

# TS40

## Engineering & Tool Steel

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### General Product Description

TS40 is delivered quenched and tempered with good impact toughness and very low residual stresses to get good dimensional stability after machining. TS40 is suitable for plastic moulding, for rubber moulding and machine components. With proper surface treatment, the service life of the tool/component can be prolonged.

#### Thickness

TS40 is supplied as plate in thicknesses between 10 - 120 mm.

### Mechanical Properties

Hardness HBW  
min - max

360 - 420

Hardness is measured, according to EN ISO 6506-1, on a milled surface 0.5 - 2 mm below the original surface.

#### Impact toughness

Test temperature	Impact energy, Charpy-V, transverse direction; min J
20 °C	20

#### Ultrasonic inspection

Ultrasonic inspection is carried out according to:

EN 10 160 (rolled plates) with extra demands according to specification SSAB V6.

## Tolerances

### Dimension

Thickness tolerances between 10 -120 mm according to SSAB thickness guarantee AccuRollTech – AccuRollTech meets the requirements of EN 10 029 class C, but offers more narrow tolerances.

Length and width tolerances are according to EN 10 029.

### Flatness

Flatness tolerances are according to SSAB flatness tolerances, closer than EN 10 029 Class N (steel type L).

### Surface

Surface properties on TS40 is according to EN 10 163-2 Class B, Subclass 3.

## Delivery Condition

Quenched and tempered at a minimum temperature of 590 °C.

On delivery from SSAB EMEA Oxelösund the plate meets the following specifications:

- free from mill scale
- not repair welded

## Fabrication and Other Recommendation

TS40 is not intended for further heat treatment. If TS40 is heated above 590 °C after delivery from SSAB EMEA Oxelösund no guarantees for the properties of the steel are given.

Nitriding or surface coating may be carried out if the temperature is below 590 °C.

Appropriate health and safety precautions must be taken when welding, cutting, grinding or otherwise working on the product. Grinding, especially of primer coated plates, may produce dust with high particle concentration. Our Tech Support department will provide further information on request.

## Contact and Information

Toolox is the registered trademark for tool steels produced by SSAB EMEA in Oxelösund.

More detailed information about Toolox is given in our brochure 41-General Product Information Weldox, Hardox, Armox and Toolox or contact SSAB EMEA.