

ZO-60

AWS ER80S-G
JIS YGW21
KS YGW21

FOR HIGH TENSILE
STRENGTH STEEL

Typical applications

Construction machineries, bridges and storage tank.

Butt and H-fillet welding of 590N/mm² class high tensile strength steel.

Characteristics on Usage

- ① Arc is very stable, spatter is less and weldability is excellent even in high welding current range.
- ② High working efficiency is obtained by automatic and semi-automatic welding due to high deposition rate and deep penetration.
- ③ Preheat at 50~150°C is required when a plate is thick and crack susceptibility is high.

Typical chemical composition of wire (%)

C	Si	Mn	Mo	Ti
0.07	0.84	1.95	0.31	0.17

Typical mechanical properties of all-weld-metal

Shielding Gas	Y · P	T · S	EI	Charpy V-notch J {kgf · m} (-18°C)
	N/mm ² {kgf/mm ² }	N/mm ² {kgf/mm ² }	(%)	
CO ₂	550 {56}	640 {65}	27	110 {11}
Ar+20%CO ₂	580 {59}	660 {67}	28	140 {14}

Sizes available and recommended currents (DC wire⊕)

Dia.	(mm)	1.2	1.4	1.6
Amp.	F	120~350	150~400	200~500
	V&OH	80~180	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

NK, JIS