any type of mold large or small! The adjustable and magnetic microscope base affixes to any metal surface. The microscope arm is extremely flexible to allow for comfortable welding on almost any mold surface. Keep the microscope at your bench or take it to the mold for a quick in-press repair. The 10X microscope comes complete with integrated LED lighting for proper illumination of the welding surface. A protective eye shutter built into the microscope provides protection for eyes. Field of view 20mm.





# Replacement Parts and Accessories

## Argon Gas Regulator

8301516



The recommended setting is 2 liters per minute flow rate.

## Argon Screw Nut

8301521



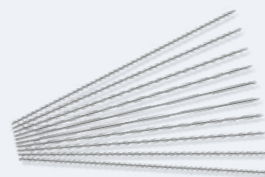
## Electrode Collets

8300931 (0.6mm Collet)  
8300933 (0.8mm Collet)  
8301503 (1.0mm Collet)



## Electrode Sets

8301499 (0.6mm electrode)  
8300934 (0.8mm electrode)  
8301651 (1.0mm electrode)



10 pre-sharpened electrodes.

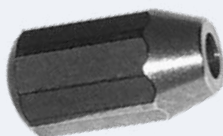
## Handpiece Cap

8301524



## Handpiece Nut

8301523



## Electrode Sharpener

8301625



## Electrode Sharpener Diamond Wheel Head

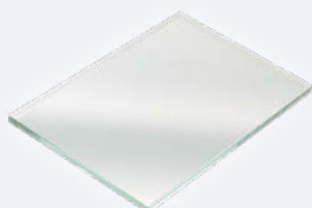
8301626



Replacement diamond wheel for Electrode Sharpener.

## Microscope Glass

8300966



## Microscope Rubber Eye Flaps

8301512



## Pin Vise, Double Ended

8204650



Wire holder capacity:  
0"-0.099"

## Wire Holder

8302500



Wire holder capacity:  
0.004"-0.025"

### Longer Electrodes Kit

8301577



#### Kit includes:

- A pair of 200mm long x 1.0 diameter electrodes (8301598)
- One 1.0mm collet (8301503)
- Three longer ceramic tip caps in sizes 30mm (8301592), 50mm (8301593), and 100mm (8301594)

### U6 Transport Case

8301649



The durable and functional Transport Case makes moving the U6 convenient. It also works well for stowing your U6 when not in use.

### U5/U6 Microscope

8301599



The 10X scope comes with internal shutter eye protection, magnetic base and LED illumination.

### Contact Clamp

8301656



8301660

## The U6 Extension Package

Extend the reach of your U6 with the U6 Extension Package! For some large molds and in-press repairs, a few extra feet of reach may be necessary. This package includes an extended handpiece, extended magnet ground, and microscope extension cables.



#### Extended Handpiece

8' (2.5m) compared to the 4' handpiece



#### Extended Magnet Cable

8' (2.5m)



#### Microscope Extension Cable

6.5' (1.98m)



*Turn To The Industry Experts*

PCS Company  
34500 Doreka Dr.  
Fraser, MI 48026

Toll Free: 800-521-0546  
Fax: 800-505-3299  
[www.pcs-company.com](http://www.pcs-company.com)