

## FN55

### Comparable specifications

**ASME SFA A 5.15:** ENiFe-CI  
**EN ISO 1071:** SC NiFe-1  
**Werkstoff Nr.:** ~ 2.4472

### Description and applications\*

\* *Illustrative, not-exhaustive list*

Ferro-nickel solid wire for welding of cast iron and joining cast iron with steel.  
The weld metal is characterized by high corrosion and heat resistance.

This grade may be mainly used for:

- repair welds on, as well as joining, work pieces of cast iron, including nodular iron;
- welding work pieces of cast iron to steel and some nonferrous base metals;
- welding stainless steels containing about 12% of chromium, as well as mild and low alloy steels which are exposed to temperatures up to 450°C;
- applications such as rebuilding shafts, wheels, critical joints between steel and cast iron, etc.

Recommended for welding high sulphur, phosphorous or lubricant-contaminated castings.

### Weldable base materials\*

\* *Illustrative, not-exhaustive list*

Grey cast iron, malleable, nodular.

### All-weld metal mech. properties\*

\* *For reference only values*

**Tensile strength (Rm):** 400 - 579 N/mm<sup>2</sup>

### Chemical composition\*

\* *For reference only values*

| C    | Mn   | Si   | P    | S    | Fe   | Ni    | Cu   | Al   |
|------|------|------|------|------|------|-------|------|------|
| max  | max  | max  | max  | max  | rem. | 54.00 | max  | max  |
| 2.00 | 0.80 | 0.20 | 0.03 | 0.03 |      | 56.00 | 2.50 | 1.00 |

### Standard packaging data\*

| Welding process | Product type             | Ø<br>mm (inches)            | Packing type            | Weight<br>kg (lbs)      | Length<br>mm (inches) |
|-----------------|--------------------------|-----------------------------|-------------------------|-------------------------|-----------------------|
| GMAW **         | filler wire              | 0.80 - 1.20 (0.030 - 0.047) | spools BS300 / D300     | 15 (33)                 | n.a.                  |
| GTAW **         | filler rod               | 1.60 - 4.00 (1/16 - 5/32)   | cardboard boxes / tubes | 5 (11)                  | 1000 (39.4)           |
| SMAW **         | core wire for electrodes | 1.60 - 5.00 (1/16 - 0.197)  | wooden boxes            | 500 - 750 (1100 - 1650) | 250 - 450 (10 - 18)   |

\* *Other sizes and packing types are available upon request*

\*\* *GMAW: gas metal arc welding; GTAW: gas tungsten arc welding; SMAW: shielded metal arc welding*

### Marking

Each filler rod for GTAW welding is durably marked with an identification traceable to the unique product type. Welding filler materials wound on spools or in coils are durably marked on the coil or spool with an identification traceable to the unique product type.

The outside of each unit package is suitably labelled with at minimum the following data: grade, diameter, heat, lot no., classifications.

Customized labels are available upon request.

### Lot classification

All our productions fulfil the **Class S3** requirements acc. to EN ISO 14344.