

Toolox 44 round bars

General Product Description

Pre-hardened, precise, predictable steel, now in round bars.

Toolox[®] 44 round bars are pre-hardened, ready-to-use quenched and tempered tool steels that come in a range of diameters from small to large.

Suitable for engineering applications in tool holders and in different types of shafts and rolls, the diameter dimensions also provide a better solution for round parts in tooling applications like molding and in dies for aluminium die casting.

Dimension Range

Toolox 44 round bars are available in diameters 21- 172 mm. Other dimensions can be available on request.

Mechanical Properties

| Diameter (mm) | Hardness (HBW) |
|---------------|----------------|
| 21- 172 | 410- 475 |

Bar hardness is measured on a milled surface, with indents positioned as impact test according to EN 10 083.

Impact Properties

| Diameter (mm) | Min. Impact Energy for Charpy-V, longitudinal direction |
|---------------|---|
| 21- 141 | 18 J / 20°C |
| 142- 172 | 11 J / 20°C |

Impact testing according to EN 10 083, EN ISO 148.

Ultrasonic testing

Ultrasonic inspection is carried out according to EN 10 308 with extra demands according to specification SSAB V6.

Tolerances

More information are available at www.ssab.com and www.toolox.com.

Diameter and Length

Tolerances according to EN 10 060.

Straightness

Straightness according to EN 10 060.

Surface Properties

Turned surface.

Delivery Conditions

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

On delivery from SSAB the bars meet the following specifications:

- free from mill scale
- not repair welded

Delivery requirements can be found at www.ssab.com and www.toolox.com.

Fabrication and Other Recommendations

Welding, bending and machining

For information concerning welding and fabrication, see SSAB's brochures at www.toolox.com or consult Tech Support, techsupport@ssab.com.

Toolox 44 is not intended for further heat treatment. If Toolox 44 is heated above 590°C after delivery from SSAB, 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.

Contact Information

www.ssab.com/contact