MAG SOLID WIRE

# STEEL (G3SI1)

## NON-ALLOY STEELS

INVEST IN THE FUTURE

**This solid, copper-coated wire is for gas welding non- and low-alloy carbonated steel. It has many useful applications in metal construction due to its excellent mechanical properties.**

## Classification

**AWS 5.18 : ER 70S-6**
**EN ISO 14341-A : G46 4 M21 3Si1 / G 42 3 C1 3Si1**
**DIN 8559 : SG2**

## Applications

- Automotive production
- Railway construction
- Shipbuilding
- Construction
- Tanks and boilers

## Benefits

- Excellent ignition properties
- Great arc stability on high currents
- A good, corrosion-resistant wire
- Enables welding in all positions

## Polarity

**DC +**

## Chemical properties

| C % | Mn % | Si % | S % | P % | Cu % |
|---|---|---|---|---|---|
| 0.07 | 1.40 | 0.80 | 0.012 | 0.012 | 0.10 |

## Mechanical properties

| Re | Rm | A 5 d | KV 20°C | KV -20°C | KV -40°C |
|---|---|---|---|---|---|
| 470 Mpa | 560 Mpa | 26% | 150 J | 90 J | 50 J |

## Recommendations

| Wire Ø (mm) | 0.8 | 1.0 | 1.2 |
|---|---|---|---|
| thickness (mm) | < 5 | 6 ▶ 8 | 8 ▶ 12 |
| voltage (V) | 16 ▶ 28 | 17 ▶ 32 | 18 ▶ 34 |
| current (A) | 60 ▶ 200 | 80 ▶ 260 | 100 ▶ 360 |

*Gas protection in compliance with EN ISO 14175*
*100% CO2 (C1) or Argon / CO2 (M21, 8 < 20% CO2)*

## Packaging

| Wire reel type | | | Wire diameter (mm) | | | |
|---|---|---|---|---|---|---|
| weight (kg) | | | Ø 0.6 | Ø 0.8 | Ø 1.0 | Ø 1.2 |
| 0.9 | S100 | — | 086593 | 086609 | — | — |
| 5 | S200 | — | 086111 | 086128 | 086135 | — |
| 15 | S270 | — | — | 086227 | 086234 | 086241 |
| | S300 | — | 086166 | — | — | — |
| 18 | — | B300 | — | 086272 | 086289 | 086296 |