

Exaton 27.31.4.LCuR

Exaton 27.31.4.LCuR is a covered electrode of AWS E383-17 type with rutile coating and normal metal recovery for welding of high-alloy austenitic stainless steels of UNS S08028 (e.g. Sanicro 28) and Alloy 825 type (e.g. Sanicro 41). Exaton 27.31.4.LCuR is suitable for joining highly alloyed fully austenitic stainless steels, such as EN 1.4563 (Sanicro 28) and Alloy 825 (Sanicro 41), which have high corrosion resistance in sulphuric and phosphoric acids and excellent pitting resistance in acid solutions containing chlorides and fluorides, such as sea water. This electrode can be used for surfacing mild and low alloy steels to give protection against pitting corrosion in chloride-containing solutions. Because the product is a bit sensitive for forming hotcracks, a correct welding practice is important.

Specifications

Classifications	EN ISO 3581-A : E 27 31 4 Cu L R SFA/AWS A5.4 : E383-17 Werkstoffnummer : 1.4563
Approvals	CE : EN 13749 UKCA : EN 13749

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	Acid Rutile

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	427 MPa	612 MPa	38 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
ISO		
As Welded	20 °C	66 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
<=0.025	0.90	0.8	0.006	0.018	32	27	3.5	0.9	0.07

Typical Weld Metal Analysis %

Co
0.060

Deposition Data

Diameter	Amps	Volts	Efficiency (Per)	Fusion time per electrode at 90Per I max	Deposition rate at 90Per
2.5 x 300.0 mm	40-95 A	30 V	60 %	33 sec	1.2 kg/h
3.2 x 350.0 mm	55-125 A	30 V	60 %	50 sec	1.6 kg/h
4.0 x 350.0 mm	70-185 A	31 V	61 %	48 sec	2.5 kg/h