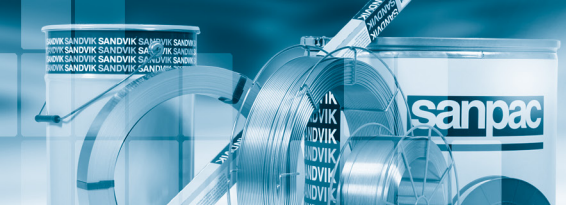

Datasheet updated 2012-08-02 18:58:58 (supersedes all previous editions)

Sandvik 19.12.3.LRV

(Covered electrodes)

Sandvik 19.12.3.LRV is a covered electrode with rutile-basic coating and about 100% metal recovery. The electrode is specially suitable for vertical down welding and for root runs of stainless steels of ASTM 316 type. Spray transfer gives a bead with a finely rippled surface. Little spatter and very good slag removal.

STANDARDS

- AWS E316L-16
- EN number E 19 12 3 LR

CHEMICAL COMPOSITION - WELD METAL

The following data are valid for non heat-treated all-weld metal.

CHEMICAL COMPOSITION, WT%

C	Si	Mn	P	S	Cr	Ni	Mo
<0.03	0.7	0.7	<0.03	<0.025	18	12	2.8

MICROSTRUCTURE - WELD METAL

Austenitic matrix with a ferrite content of about 6FN according to DeLong.

MECHANICAL PROPERTIES - WELD METAL

Temperature	°C	20	-40	-80	-120	-160
Yield strength, $R_{P0.2}$	MPa	340	-	-	-	-
Yield strength, $R_{P1.0}$	MPa	365	-	-	-	-
Tensile strength, R_M	MPa	520	-	-	-	-
Elongation, A_5	%	30	-	-	-	-
Reduction in area, Z	%	40	-	-	-	-
Impact strength, Charpy V	J	65	56	46	38	29

CORROSION PROPERTIES - WELD METAL

Sandvik 19.12.3.LRV is resistant to intercrystalline corrosion according to DIN 50914 in the as-welded and quench-annealed condition.

MARKING

Printing	Sandvik 19.12.3.LRV/316L-16
Tip colour	blue

DEPOSITION DATA

ELECTRODE DATA

Electrode diameter, mm	2.5	3.25
Length, mm	300	300
Weights: kg/100 pcs	1.5	2.5
kg/box	1.8	4.5
Electrodes/box	121	184
Max deposition rate, kg weld metal/h, approx	1.0	1.6
Effective value kg weld metal/kg electrodes	0.70	0.70
Change value Electrodes/kg weld metal	94	59
Burn-off time per electrode at max current, s	39	39

WORKING DATA

Welding positions	all
Current/polarity	direct current/electrode positive or alternating current at an open circuit voltage of at least 60V

DISCLAIMER:
Recommendations are for guidance only, and the suitability of a material for a specific application can be confirmed only when we know the actual service conditions. Continuous development may necessitate changes in technical data without notice. This datasheet is only valid for Sandvik materials.