# Union RV NiMoCr

Flux cored wire, low-alloyed, rutile

## Classifications

| EN ISO 18276-A | EN ISO 18276-B | AWS A5.29 | AWS A5.29M |
|---|---|---|---|
| T 69 4 Z P M 1 H5 | T765T1-1MA-N4M1-H5 | E111T1-K2M-JH4 | E761T1-K2M-JH4 |

## Characteristics and typical fields of application

Union RV NiMoCr is a medium alloyed seamless copper coated rutile flux cored wire with fast solidifying slag for GMAW with mixed gas M21 acc. to EN ISO 14175. The wire is suitable for the welding in all positions of quenched and tempered or thermomechanical rolled fine grain structural steels as well as joining of wear-resistant structural steels. It's furthermore characterized by a stable arc, good weldability, low spatter affinity, a good bead appearance and good slag detachability. The fast solidifying slag allows the manual and mechanized welding in overhead positions. The weld metal deposit offers excellent toughness properties at low temperatures.

## Base materials

Fine Grain Steels S620Q - S690QL1
(N-A-XTRA 63, N-A-XTRA 70), S700MC (PAS 700; Weldox 700)
Wear-resistant Steels 20MnCr6-5, 21MnCr6-5,
20MnCr4-3, 28MnCr4-3

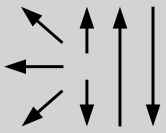
## Typical analysis of all-weld metal (wt.-%)

| | C | Si | Mn | P | S | Ni | Mo | Cr | Gas |
|---|---|---|---|---|---|---|---|---|---|
| wt-% | 0.07 | 0.50 | 1.7 | ≤ 0.015 | ≤ 0.015 | 2.0 | 0.20 | + | M21 |

## Mechanical properties of all-weld metal

| Heat-treatment | Shielding gas | Yield strength $R_{p0.2}$ | Tensile strength $R_m$ | Elongation A ($L_0$=5$d_0$) | Impact work ISO-V KV J | |
|---|---|---|---|---|---|---|
| | | MPa | MPa | % | +20 °C | –40 °C |
| aw | M21 | 690 | 770 | 17 | 90 | 69 |

## Operating data



| Polarity: | Shielding gas: | ø (mm) | Spool | Amps A | Voltage V |
|---|---|---|---|---|---|
| DC ( + ) | (EN ISO 14175) M21<br><br>Consumption:<br>15 – 18 l/min | 1.2 | B300 | 120 – 350 | 17 – 32 |

## Approvals

DNV, LR, ABS, BV, GL