



Flux cored wire
Union RV 71

GMAW-welding

Classifications:

EN 758	AWS A 5.20
T 42 2 P M 1 H5 T 42 2 P C 1 H5	E71T-1MJH4

Description and application:

Union RV 71 is a rutile flux cored wire with fast freezing slag for all-position welding, according to EN 439, when using mixed gas M21, M33 and C1. It shows good mechanical-technological properties. The outstanding welding properties are the stable arc, the good modelling characteristic, the very low spatter proportion, finely rippled and notch free weld interface, and good slag detachability.

Due to the fast freezing slag out-of-position welding with increased current is possible for manual as well as for mechanized welding.

Base materials:

S185, S235JR, S275JR, S355JR (St 33, St 37-2, St 44-2, St 52-3)
 P235GH, P265GH, P295GH, P355GH (HI, HII, 17 Mn 4, 19 Mn 6)
 P275N - P355NH (StE 285 - WStE 355)
 S275N - S420NL (StE 285 - TStE 420)
 L210 - L415NB (StE 210.7 - StE 415.7 TM)
 X 42 - X 60 (API-5LX) (StE 290.7 TM - StE 415.7 TM)
 St35, St 35.4, St 35.8, St 45.8, St 52.4
 GS-38 - GS-52, Shipbuilding steels Grad A - E, AH 32 - EH 36, A40 – F40

Mechanical properties of the weld metal acc. to DIN EN 1597-1: (Min. values at RT)

Shielding gas PWHT Test temperature (°C)	M21 acc. to EN 439 as welded			
	+20	±0	-20	-40
Yield Strength R_{eH} (N/mm ²)	≥ 420			
Tensile Strength R_m (N/mm ²)	≥ 520			
Elongation A_5 (%)	≥ 24			
Impact values A_v (J)	120 - 150	90 - 120	60 - 90	30 - 50

Weld metal analysis % (Typical values)

C	Si	Mn	P	S
0,06	0,5	1,4	≤ 0,025	≤ 0,025

Applicable shielding gas:

Mixed gas M21, M33 and C1 acc. to EN 439 - preferred M 21 (18 % CO₂, 82 % Ar)

Recommended parameters:

Diameter (mm)	1,0	1,2	1,4	1,6	2,4
Voltage (V)	21 - 30	22 - 32	23 - 32	24 - 33	24 - 28
Amperage (A)	130-270	150-300	150-350	180-375	300-700
Shielding gas (l/min.)	appr. 12	appr. 14	appr. 16	appr. 18	appr. 20

Current/Polarity:

=+

Welding positions:

acc. to DIN ISO 6947: PA, PB, PF, PC (w, h, s, q)

Approvals:

TÜV (Kennblatt-Nr. 07185), DB (Kennblatt-Nr. 42.132.32),
 ABS, Controlas, DNV, GL, LR, UDT

Forms of supply:

Diameter (mm)	1,0	1,2	1,4	1,6	2,4
Kind of spool	B300	B300	B300	B300	B300
Weight of spool (kg)	16	16	16	16	16
Other diameters and forms of supply on request					