## TIG rods for repair of cracked material

## Stainless Steels

| Product Name<br>Classification AWS<br>Classification EN<br>Classification DIN | Mechanical<br>Properties<br>Typical Values                | Size<br>(mm)   | Approvals | Characteristics and Applications   |
|---|---|--|-----------|--|
| UTP A 651  AWS A5.9: ER 312  EN ISO 14343-A: W 29 9                           | UTS: 750 MPa<br>YS: 650 MPa<br>EI: 25%<br>CVN Impact: 27J | 1.2 x 1000<br>1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000 | -         | UTP A 651 is suitable for joining and surfacing of steels of difficult weldability, repair of hot and cold working steels, cushioning layers. The weld metal of UTP A 651 is scale resistant up to 1150°C. Crack and wear resistant, stainless and work hardening. Hardness of the pure weld metal: approx. 240 HB |

## Copper alloys

| Product Name<br>Classification AWS<br>Classification EN<br>Classification DIN | Mechanical<br>Properties<br>Typical Values | Size<br>(mm)  | Approvals | Characteristics and Applications  |
|---|--|---|-----------|---|
| UTP A 381  AWS A5.7: ER Cu  EN ISO 24373: S Cu 1898 (CuSn1)                   | UTS: 200 MPa<br>YS: 50 MPa<br>El: 30%      | 1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000  | -         | UTP A 381 is used for oxygen free copper types according to DIN 1787 OF-Cu, SE-Cu, SW-Cu, SF-Cu. The main applicational fields are in the apparatus- and pipeline construction.   |
| UTP A 387  AWS A5.7: ER CuNi  EN ISO 24373: S Cu 7158 (CuNi30Mn1FeTi)         | UTS: >360 MPa<br>YS: >200 MPa<br>El: >30%  | 1.2 x 1000*<br>1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000<br>*available<br>on request | TÜV, GL   | UTP A 387 is used for copper nickel alloys with up to 30% nickel according to DIN 17664, such as CuNi20Fe (2.0878), CuNi30Fe (2.0882). Chemical industry, seawater desalination plants, ship building, offshore technique. The weld metal of UTP A 387 is resistant to seawater and cavitation. |

## Gas shielded cored wires for repair, anti-wear and anti-corrosion

Low alloy steels

| Product Name<br>Classification AWS<br>Classification EN<br>Classification DIN | Mechanical<br>Properties<br>Typical Values | Size<br>(mm)      | Approvals | Characteristics and Applications   |
|---|--|-------------------|-----------|--|
| SK 600 - G  DIN 8555;  MF 6-GF-60-GP  | Hardness as<br>welded: 59 HRC              | 0.9<br>1.2<br>1.6 | -         | Martensitic steel alloy designed for welding in horizontal and vertical-up positions under gas shielding. Its resistance to friction and low stress abrasive wear with moderate impact is excellent. Shielding gas: Argon 82% + $\rm CO_2$ 18% or $\rm CO_2$ 100%. Field of use: Bucket teeth, gravel pumps, conveyor chains, sliding metal parts, gear teeth, crusher hammers, rock drills. |