

Inweld 4130

Alloy 4130

AISI / SAE 4130



Description and Applications:

Inweld 4130 is a chromium-molybdenum low alloy GTAW wire. Inweld 4130 produces dense, heat-treatable deposits having high tensile strength and medium elongation. 4130 weld deposits match the hardening characteristics of the base metal. Deposits are roughly 32-36 Rockwell C as applied and can be readily machined and then heat-treated producing a hardening up to Rockwell C 42-45 using proper procedures.

Inweld 4130 is most-often used to weld low-alloy heat-treatable steels like AISI/SAE 4130 and 8630. Typical applications are for tool and die block construction and repair, construction and repair of tools, dies and molds having similar chemistries, as well as welding of oil-field piping and valve equipment, rolled high tensile plate and foundry repair of high-tensile castings. Inweld 4130 responds well to flame hardening procedures.

Chemical Composition of 4130

Fe	C	Mn	Si	P	S	Cr	Ni	Mo
Balance	0.25	1.25	0.40	0.013	0.015	0.50	1.30	0.20

Single values are maximum unless otherwise specified.

(Welded with DCSP, 100% Argon Shield Gas)

PWHT: fully annealed, welded, post weld re-heat, oil quenched at 1600°F, then:

Tempered at	1150°F	950°F
Yield point:	168,000	188,000
Tensile strength:	190,000	200,000

Available in: 0.035, 0.045, 1/16, 3/32, 1/8 X 36"

