



**Weld Mold Company**  
*Serving the welding  
industry since 1945*

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## WELD MOLD 9580

### DESCRIPTION:

A superior alloy designed especially for the extra tough hot and cold work tooling applications. To be used as welded without subsequent heat treatment.

### APPLICATIONS:

Weld Mold 9580 has exceptional wear characteristics at high temperatures. Ideal for press dies, screw press dies, and impactor dies. It is also used effectively for cold forming applications such as automotive trim sections, forming dies and blanking dies. Machinability is limited to EDM or grinding.

### PROCEDURE:

For repairs, prepare area to be welded by removing all cracks, heat checks or other defects. Clean area of any slag, scale, rust or drawing compounds. Preheat die blocks and other units where the entire working surface is to be welded to 800° F. On other alloys preheat and post-heat according to the base metal. Maintain temperature during welding. Use the stringer bead technique. Peen the weld when forgeable to relieve stresses. After welding, cool in still air to 300° F to obtain the ultimate grain refinement and uniform hardness in the weld deposit. Post-heat at 1000° F for one hour per inch of thickness. Cool in still air to room temperature.

### SMAW

DC+

### FCAW

DC+, 100%CO<sub>2</sub>  
or 75%Ar-25%CO<sub>2</sub>

### TECHNICAL DATA:

Available Processes:	SMAW and FCAW
Hardness:	Rockwell C 56-58, as welded
Heat Treatment:	Use H-12 Procedure
Class:	Hot work tool steel

### TEMPERING DATA:

As welded:	56 – 58 Rc
At 1,075° F	55 – 57 Rc
At 1,100° F	53 – 55 Rc
At 1,125° F	49 – 51 Rc