

FOR HIGH TENSILE
STRENGTH STEEL

AWS ER70S-G
JIS YGW18
KS YGW18

ZO-55

Typical applications

Butt and fillet welding of mild steel & 540N/mm² class high tensile strength steel. Construction Equipment, Bridges and Building

Characteristics on Usage

- ① Excellent Mechanical Properties are obtained under High heat Input (40kj/cm) and interpass temp. (350°C) for 490N/mm² class steel welding
- ② Increasing Productivity due to higher Heat Input and Interpass Temperature.
- ③ It is suitable to use shielding gas of 20 to 25ℓ /min.
- ④ Distance between a base plate and contact tip must be kept at around 6 ~15mm with current less than 250A, and around 15 ~ 25mm with current over than 250A.
- ⑤ Wind screen must be set at the welding in the place with strong wind

Typical chemical composition of wire (%)

C	Si	Mn	Ti
0.07	0.92	1.92	0.18

Typical mechanical properties of all-weld-metal

Shielding: Gas	Y · P	T · S	EI	IV	Welding Condition
	Nmm ² {kgf/mm ² }	Nmm ² {kgf/mm ² }	(%)	J {kgf · m} (0°C)	
CO ₂	580 {59}	640 {65}	27	170 {17}	18KJ/cm, 150°C
	470 {48}	560 {57}	29	120 {12}	40KJ/cm, 350°C

Sizes available and recommended currents (DC wire⊕)

Dia.	(mm)	1.2	1.4	1.6
Amp.	F	100~350	140~400	200~550
	V&OH	50~180	100~250	120~300

Package

Dia.	(mm)	0.8	0.9	1.0	1.2	1.4	1.6	
Spool	(kg)	5, 15, 20						
Pailpack	(S)	200, 250		250, 300,		-		
Pailpack	(B)	-		350,400,450				

Approved by