

Exaton 385-16



385-16 is a covered electrode with type with rutile-basic coating and normal recovery, used for welding of high-alloy austenitic stainless of UNS N08904 type, also known as 904L (e.g. Sandvik 2RK65).

385-16 gives a fully austenitic chromium-nickel-molybdenum weld metal with especially low carbon content and copper addition. Spray transfer gives a bead with a finely rippled surface, little spatter and good slag removal.

It is suitable for joining steels of the 20Cr/25Ni/4.5Mo/1.5Cu type such as 2RK65 and 904L used in many areas of the process industry, such as in the production of acetic acid, sulphuric acid, terephthalic or tartaric acid and vinyl chloride as well as other chloride containing media. It is also suitable for use in cooling operations involving sea water or heavily polluted river water.

385-16 may also be used to join 317L where improved corrosion resistance in specific media is required. These electrodes may be used to join 2RK65, 904L, and 317L to other grades of stainless steel.

Classifications	SFA/AWS A5.4 : E385-16 EN ISO 3581-A : E 20 25 5 Cu N L R 3 2 Werkstoffnummer : 1.4519
Approvals	CE EN 13479 VdTUV 02805

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current	AC, DC+
Ferrite Content	FN 0
Alloy Type	Austenitic CrNiMo
Coating Type	Basic Rutile

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	410 MPa (59 ksi)	590 MPa (86 ksi)	35 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
ISO		
As Welded	20 °C (68 °F)	65 J (48 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	Ni	Cr	Mo	Cu
0.03	1	0.5	25	20	4.7	1.5

Deposition Data

Diameter	Current	Voltage	Number of electrodes/ kg weld metal	Burn-off Time/ Electrode	Deposition Efficiency %	Deposition Rate @ 90% I max
2.5 x 300.0 mm (0.098 x 11.8 in.)	60-85 A	24 V	91	44 sec	60 %	0.9 kg/h (2.0 lb/h)
3.2 x 350.0 mm (1/8 x 13.8 in.)	85-130 A	27 V	41	60 sec	58 %	1.5 kg/h (3.3 lb/h)
4.0 x 350.0 mm (5/32 x 13.8 in.)	95-180 A	29 V	30	64 sec	51 %	1.9 kg/h (4.2 lb/h)