

** New Micro Welding Technology *
Do It Professionally With Ease And Confidence!*

Engis Corporation is pleased to announce the new MOLD MEDIC PROMAX mold welding system.

Designed to reduce costly down time due to damaged molds or dies that require welding repair.

*The **MOLD MEDIC PROMAX** offers both resistance and TIG pulse welding. No*

need to remove the tool from the machine, send it out or deal with damage from excessive heat after welding. PROMAX generates very little heat, cool-to-the-touch homogenous welds utilizing ribbon, powder metal, yarn, porous metal and a variety of different size wires. Operation of this unique, one-of-a-kind welder is safe and easy. Requires very little training and works on 220 volts, a.c. single phase current. Operator controls allow for adjustment of current, 5-250 amps and weld pulse time of 1/1000-600/1000 seconds on TIG. Resistance current range 5-750 amps and a pulse weld time of 1-600 ms.



REPAIR:

- Parting Lines
- Pin-Gate Areas
- Slide Edges
- Pin Holes
- Ejector Holes
- Corners
- Surface Scratches
- Dents
- Vent Areas
- Tunnel-Gate Areas

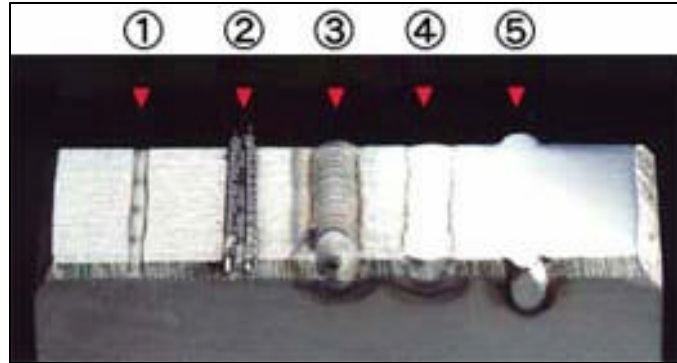
- True, homogenous weld will not flake or separate!
- Repairs or modifications can be machined and finished without post heating!
- Perform your repairs in-house & save!

Get flawless welds without sending your molds out for repair. The **MOLD MEDIC PROMAX** allows for in-house repairs. Low heat weld system makes your job easier!

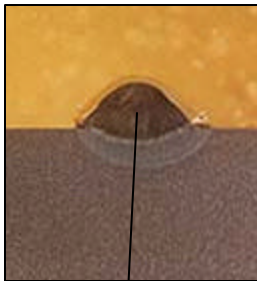
Example of the welding process

The photo to the right is an example of how the pulse TIG system works. Here you can see starting from steps 1-5, damaged area to final finishing.

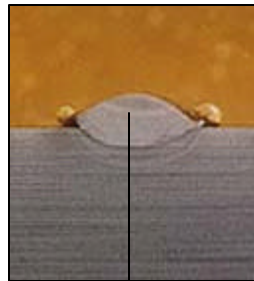
1. Grooved surface .050" wide x .040" deep.
2. Tack weld wire using resistance welding method.
3. Weld by TIG pulse weld method.
4. Rough grind finishing.
5. Final finish shows very little trace of repaired area.



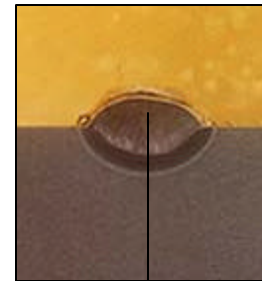
Magnified X 10 of weld .080" diameter



P-20 Material Weld



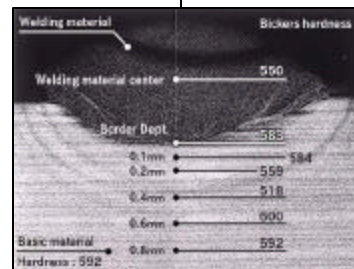
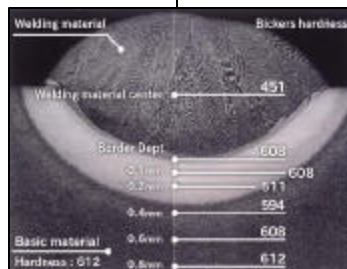
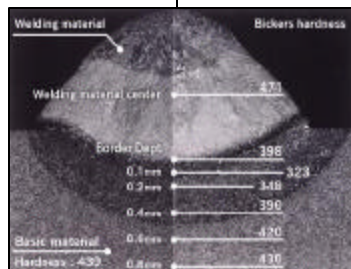
Stavax Material Weld



H-13 Material Weld

50 X Magnification

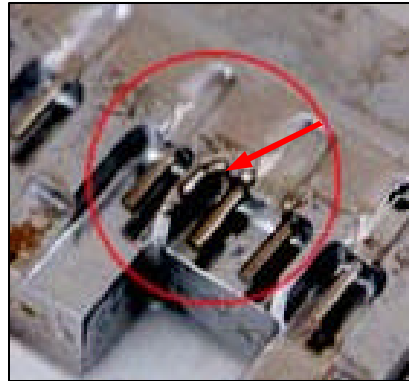
50 X Magnification



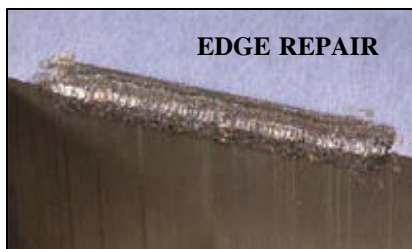
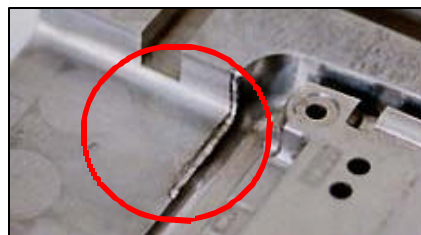
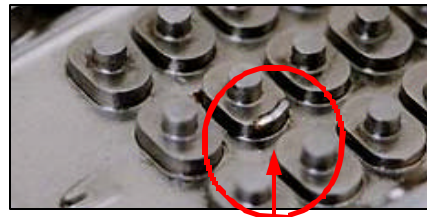
BASE MATERIAL

With a broad range of applications, the **MOLD MEDIC PROMAX** will pay for itself many times over!

Easy and precise welding is possible on all tool steels. A complete selection of welding materials is available for all mold and tool steels.



TIG Pulse Weld Examples



Resistance Weld Examples



MOLD MEDIC PROMAX

SPECIFICATIONS, STANDARD & OPTIONAL EQUIPMENT

Standard equipment for the MOLD MEDIC PROMAX:

- Tool Box (1)
- Input Cord (1)
- Output Cord for Resistance Welding (1)
- Output Cord for TIG Welding (1)
- Hand Piece for Resistance Welding (1)
- Electrode Holders for Resistance Welding (6 pcs)

- Electrodes for Resistance Welding (7 pcs)
- Electrodes for TIG Welding (3 pcs)
- Foot Switch (1)
- Argon Gas Hose (1)
- Scissors (1)

Welding Materials:

Plate Material: NAK-80 and Stavax, 0.1 \varnothing and 0.2 \varnothing x 5mm x 1m (1 ea)

SPECIFICATIONS

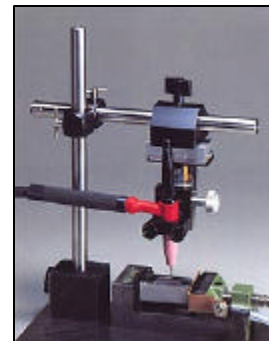
- Power required:**220 volts, 1 phase, 60 Hz.
- Input current**10.4 KVA
- Output current**250 amps (TIG) / 750 amps (resistance)
- Output range**.....5-250 amps (TIG) / 100-750 amps (resistance)
- Welding time range**..... 1-600 ms (TIG) / 1-30 ms (resistance)
- Duty cycle** 12% (TIG) / 7.5% (resistance)
- Welding tack time:**1/1000 second
- Control method:**Through inverter
- Cooling:**Automatic internal fan
- Gas required:** Argon (TIG)
- Gas pre-flow time:**.....0.3 seconds (TIG)
- Dimensions:**..... 14" H x 8" W x 16" D
- Weight**..... 52 lbs.



Microscope
**Auto-Lens
Shield**



Optional Equipment	
ITEM P/N	ITEM
W3001	Welding Torch 3m
W3002	Electrode Cable 3m
W3003	Foot Switch
W3004	Tungsten Electrode
W3005	Electrode Collet
W3006	Helmet Shield
W3007	2 Axis Torch Stand
W3008	Gas Regulator, with Flow Meter
W3010A	Microscope with Magnetic Base & Auto-Lens Shield



2-Axis Torch Stand



**Leaders in Superabrasive
Finishing Systems**

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