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# Sandvik 50SW

## (Welding flux)

Sandvik 50SW is a basic agglomerated flux with low silicon pickup. It gives good slag removal, good tie-ins and a finely rippled surface. It is suitable for welding with either wire or strip electrodes of nickel alloy type. It is particularly suitable for surfacing with Sanicro 72HP strip electrodes (ERNiCr-3 type).

Typical applications for flux Sandvik 50SW are found in nuclear and chemical equipment fields. It is also suitable for dissimilar material welding of nickel alloy grades to stainless steel grades.

#### **STANDARDS**

EN number 760 S A AF 2

#### **ALLOYING VECTOR**

The alloying vector describes the difference in chemical composition between the filler metal and the undiluted all-weld metal due to the influence of the flux. The following table presents data for flux Sandvik 50SW in combination with strip and wire electrodes.

Element	Strip electrode	Wire electrode
	Sanicro 72HP	Sanicro 72HP
С	+0.003	+0.003
Si	+0.2	+0.1
Mn	±0	±0
Cr	-0.9	-0.8
Ni	±0	±0
Nb	-0.2	-0.2
Fe	±0	±0

#### **CHEMICAL COMPOSITION (NOMINAL), %**

□SiO <sub>2</sub> +TiO <sub>2</sub>	CaF <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub> +MnO
14	52	30

### FLUX DATA

Bulk weight	1.2 kg/l
Basicity (Boniszewski)	2.4
Current capacity using 60 x 0.5 mm strip electrode	900 A
Flux consumption	0.7-0.8 kg/kg strip electrode

### WELDING PARAMETERS

Direct current, with electrode positive is normally used.

Strip dimensions, mm	Current, A	Voltage, V	Travel speed, mm/min
60x0.5	700	29	130

Wire diameter, mm	Current, A	Voltage, V	Travel speed, mm/min
3.25	400	30	400

#### 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.

