

SUPRANOX RS 312 is a rutile coated MMA electrode for joining difficult-to-weld steels, dissimilar steels and for wear-resistant surfacing and buffer layers.

Applications include repair and maintenance welding on machines, power transmission equipment and tools. The microstructure of the higher strength weld metal consists of ferritic-austenitic Cr-Ni steel, with ~30% delta-ferrite, and is highly crack resistant, rust-proof and non-scaling <1100°C.

Very good weldability, weld metal transfer is in fine droplets with easy slag removal, producing a good weld bead shape.

Classification	
EN ISO	3581-A: E Z (29 9) R 12
AWS	A5.4: -E 312-16

Approvals	Grade
DB	●
CE	

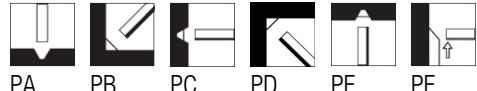
Chemical analysis (Typical values in %)

C	Mn	Si	Cr	Ni	Ferrite
0.08	1	1.2	28	12	25-50

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	Hardness
				+20 °C	
As Welded	≥ 450	≥ 650	≥ 20	≥ 30	220 HB

Storage
Keep dry and avoid condensation.
Re-drying not generally required.
If necessary: 250-300°C for 1 hour, 5 times max.

Current condition and welding position
AC; DC+


Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weightn(kg/1000)	SMPA		VPMD	
				PC	Code	PC	Code
2.5	300	55-75	18.30	28	W000258455	95	W000287909
3.2	350	75-115	36.37	15	W000258456	55	W000287910
4.0	350	90-140	54.10			35	W000258457