TECHALLOY® 4130

Low Alloy Steel

KEY FEATURES

- High strength, low alloy
- Preheat and inter-pass temperature of 400°F (204.4°C) is required

TYPICAL APPLICATIONS

- Joining steels of similar chemical composition
- Overlays where moderate hardness is required

WELDING POSITIONS

All

DIAMETERS / PACKAGING

Diameter in (mm)	MIG 33 lb (15 kg) Steel Spool
0.035 (0.9)	MG4130035659
0.045 (1.1)	MG4130045659
1/16 (1.6)	MG4130062659

WIRE COMPOSITION[1]

	%C	%Mn	%Si	%Fe	%Cr	%Mo	%Ni	%V
Typical Results[3]	0.31	0.52	0.28	Balance	0.93	0.20	-	-

MECHANICAL PROPERTIES[4]

	Yield Strength[2] MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %
Typical Results[3]	900 (130)	1,000 (145)	11

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas
MIG – Spray Transfer	0.035 (0.9) 0.045 (1.1) 1/16 (1.6)	28-32 30-34 30-34	165-200 180-220 230-260	98% Ar / 2% O_2
MIG – Short Circuit Transfer	0.035 (0.9) 0.045 (1.1)	22-25 23-26	100-140 120-150	75% Ar / 2% O_2

[1]Typical deposit composition. [2]Measured with 0.2% offset. [3]See test results disclaimer. [4]Quenched from 1,550 F (843 C) in oil and tempered at 1,050 ° F (565 ° C).
Safety Data Sheets (SDS) are available on our website at www.lincolnelectric.com

Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at www.lincolnelectric.com

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

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Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

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