

MILD & LOW ALLOY STEEL WIRES

PRODUCT

USES

TYPICAL CHEMICAL
COMPOSITION
OF THE WIRE

MECHANICAL
PROPERTIES
OF ALL WELD METAL
(AS WELDED)

120S-1

AWS A5.28 ER120S-1



120S-1 is a high strength low alloy steel welding wire developed for welding of HY100 and other high strength steels. The weld deposits also give adequate low temperature toughness down to -60°F. A preheat and interpass temperature of not less than 300°F is recommended during welding.
NOTE: Mechanical properties (listed to the right) of welds are greatly influenced by the preheat interpass temperature, the heat input, and the post-weld heat treatment.

Carbon	.08
Manganese	1.55
Silicon	.48
Chromium	.35
Nickel	2.55
Molybdenum	.50
Sulfur	.006
Phosphorus	.008
Copper	.24
Iron	Balance

Tensile Strength:
124,000 PSI 860 MPA
Yield Strength:
106,500 PSI 730 MPA
Elongation: 15%
Impact Strength:
@ -60°F / -51°C
60 ft-lbs 80 Joules

4130*

AISI 4130

*This grade can also be used for submerged arc welding

4130 is a high strength, low alloy welding wire for joining steels of similar chemical composition, as well as for overlays where moderate hardness is required. This wire can be used for TIG, MIG, and submerged arc welding applications. A preheat and interpass temperature of not less than 400°F is required during welding.
NOTE: Mechanical properties (listed to the right) of welds are governed by the heat treatment undergone by the weld metal. Mechanical properties above are for weld metal oil quenched from 1550°F and tempered at 1050°F

Carbon	.31
Manganese	.52
Silicon	.28
Chromium	.93
Molybdenum	.20
Phosphorus	.015
Sulfur	.012
Copper	.21
Iron	Balance

Tensile Strength:
145,000 PSI 1000 MPA
Yield Strength:
130,000 PSI 900 MPA
Elongation: 11%

CALL FOR: Large quantities, special sizes/packaging, flag tag or special certifications

ALLOY & UNIT		SPOOLED WIRE FOR MIG OR COLD WIRE TIG DIAMETER, PART NUMBER & PRICE PER UNIT TYPE											
		.023		.030		.035		.045		1/16		3/32	
70S-2	33lb spool			70S2030-33	\$95.67	70S2035-33	\$91.05	70S2045-33	\$89.40				
70S-3	30lb spool			70S3030-30	\$49.00	70S3035-30	\$47.50	70S3045-30	\$46.00	70S3116-30	\$43.00		
	60lb coil			70S3030-60	\$98.00	70S3035-60	\$96.00	70S3045-60	\$92.00	70S3116-60	\$87.00		
70S-6	2lb spool	70S6023-2	\$8.80	70S6030-2	\$8.50	70S6035-2	\$7.65	70S6045-2	\$7.25				
	10lb spool	70S6023-10	\$27.25	70S6030-10	\$24.75	70S6035-10	\$20.50	70S6045-10	\$19.95				
	11lb spool	70S6023-11	\$29.95	70S6030-11	\$27.20	70S6035-11	\$22.50	70S6045-11	\$21.90				
	30lb spool	70S6023-30	\$68.00	70S6030-30	\$46.50	70S6035-30	\$40.95	70S6045-30	\$40.40	70S6116-30	\$40.40		
	60lb coil			70S6030-60	\$92.00	70S6035-60	\$80.84	70S6045-60	\$80.00	70S6116-60	\$80.00	70S6332-60	\$80.00
80S-B2	25lb spool					80SB035-25	\$89.95	80SB045-25	\$85.50				
80S-D2	30lb spool			80SD030-30	\$89.30	80SD035-30	\$82.70	80SD045-30	\$79.40				
90S-B3	25lb spool					90SB035-25	\$105.00	90SB045-25	\$99.50				
100S-1	30lb spool					100S035-30	\$178.00	100S045-30	\$175.00				
110S-1	30lb spool					110S035-30	\$180.00	110S045-30	\$178.00				
120S-1	30lb spool					120S035-30	\$215.50	120S045-30	\$207.00				
4130	30lb spool					4130035-30	\$187.50	4130045-30	\$180.00	4130116-30	\$178.50		

ALLOY & UNIT		TIG FILLER CUT LENGTHS 36" LONG DIAMETER, PART NUMBER & PRICE PER UNIT TYPE											
		.030		.035		.045		1/16		3/32		1/8	
70S-2	1lb pack	70S2030-1	\$9.00	70S2035-1	\$8.00	70S2045-1	\$7.50	70S2116-1	\$7.00	70S2332-1	\$7.00	70S2018-1	\$7.00
	10lb pack	70S2030-10	\$80.00	70S2035-10	\$70.00	70S2045-10	\$65.00	70S2116-10	\$45.00	70S2332-10	\$40.00	70S2018-10	\$40.00
70S-3	1lb pack							70S3116-1	\$4.95	70S3332-1	\$4.95	70S3018-1	\$4.95
	10lb pack							70S3116-10	\$35.00	70S3332-10	\$35.00	70S3018-10	\$35.00
70S-6	1lb pack			70S6035-1	\$3.95	70S6045-1	\$3.75	70S6116-1	\$3.50	70S6332-1	\$3.25	70S6018-1	\$3.25
	10lb pack			70S6035-10T	\$35.50	70S6045-10T	\$33.00	70S6116-10	\$29.90	70S6332-10	\$29.90	70S6018-10	\$29.90
80S-B2	1lb pack			80SB035-1	\$9.50	80SB045-1	\$11.50	80SB116-1	\$10.50	80SB332-1	\$9.50	80SB018-1	\$9.50
	10lb pack			80SB035-10	\$90.00	80SB045-10	\$80.00	80SB116-10	\$70.00	80SB332-10	\$60.00	80SB018-10	\$60.00
80S-D2	1lb pack					80SD045-1	\$5.90	80SD116-1	\$5.50	80SD332-1	\$5.25	80SD018-1	\$5.25
	10lb pack					80SD045-10	\$45.00	80SD116-10	\$40.00	80SD332-10	\$38.50	80SD018-10	\$38.50
90S-B3	1lb pack			90SB035-1	\$12.50	90SB045-1	\$11.50	90SB116-1	\$10.50	90SB332-1	\$9.50	90SB018-1	\$9.50
	10lb pack			90SB035-10	\$90.00	90SB045-10	\$80.00	90SB116-10	\$70.00	90SB332-10	\$60.00	90SB018-10	\$60.00
100S-1	10lb pack							100S116-10	\$85.00	100S332-10	\$80.00	100S018-10	\$70.00
110S-1	10lb pack							110S116-10	\$85.00	110S332-10	\$80.00	110S018-10	\$70.00
120S-1	10lb pack							120S116-10	\$85.00	120S332-10	\$80.00	120S018-10	\$70.00
4130	1lb pack							4130116-1	\$10.75	4130332-1	\$10.25	4130018-1	\$9.50
	10lb pack							4130116-10	\$85.00	4130332-10	\$80.00	4130018-10	\$70.00