



Sandvik Materials Technology is a developer and producer of advanced stainless steels, special alloys, titanium and other high-performance materials

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# Sandvik 7C27Mo2 (Strip steel)

Sandvik 7C27Mo2 is a martensitic stainless steel alloyed with molybdenum that is characterized by good formability. After hardening, the grade has:

- Very good corrosion resistance
- High toughness
- Excellent fatigue strength

Sandvik 7C27Mo2 is typically used for cutters in electric shavers and springs.

## STANDARDS

- UNS S42026
- EN number (1.4034)\*

\*) Nearest equivalent grade

## CHEMICAL COMPOSITION (NOMINAL) %

| C    | Si  | Mn  | P     | S     | Cr   | Mo  |
|------|-----|-----|-------|-------|------|-----|
|      |     |     | max.  | max.  |      |     |
| 0.38 | 0.4 | 0.6 | 0.025 | 0.010 | 13.5 | 1.0 |

## 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 lbs/in.) of strip width.

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

## DIMENSIONS

| Thickness     |             | Width     |             |
|---------------|-------------|-----------|-------------|
| mm (in.)      |             | mm (in.)  |             |
| Min.          | Max         | Min.      | Max.        |
| 0.10 (0.0039) | 4.5 (0.177) | 5 (0.197) | 350 (13.78) |

Other sizes can be supplied to meet specific requirements.

## Tolerances

Contact us for information about tolerances.

## MECHANICAL PROPERTIES

| As-delivered | Tensile strength   | Hardness |             |
|--------------|--------------------|----------|-------------|
|              | MPa (ksi)          | HV       | HRB         |
| Annealed     | max. 700 (102)     | max. 215 | max. 94.3   |
| Cold rolled  | 850-1000 (123-145) | 265-315  | 101.4-106.6 |

## PHYSICAL PROPERTIES

The physical properties of a steel are related to a number of factors, including alloying elements, heat treatment and manufacturing route, but the data presented below can generally be used for rough calculations.

| Density             |      |
|---------------------|------|
| g/cm <sup>3</sup>   | 7.7  |
| lb/in. <sup>3</sup> | 0.28 |

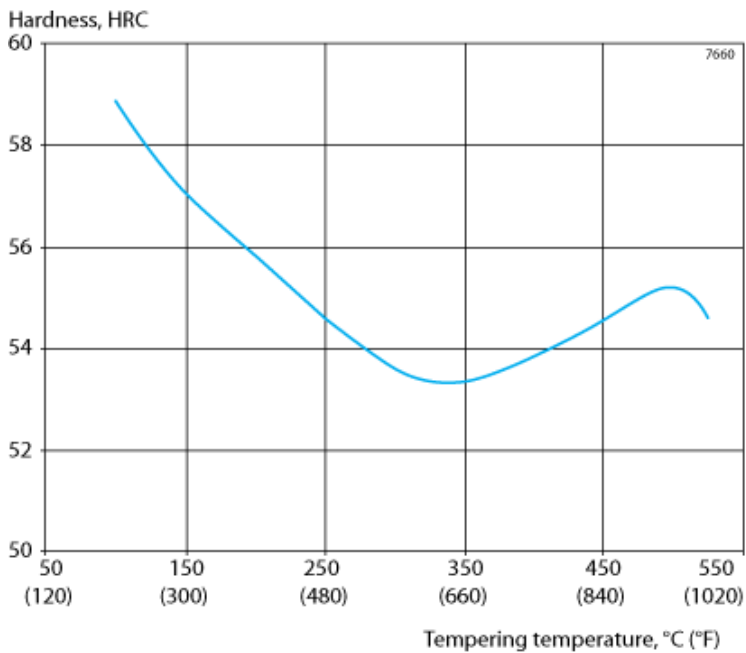
## HEAT TREATMENT

### Hardening data

Hardening temperature 1030°C (1885°F), strip thickness 3.5 mm (0.138 in.), holding time 6 minutes, quenching in oil.

### Tempering data

Tempering time 30 minutes.



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

Additional recommendations regarding hardening can be found in Sandvik's hardening guide.

### 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.

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