

GMAW

# MG-S50

**FAMILIARC™**

**Solid wire**

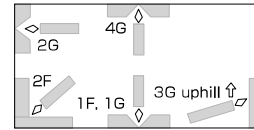
**Features:**      ■ Suitable for butt and fillet welding in all positions

**Welding Positions:**

**Classification:** AWS A5.18 ER70S-G

**Shielding gas:** Ar-5~20%CO<sub>2</sub>, Ar-2~5%O<sub>2</sub>

**Polarity:**        DCEP



**Packaging data**

φ mm	Spool		Drum		
	kg	kg	kg	kg	kg
0.8	10kg	-	-	-	-
0.9	10kg	20kg	-	-	-
1.0	10kg	20kg	100kg	-	-
1.2	10kg	20kg	-	250kg	-
1.4	-	20kg	-	-	-
1.6	10kg	20kg	-	-	400kg
<b>Volume mm</b>	240W, 110H, 240L	300W, 110H, 300L	530 φ, 820H		680 φ, 770H

**Composition (wire mass%)**

	Typical (Ar-20%CO <sub>2</sub> )	Guaranty <sup>a</sup>
<b>C</b>	0.10	0.02~0.15
<b>Si</b>	0.75	0.40~1.00
<b>Mn</b>	1.38	0.90~1.60
<b>P</b>	0.011	0.030
<b>S</b>	0.012	0.030
<b>Cu</b>	0.24	0.50

Note: <sup>a</sup> Single values are maximum.

**Welding parameters (A)**

φ mm	1F, 1G, 2F	2G	3G uphill	4G
0.8	50~180	50~180	50~140	50~120
0.9	50~200	50~180	50~140	50~120
1.0	50~220	50~200	50~140	50~120
1.2	80~300	80~300	50~160	50~140
1.4	150~400	150~350	-	-
1.6	200~450	200~400	-	-

**All-weld mechanical properties**

	Typical		Typical		Guaranty
	MPa	MPa	MPa	MPa	
<b>0.2%YS (MPa)</b>	450	370	490	400	400min.
<b>TS (MPa)</b>	570	520	590	540	483min.
<b>El on 4d (%)</b>	28	32	33	33	22min.
<b>IV -29°C (J)</b>	180	190	180	200	27min.
<b>PWHT (°C/h)</b>	AW	620x1	AW	620x1	AW
<b>SG</b>	Ar-20%CO <sub>2</sub>		Ar-2%O <sub>2</sub>		Ar-20%CO <sub>2</sub> & Ar-2%O <sub>2</sub>

**Approvals**

<b>ABS</b>	3YSA
<b>LR</b>	3YS
<b>DNV-GL</b>	III YMS