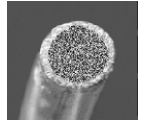




Seamless flux-cored wire

STEIN-MEGAFIL® 821 R



- Type:** Micro-alloy rutile flux-cored wire with rapidly solidifying slag for CO₂ and Ar-CO₂ mix.
- Applications:** Shipbuilding, steel and vessel construction, mechanical engineering and pipe work. Offshore. **CTOD tested.**
- Properties:** Excellent weld puddle manipulation, superior out-of-position welding. Using temperature up to - 60 °C (- 76 °F). Particularly suited for MAG orbital welding applications and all-position welding on ceramic backing. Low spatter loss, easy slag removal.

Classification:	EN ISO 17632-A	T 50 6 1Ni P M 1 H5	T 46 4 1Ni P C 1 H5
	EN ISO 17632-B	T576T1 1MA N1M2 H5	T554T1 1CA N1M2 H5
	AWS ASME 5.29	E81T1-Ni1M-J H4	E81T1-Ni1C-J H4
	AWS ASME 5.29M	E551T1-Ni1M-J H4	E551T1-Ni1C-J H4

Materials:	DIN	EN	ASTM
shipbuilding steels	A, B, D, AH 32 - EH 36		typical
unalloyed structural steels	St 33, St 37-2 - St 52-3	S185 - S355	A 258 / A 516 A 662 / A 387
boiler steels	HI, HII, 17Mn4, 19Mn5	P235GH - P355GH	A 738 / A 612
pipe steels	St 35.8, St 45.8 StE 210.7 TM - StE 480.7 TM	P235T1/T2 - P460NL2 L210 - L480MB	A 299
fine grain structural steels	StE 255 - StE 460	S255 - S500 (NL1, 2)	
steels to API-standard	X 42 - X 70		

Approvals: TÜV, DB, GL, Controlas, BV, LR, DNV, RINA, FORCE, ABS, CWB

Weld metal analysis % (typical values for mixed gas M21 82% Ar / 18% CO₂)

C	Mn	Si	P	S	Ni
0,05	1,3	0,5	< 0,015	< 0,015	0,7

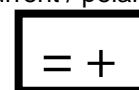
Mechanical properties of the pure weld metal (typical values)

Heat-treatment	R _{eL} MPa (ksi)	R _m MPa (ksi)	A5 %	Charpy V Notch [J] (ft.lb)			
				- 40 °C (- 40 °F)		- 60 °C (- 76 °F)	
				M21	C1	M21	C1
AW	> 500 (73)	560 - 690 (81 - 100)	> 22	> 60 (44)	> 47 (35)	> 47 (35)	> 27 (20)

AW: as welded

Diameters: Ø 1.0 - 1.6 mm (0.04 - 1/16 inch)
Packaging information: see chapter H

current / polarity



welding position

