

# ZH-100

For 690MPa tensile strength steel

## Classifications

EN ISO 16834-B:2007	: G 69A 2 U M N3M2
AWS A5.28-05	: ER100S-1
JIS Z 3312	: G 69 A 2 M N3M2

## Approvals – M21 (Mix Gas)

Other	: CWB, TUV
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## Description

- For butt and fillet welding of machinery, heavy equipment and pressure vessels
- Stable weldability on high welding current
- Beautiful weld appearance due to low spatter with mixture gas

## Welding positions



## Polarity & shielding gas

- DCEP (DC+)
- Mix: Ar+2% O<sub>2</sub> (15 – 25 l/min)
- Mix: Ar+20% CO<sub>2</sub> (15 – 25 l/min)

## Typical chemical composition of wire (%)

C	Si	Mn	P	S	Ni	Mo
0.05	0.26	1.54	0.008	0.006	2.00	0.35

## Typical mechanical properties of all-weld metal

	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Impact Value (J) - 20°C	Remarks
AWS A5.28	Min. 610	Min. 690	Min. 16	≥ 68 (@-50°C)	Ar+2% O <sub>2</sub>
EN ISO 16834-B	Min. 600	690-890	Min. 14	≥ 47	Mix
Example	700	760	20	70	Mix
Example	720	780	21	130 (@-50°C)	Ar+2% O <sub>2</sub>

## Operating data

Diameter (mm)		1.2	1.4
Current (Amp)	Flat (PA/1G)	120-350	150-400
	Vertical (PF/3G)	80-180	100-250
	Overhead (PE/4G)	80-180	100-250