

## MT-312

## 1.4337

**MIG/TIG welding wire of ferritic-austenitic chrome-nickel steel suitable for joint-welding dissimilar steels and for resurfacing non-scaling up to +1000°C.**

### Standard designation

|                  |          |
|------------------|----------|
| Material No.     | 1.4337   |
| AWS/ASME SFA-5.9 | ER 312   |
| EN ISO 14343-A   | G/W 29 9 |

### Main base metals

Non-corrosive similar steels and cast-steels, e.g. 1.4762 (X 10 CrAl 24), 1.4085 (G-X70 Cr 29); difficult weldable steel, e.g. highly solid construction steel, high manganese steel and joint with to high-alloy steels; repair welding and wear resistant hardfacing.

### Mechanical properties of all – weld – metal

(typical values)

| Gas shield                                    | Thermal treatment | [°C]  | M 11 untreated +20° |
|---|-------------------|-------|---------------------|
| Test temperature                              |                   |       |                     |
| 0,2%-yield strength R <sub>p0,2</sub>         |                   | MPa   | 560                 |
| Tensile strength R <sub>m</sub>               |                   | MPa   | 740                 |
| Elongation A <sub>5</sub>                     |                   | [%]   | 25                  |
| Lin. Thermal expansion Coefficient (20-400°C) |                   | [1/K] | 15x10 <sup>-6</sup> |

### Average chemical composition of all-weld-metal (%)

| C    | Si  | Mn      | Cr        | Ni       |
|------|-----|---------|-----------|----------|
| 0,12 | 0,4 | 1,0-2,5 | 28,0-32,0 | 8,0-12,0 |

### Structure

ferritic-austenitic

### Gas types applicable TIG

I1

### Gas types applicable MIG

M 11

### TIG rod diameters, unit weights

| Diameter [mm] | Length [mm] | Kg per box [kg] |
|---------------|-------------|-----------------|
| 1,00          | 1000        | 10,0            |
| 1,60          | 1000        | 10,0            |
| 2,00          | 1000        | 10,0            |
| 2,40          | 1000        | 10,0            |
| 3,20          | 1000        | 10,0            |
| 4,00          | 1000        | 10,0            |
| 5,00          | 1000        | 10,0            |

### MIG welding wire:

Diameter                      0,8mm                      1,0mm                      1,2mm                      1,6mm

### Welding positions MIG acc.to EN ISO 6947

PA, PB, PF, PC, PG

### Welding positions TIG acc.to EN ISO 6947

PA, PB, PC, PF

### Current/Polarity TIG

= -

### Current/Polarity MIG

= +