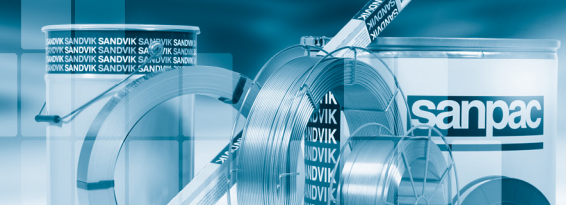

SANDVIK

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Sanicro 60

(Covered electrodes)

Sanicro 60 is a covered electrode with basic coating with normal metal recovery for welding of nickel alloys and high-alloy stainless steels, such as Sandvik 254 SMO*, Sanicro 63, Alloy 625 and Alloy 825. It can also be used for dissimilar joining of stainless steels to nickel alloys and for overlay welding. There is little spatter and very good slag removal.

STANDARDS

- AWS ENiCrMo-3
- EN number Ni 6625

Product standards

- EN ISO 14172
- AWS A5.11

CHEMICAL COMPOSITION - ALL-WELD METAL

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

CHEMICAL COMPOSITION, WT%

C	Si	Mn	P	S	Cr	Ni	Mo	Nb	Fe	Co	Cu
max			max	max		min			max	max	max
0.05	0.3	0.1	0.020	0.015	21	60	9.0	3.5	6.0	0.05	0.2

MICROSTRUCTURE - ALL-WELD METAL

Fully austenitic.

MECHANICAL PROPERTIES - ALL-WELD METAL

Temperature	°C	20	-196
Yield strength, $R_{P0.2}$	MPa	450	-
Tensile strength, R_m	MPa	760	-
Elongation, A	%	30	-
Impact strength, Charpy V	J	65	45

CORROSION RESISTANCE - ALL-WELD METAL

Resistant to intergranular corrosion according to ASTM G-28. Highly resistant to pitting, crevice and stress corrosion cracking in chloride-bearing media.

RECOMMENDED WELDING DATA

Diameter, mm	2.5	3.25	4.0	5.0
Current, A	50-60	70-95	90-120	120-160

Redrying electrodes when necessary: 200 °C (390 °F)/2h

MARKING

Marking at grip end	Sanicro 60

DEPOSITION DATA

ELECTRODE DATA

Electrode diameter, mm	2.5	3.25	4.0	5.0
Length, mm	300	350	350	350
Weights: kg/100 pcs	1.5	2.9	5.1	9.1
kg/box	3.8	4.6	5.4	5.0
Electrodes/box	260	160	105	55
Max deposition rate, kg weld metal/h, approx	0.9	1.4	1.2	2.4
Effective value kg weld metal/kg electrodes	0.66	0.69	0.67	0.72
Change value Electrodes/kg weld metal	103	49	30	15
Burn off time per electrode at max current, s	41	52	71	99

WORKING DATA

Welding positions	diameter <3.25 mm	all except vertical down
	diameter >4.0 mm	preferably flat position
Current/polarity	direct current/electrode positive.	

* 254 SMO is a trademark owned by Outokumpu OY.

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.