



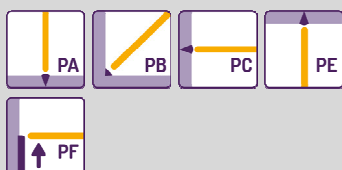
STICKELECTRODES, DISSIMILAR STEELS

SOLDY 312L16

Processing information

Re-drying: 300–350 °C/2h

Welding positions:



Polarity:



Whether preheating is required depends on the base material, for low dilution low heat input required. Otherwise preheating not necessary. Interpass temperature max. 200 °C.

Application

Electrode for joint welding and surfacing on steel and cast steel of the same or similar alloy, for joint welding on high-tensile unalloyed and low-alloyed construction steel, heat-treated steel, tool steel and high-manganese steel as well as for joint welding of dissimilar steel with high-alloyed, stainless steel. Furthermore, this rod electrode is ideal for crack-resistant and tough-hard intermediate layers when hard-surfacing as well as for wear-resistant, workhardened and warm-hardened surfacing. The austenitic-ferritic weld metal is stainless, corrosion-resistant and suitable for working temperatures of up to 300 °C. Due to the enhanced delta-ferrite content of the weld metal black-and-white joints are very resistant against hot-cracking.

Field



**Characteristic
rutile-coated,
core wire-alloyed**

Standards

**ISO 3581-A
E 299 R 12**

**AWS A 5.4
E 312-16**

Material no.

1.4337

Approvals



All Weld Metal Mechanical Properties

Heat Treatment AW

Structure Austenite/Ferrite

Weld Metal Composition [%]

C	Si	Mn	Cr	Ni
0,1	0,9	1	29	9

Yield Strength Rp 0,2 [MPa] > 500

Tensile Strength Rm [MPa] > 700

Elongation A5 [%] > 20

Welding Current, Packaging

Item no.	Diam. [mm]	Amperage [A]	kg/Pack	≈ Piece/Pack	kg/1000 Pc.
	2,00/300	50 - 70	4,0	343	11,7
	2,50/300	70 - 100	4,0	226	17,7
	3,25/350	100 - 140	5,0	142	35,2
	4,00/350	130 - 170	5,0	94	53,2