

PUK U5 POWER Micro TIG Welder

Developed for Mold and Die Repair

Incorporating the latest technology, the PUK U5 POWER 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.

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

Complete Package:

The system comes complete with microscope, LED light, electrode handpiece, sets of 0.6mm and 0.8mm electrodes, electrode sharpener, ground cables, argon gas regulator, tack resistance welder, and foot pedal.



CATALOG NO.	DESCRIPTION
8300957	PUK U5 POWER Micro TIG Welder

PUK U5 POWER Micro TIG Welder



TECHNICAL DATA: MICROSCOPE SM04

Magnification	10 x
Field of vision / diameter	20 mm
Operating distance	145 mm
Integrated-Automatic-LCD-Filter (Glare shield)	+
Degree of luminescence / obscurity	DIN 3 / DIN 11
UV Protection / IR Protection	>UV15 / > IR14
LED lighting	3 W

TECHNICAL DATA: PUK U5 POWER

Power output (TIG) min. /max.	9- 430 A
Impulse length (TIG) min./max.	0.5 - 34ms
Power output (Tack welding) min./max.	80 - 800A
Impulse length (Tack welding) min./max.	0.2 - 6 ms
Welding speed	0.8 s
Automatic gas-pre-flow time	+
Gas consumption	ca. 2 l / min
Shielding Gas	Argon > 99.9 %
Current consumption "maintaining mode"	10 W
Program memory	33 x
Catalog No.	8300944

The PUK U5 POWER 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.

Save time

- Repair your molds the same day.
- No pre-welding heat treatment required.
- Welds quickly: 1 spot weld every 0.8 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 (0.6mm) touches the exact location of weld spot.

Mobility

- Take the U5 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.

PUK U5 POWER

Pre-programmed and ready to use... 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



PUK U5 POWER Micro TIG Welder The Microscope...Maximize Mobility

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.



**Microscope can connect
directly to your mold base.**



PUK Replacement Parts

Argon Gas Regulator - 8301516

The PUK flow regulator enables the exact setting of the recommended 2 liters per minute flow rate. It's precise and easy but above all, it's reliable! The argon gas allows for clean, oxidation free welds.



Argon Screw Nut - 8301521



Electrode Collets 0.6mm Collet – 8300931, 0.8mm Collet – 8300933



Electrode Sets 0.6mm Electrodes – 8300932, 0.8mm Electrodes – 8300934

10 pre-sharpened electrodes for immediate use. The thin electrode increases precision by touching the exact spot of weld. Just prior to weld, the electrode pulls back into the hand-piece allowing for a clean and precise weld spot.



Handpiece Cap - 8301524



Electrode Sharpener - 8301625

For simple and rapid sharpening of PUK electrodes. The diamond disc rotates when the button is pressed allowing for quick and convenient electrode sharpening. The unit plugs into the back of the machine.



Electrode Sharpener Diamond Wheel - 8301531

Replacement diamond wheel for Electrode Sharpener. See video on gesswein.com for instructions.



Microscope Glass - 8300966



Microscope Rubber Eye Flaps - 8301512



PUK Extension Package - 8300939

Extend the reach of your PUK U4 with the PUK U4 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. The extended handpiece measures approx. 8' (2.5m) compared to the 4' handpiece included with the PUK U4. The extended magnet cable measures 8' in length. The microscope extension cables add on an additional 6.5' in length to the standard PUK microscope, thus totaling 12.5' in overall length.





PUK Welding Wire

- All welding rods are 18" in length

Welding wire for the PUK Micro TIG Welder. Available in a variety of alloys with different lengths and diameters.

CATALOG NO.	ALLOY	DIA. X LENGTH
8302564	420 Stainless	.015" x 18"
8302567	420 Stainless	.030" x 18"
8302604	P-20 Tool Steel	.015" x 18"
8302607	P-20 Tool Steel	.030" x 18"
8302614	H-13 Tool Steel	.015" x 18"
8302617	H-13 Tool Steel	.030" x 18"
8302654	S-7 Tool Steel	.015" x 18"
8302657	S-7 Tool Steel	.030" x 18"
8302664	Beryllium Copper	.015" x 18"
8302667	Beryllium Copper	.030" x 18"
8302764	Aluminum 7075	.015" x 18"
8302767	Aluminum 7075	.030" x 18"