

## Cored Wires Stainless and Heat resistant steels

Fluxinox 312 is an alloyed rutile flux cored wire for the joining and surfacing of dissimilar steels. The ferritic-austenitic weld metal (Delta-ferrite approximately 50%) is non-scaling up to 1100 °C. Due to the high ferrite content, the weld metal is suited for difficult-to-weld steels and stress-relaxing buffer layers on crack-susceptible base plates.

Fluxinox 312 is characterized by outstanding, almost spatter-free, welding properties. It produces finely rippled flat and smooth welds which are free of undercut into the base metal. Very easy slag removal. Fluxinox 312 is mainly used for joining dissimilar steels and difficult-to-weld steels, e.g. heat treatable steels, tool steels, and high manganese steels, and for surfacing or repair welding.

Classification	
AWS	A5.22: E312T0-4/E312T0-1
EN	12073: T 29 9 R M 3 / T 29 9 R C 3

Approvals	Grades

### Analysis of all-weld metal (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	Cu	N	Ferrite
≤ 0.15	1.30	0.90	-	-	29	9	-	-	-	-	-

### All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation A5 (%)	Impact Energy ISO - V (J) + 20 °C	Hardness
As Welded	≥ 450	≥ 660	≥ 25	≥ 32	-

Gas test: Acc. To EN 439: M21(Arcal 21-Atal 6)

**Shielding Gas:** Acc. To EN 439: M21(Arcal21-Atal6) or C1(Arcal 2)


### Materials

Dissimilar and difficult to weld steels

### Storage

Keep dry and avoid condensation

### Current condition and welding position

DC+		
		
PA	PB	PC

**Packaging data:** K300 kg, 16

Diameters						
	1,2					