

For Mild Steel and 490 N/mm<sup>2</sup> High Tensile Strength Steel

### Classification

AWS A 5.18 : ER 70S-6 JIS Z 3312 : YGW12

## **Applications**

Welding of mild steels and 490 N/mm<sup>2</sup> high tensile strength steels for automobiles, rolling stocks, electric appliances, machinery, air conditioners, light gauge steels, pipes, steel frames, bridges and ships.

#### **Characteristics**

YAWATA YM-70S is a gas metal arc welding wire to be used with  $CO_2$  or  $Ar+10\sim50\%$   $CO_2$  shield gas and assures stable arc, less spatter, smooth feeding, good electrical contact and low tip wear. Arc transfer characteristics are excellent with Argon based gas mixtures, particularly in spray and pulsed modes of transfer. It is ideal for positional, single pass welding of sheet steel and steel pipes.

# **Typical Chemical Composition of Deposited Metal (%)**

С	Si	Mn	P	S
0.10	0.88	1.45	0.012	0.014

## **Typical Mechanical Properties of Deposited Metal**

Shield Gas	Tensile Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Yield Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	_	Charpy 2V-notch at -20°C, J (kgf.m)
$CO_2$	560 (57)	460 (47)	28	80 (8.2)
Ar+20% CO <sub>2</sub>	580 (59)	480 (49)	26	70 (7.1)

## Sizes & Recommended Current Range (DC +)

Diameter (mm)	0.8	0.9	1.0	1.2	1.6
Welding Position	Current (A)				
All	60~180	60~200	100~290	120~350	160~390

### **Packing**

Diameter/ Length (mm)	0.8	0.9	1.0	1.2	1.6
Weight per spool (kg)			15		