

UTP A 4221

Classifications

TIG rod

EN ISO 18274

AWS A5.14

S Ni 8065 (NiFe30Cr21Mo3)

ER NiFeCr-1 (UNS N08065)

Characteristics and field of use

UTP A 4221 is suitable for joining and surfacing of alloys of similar nature, furthermore for welding of CrNi-MoCu-alloyed austenitic steels used for high quality tank and apparatus construction in the chemical industry, corrosion resistance in media of sulphuric and phosphoric acid.

UTP A 4221 is specially designed for welding alloy 825 (2.4858, UNS N08825).

Fully austenitic weld metal with high resistance against stress corrosion cracking and pitting in media containing chloride ions. Good corrosion resistance against reducing acids due to the combination of Ni, Mo and Cu. Sufficient resistance against oxidizing acids. The weld metal is corrosion resistant in sea water.

Typical analysis in %

C	Si	Mn	Cr	Ni	Mo	Cu	Fe
0.01	0.25	0.8	20.5	41.0	3.1	1.8	balance

Mechanical properties of the weld metal

<i>Yield strength $R_{p0.2}$</i>	<i>Tensile strength R_m</i>	<i>Elongation A</i>	<i>Impact strength K_V</i>
<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>J [RT]</i>
360	> 550	> 30	> 100

Welding instructions

The welding area has to be free from impurities (oil, paint, markings). Minimize heat input. The interpass temperature should not exceed 120 °C.

Form of delivery and recommended welding parameters

<i>Rod diameter x length [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>
2.4 x 1000	DC (-)	I 1