

FCW for High Tensile & High Yield Strength Steels

GMX101-K3

AWS A5.29M E691T1-K3C / A5.29 E101T1-K3C
JIS Z 3313 T692T1-1CA-N3M2

Product Features:

- Flux cored arc welding wire for low alloy high yield and high tensile strength steel for all positions.
- All deposited weld metal contains 2.0% Ni-0.5% Mo elements, good for welding of low alloy high yield and high tensile strength steel.
- Good for RT examination, good crack resistance.

Applications:

- Suitable for welding of HY-80 or similar grade steels.

Typical chemical composition of all-weld metal (wt%)

C	Si	Mn	Ni	Mo	Fe
0.04	0.40	1.40	1.96	0.53	Bal.

Typical mechanical properties of all weld metal

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation %	Impact value (-20°C) J
780	808	16	48

Size (mm) & recommended welding parameters

Diameter		1.2	1.6
Polarity		DC+	DC+
Ampere (A)	Flat, horizontal position	180~300	200~350
	Vertical / overhead position	160~220	----
Shielding Gas		CO ₂	CO ₂

Note:

- Proper cleaning and 150°C preheat on base metal before welding.
- Keep proper welding current and inter pass temperature to control the heat input (the higher the heat input, the poor the impact toughness).