

## 2.4951

## ALLOY 75

Brand name | Nicrofer® 7520

Trade name | Alloy 75

| Material No. | EN Designation | UNS    | Alloy |
|--------------|----------------|--------|-------|
| 2.4951       | NiCr20Ti□      | N06075 | 75    |

Description | Alloy 75 / 2.4951 is a nickel-chromium-iron alloy with titanium.

Special properties | Excellent resistance to oxidizing atmospheres at temperatures up to 1100°C. Good mechanical properties at temperatures up to 1000°C.

| C<br>%    | Si<br>≤ % | Mn<br>≤ % | P<br>≤ % | S<br>≤ % |
|-----------|-----------|-----------|----------|----------|
| 0.08-0.15 | 1.00      | 1.00      | 0.02     | 0.015    |
| Cr<br>%   | Ni<br>%   | Ti<br>≤ % | Cu<br>%  | Al<br>%  |
| 18.0-21.0 | Rest      | 0.20-0.60 | ≤ 0.50   | ≤ 0.30   |
| Co<br>%   | B<br>%    | Fe<br>%   |          |          |
| ≤ 5.00    | ≤ 0.006   | ≤ 5.00    |          |          |

| 0.2% Yield strength R <sub>p</sub><br>≥ N/mm <sup>2</sup> | Tensile strength R <sub>m</sub><br>N/mm <sup>2</sup> | Elongation A <sub>5</sub><br>≥ % | Resistant on air up to<br>°C | Modulus of elasticity<br>kN/mm <sup>2</sup> |
|-----------------------------------------------------------|------------------------------------------------------|----------------------------------|------------------------------|---------------------------------------------|
| 235                                                       | ≥ 640                                                | 26                               | 1200                         | 221                                         |

| Density<br>g/cm <sup>3</sup> | Specific heat capacity<br>J/kg K | Thermal conductivity<br>W/m K | Electrical resistivity<br>Ω mm <sup>2</sup> /m |
|------------------------------|----------------------------------|-------------------------------|------------------------------------------------|
| 8.2                          | 420                              | 13                            | 1.09                                           |

Suitable welding filler materials | 2.4648

Application | Steam and combustion turbine

| Sheets/Plates                                                                       | Bars                                                                                | Wire                                                                                | Tubes/Pipes                                                                          | Fittings                                                                              | Forged / cast parts                                                                   | Finished part (drawing)                                                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |