

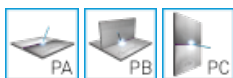
# CEWELD S3Si

|                |                                                                                                                                                                                                                                                                                    |                              |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| TYPE           | Solid drawn copper coated wire for the SAW process                                                                                                                                                                                                                                 |                              |
| APPLICATIONS   | Pipe work; offshore, pressure vessels, bridge, crane building, apparatus, and steam turbine construction.                                                                                                                                                                          |                              |
| PROPERTIES     | Excellent mechanical strength and welding properties due to a increased manganese and silicon content. S3Si is best to be used with FL 155 high basic agglomerated flux to obtain neutral action on metallurgical chemistry and excellent subzero impact properties down to -60°C. |                              |
| CLASSIFICATION | AWS                                                                                                                                                                                                                                                                                | A 5.17: EH12K, A 5.23: EH12K |
|                | EN ISO                                                                                                                                                                                                                                                                             | 14171-A: S3Si                |
|                | W.Nr.                                                                                                                                                                                                                                                                              | 1.0496                       |
|                | F-nr                                                                                                                                                                                                                                                                               | 6                            |
|                | FM                                                                                                                                                                                                                                                                                 | 1                            |

|              |                   |                            |                    |               |
|--------------|-------------------|----------------------------|--------------------|---------------|
| SUITABLE FOR | <b>Materials</b>  | <b>DIN</b>                 | <b>EN</b>          | <b>ASTM</b>   |
|              | shipbuilding      | A, B, D, E, AH 32 - EH 36  | same               | Typical       |
|              | Unalloyed steels  | St 33, St 37-2 - St 52-3   | S185 - S355        | A 258 / A 516 |
|              | boiler steels     | H I, H III, 17Mn4, 19Mn5   | P235GH, P355GH     | A 662 / A 387 |
|              | pipe steels       | St 35.8, St 45.8           | P235T1/T2, P460NL2 | A 738 / A 612 |
|              | -                 | StE 210.7 TM, StE 445.7 TM | L210 - L445MB      | A 299         |
|              | Fine grain steels | StE 255 to StE 460         | S235 - S460QL1     | -             |
|              | API-standard      | X 42, X65, X 70            | X 42, X65, X 70    | -             |

APPROVALS DNV, Lloyds

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

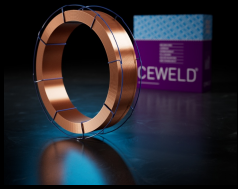
| C   | Si   | Mn   | P     | S     |
|-----|------|------|-------|-------|
| 0.1 | 0.35 | 1.75 | 0.015 | 0.015 |

MECHANICAL PROPERTIES

| Heat Treatment | R <sub>p0.2</sub> (MPa) | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |       |       | Hardness |
|----------------|-------------------------|----------------------|--------------------|-------------------------|-------|-------|----------|
|                |                         |                      |                    | RT                      | -40°C | -60°C |          |
| As Welded      | 485                     | 580                  | 27                 | 120                     | 100   | 60    | HRc      |

REDRYING Not required

GAS ACC. EN ISO 14175



# CEWELD S3Si

## S3Si 2,4MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Drum      | 300     | 8720663404510 |
| K-415     | 25      | 8720663404503 |

## S3Si 3,2MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| K-415     | 27      | 8720663404527 |

## S3Si 4,0MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| K-415     | 25      | 8720663404534 |