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Sandvik 6C27

(Strip steel)

Sandvik 6C27 is a martensitic stainless chromium steel with a low carbon content that is characterized by excellent formability. After hardening, the grade has good corrosion resistance and high toughness.

Typical applications for Sandvik 6C27 are shaving heads in electric shavers, kitchen tools like butter knives and slicers and potato peelers.

STANDARDS

- ASTM 420
- UNS S42000
- W.Nr. 1.4007
- DIN X 35 Cr 14

CHEMICAL COMPOSITION (NOMINAL) %

C	Si	Mn	P	S	Cr	Mo
			max.	max.		
0.32	0.2	0.3	0.025	0.010	13.7	-

FORMS OF SUPPLY

The strips can be supplied either in coils or as straightened lengths of 0.5 - 4.0 meter (1.6 - 13.1 feet). The coil weight is max 5 kg/mm (280 ibs/in.) of strip width.

Hardening and tempering of the strip steel is needed to achieve the correct finish and to meet the properies reguired by the end user.

DIMENSIONS

Thickness		Width	
mm (in.)		mm (in.)	
Min.	Max	Min.	Max.
0.10 (0.0039)	2.5 (0.098)	5 (0.197)	380 (14.96)

Other sizes can be supplied to meet specific requirements.

Tolerances
The thickness and width tolerances are +/- tolerances to the nominal size. The normal tolerance classes for most of our strip products are T2 and B1. Tighter tolerances as well as other tolerance limits can be offered upon request.

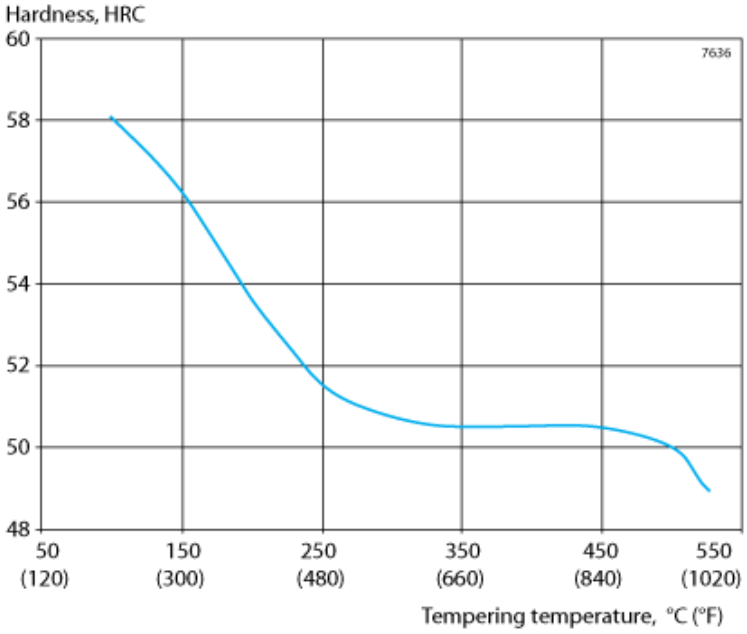
MECHANICAL PROPERTIES

As-delivered	Tensile strength	Hardness	
	MPa (ksi)	HV	HRB
Annealed	max. 600 (87)	max. 185	max 88.5
Cold rolled	700-1000 (102-145)	215-315	94.3-106.6

HEAT TREATMENT

Hardening data
Hardening temperature 1070°C (1960°F), holding time 3 minutes, quenching in oil.

Tempering data
Tempering time 30 minutes.



Brittleness occurs with tempering above 450°C (840°F).

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.