

KOBELCO

FAMILIARC™

MG-51T

70ksi Grade MIG solid wire



Code Data

AWS A5.18 ER70S-6

Outstanding Features

- Excellent wire feeding provides trouble-free welding for handy welding as well as robotic welding.
- Uniform cast and helix help maintaining constant angle of wire.
- High quality copper plated through advanced process ensures long shell life, electrical conductivity and less accumulation in conduit.
- Kink-less in using drums helps to weld efficiently without unexpected trouble.

Typical chemistry of weld metal (100%CO₂)

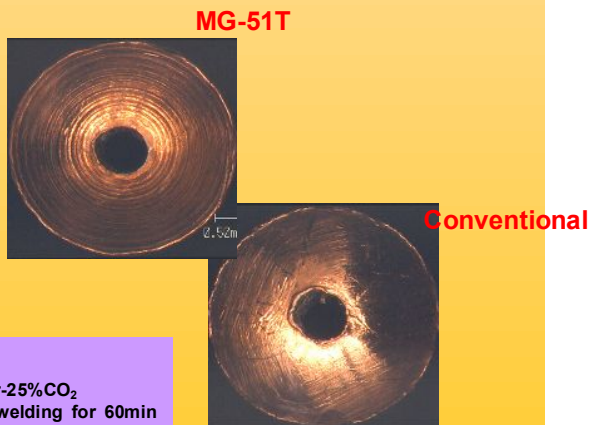
C	Si	Mn	P	S	Cu
0.11	0.53	1.15	0.011	0.012	0.14

Typical mechanical property of weld metal (100%CO₂)

0.2%P.S (psi)	T.S (psi)	Elongation (%)	Impact value (ft-lbs)	
			-20 °F	32 °F
68,600	81,800	32	50	106

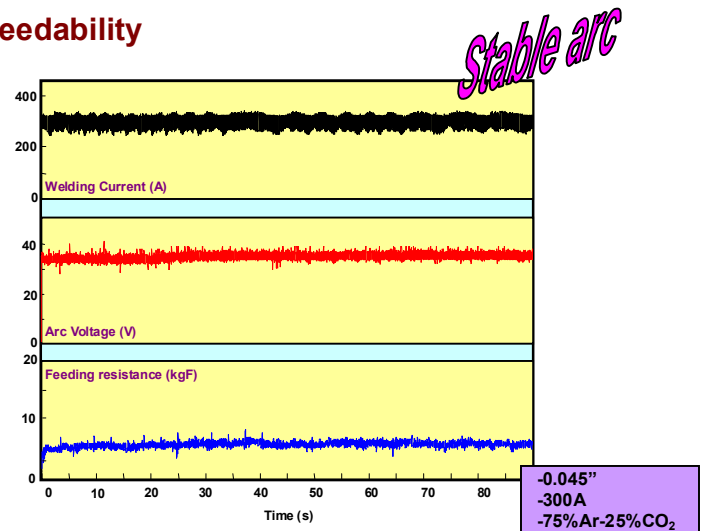
Welding parameter: 270A-33V (0.045")

Extension of tip life



-0.045"
-300A
-75%Ar-25%CO₂
-After welding for 60min
consecutively

Feedability



Recommended welding procedure ranges and deposition rates

Wire Size (in)	Wire extension (in)	Cup size (in)	Gas flow rate (CFH)
0.035	3/8 - 5/8	5/8	40 - 50
0.045	5/8 - 3/4	5/8	40 - 50

* Gas flow is measured at gas cup with wire in position.

** When utilizing amperage above 300A, use 3/4" or larger cup size.

Wire Size (in)	Wire Feed (in/min)	Current (A)	Arc Voltage (V)	Deposition rate (lbs/hr)	Deposition Efficiency (%)
0.035	75	60	16-17	1.2	95 - 96
	110	80	17-18	1.8	
	150	100	18-19	2.4	
	190	120	19-20	3.0	
	235	140	20-21	3.8	
0.045	105	100	19-21	3.0	94 - 95
	125	120	20-21	3.5	
	155	140	21-22	4.4	
	190	160	22-23	5.4	
	225	180	23-24	6.0	
	260	200	24-25	6.5	
	300	220	26-27	7.3	
	335	240	28-29	8.5	
	370	260	30-31	9.5	
	415	280	31-32	10.8	
	455	300	32-33	11.9	

* DC-Electrode positive

** Voltage shown is for 100% CO₂ shielding gas. For mixed gas, use two volts less than shown.

*** Table shown are approximate values that will vary with welding conditions.

**** Shaded area represents optimum welding condition.