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Postalloy® DuraForge™ 2742-FCG is a tough iron base chromium-Tungsten-moly hot-working tool steel welding alloy. It is machinable in the "as welded" condition. It has very good thermal fatigue resistance and excellent resistance to heat checking when subjected to water quenching.

Typical Applications:

Repair worn areas on ram and sow blocks. Fill in die impressions that are to be re-cut to dimension. Repair of spalled or heat-checked areas on hydraulic press and drop hammer forging dies.

Specifications

Product Type

Wire: Flux-cored, Gas-Shielded (with an easily removed slag covering)

Weld Deposit Properties

Hardness as welded: 38-43Rc

Applications

see above

Postalloy® DuraForge™ 2742-FCG Welding Parameters

Current: DC Electrode Positive

Diameter	Amps	Volts	Stick Out
1/16" (1.6mm)	300-310	30-31	3/4" (19mm)
3/32" (2.4mm)	270-450	28-32	1 1/4" (32mm)
1/8" (3.1mm)	400-800	20-40	1 1/2" (38mm)

Welding Procedure

Gas Cover Options (for all wire sizes):

75/25 Argon/CO₂, 80/20 Argon/CO₂, 90/10 Argon/CO₂, 98/2 Argon/CO₂. Slow Cooling after welding is extremely important to reduce stress build-up and minimize the risk of cracking. Therefore, using this wire requires a minimum of preheat from 600°F to 800°F (315°C to 427°C) depending on size of the part and composition of the base metal. Throughout welding operation, limit interpass temperature to 900°F (480°C). After welding, the part should be returned to the preheat furnace to allow the temperature throughout the part to equalize.

Packaging Options

Diameter	Standard Packaging
1/16" (1.6mm)	33 lb spool
3/32" (2.4mm)	55 lb coil
1/8" (3.1mm)	55 lb coil

