

STELLOY Ni520-G

CLASSIFICATION

EN 14700: TNi4

DIN 8555¹: MSG 23-GF-200-CTZ

¹ Former classification replaced by EN 14700

DESCRIPTION

- Nickel-based super-alloy flux-cored wire
- Weld metal is a precipitation hardened alloy designed to withstand impact, compression, oxidation, corrosion and heat up to 950°C
- Excellent thermal shock resistance
- Can be machined without previous heat treatment

APPLICATIONS

STELLOY Ni 520-G is designed in general to surface all parts undergoing mechanical stress combined with corrosion, thermal shocks and/or high temperatures

Examples

- High-speed forging hammers, hot drawing dies, etc.

TYPICAL ALL-WELD METAL ANALYSIS

| C | Mn | Si | Cr | Fe | Mo | Co | W | Ti | Al | Ni |
|------|------|------|-------|------|------|-------|------|------|------|------|
| 0.04 | 0.10 | 0.70 | 14.00 | 2.00 | 6.00 | 12.00 | 1.20 | 3.50 | 2.00 | Bal. |

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness:

As welded: 190 HB

SHIELDING GAS

EN ISO 14175: I1 Ar

M12 Ar + 0.5% <CO₂ 2.5 with or without helium

OPERATING CONDITIONS

| Diameter [mm] | Amperage [A] | | Voltage [V] | | Stick-out [mm] | |
|---------------|--------------|---------|-------------|---------|----------------|---------|
| | Range | Optimum | Range | Optimum | Range | Optimum |
| 1.6 | 140 - 300 | 250 | 22 - 28 | 28 | 15 - 25 | 20 |

| Diameter [mm] | Amperage [A] | Voltage [V] | Stick-out [mm] |
|---------------|--------------|-------------|----------------|
| 2.4 | 280 - 350 | 300 | 26 - 30 |
| | | 28 | 15 - 25 |
| | | | 20 |

Recovery: 98 %

WELDING POSITIONS

Flat, half up, half down

STANDARD DIAMETERS (mm)

1.6, 2.4 mm

Other diameters: please consult us

PACKAGING

| Diameter | < 2.4 mm | > 2.4 mm |
|---------------------------------|----------------|-------------------------|
| Standard packaging [EN ISO 544] | Spool : BS 300 | Metal basket rim: B 450 |
| Weight | 15 kg | 25 kg |
| | | Up to 330 kg |