

FAQ about Toolox[®] engineering & tool steel

When you are curious about Toolox[®] engineering & tool steel, here are some common questions and answers. If you want to know more, don't hesitate to get in touch.

Understanding Toolox®

Q: What is Toolox®?

A: Toolox® is a pre-hardened engineering and tool steel developed by SSAB, designed for high-performance applications requiring durability and machinability.

Q: What industries commonly use Toolox®?

A: Toolox® is widely used in industries such as mold-making, die-casting, machine tool manufacturing, and heavy engineering.

Q: Is there a difference between engineering steel and tool steel?

A: It is more related to the way the steel is used than to the steel's properties. A common distinction is that engineering steel is used for structural and mechanical components such as shafts, gears, and other machine parts. It prioritizes strength, toughness, machinability, and weldability, while tool steel is designed for cutting, forming, or shaping other materials. It offers high hardness, wear resistance, and heat resistance. Toolox® engineering & tool steel covers the entire span of applications.

Performance & durability

Q: What makes Toolox® different from conventional tool steels?

A: Toolox® is delivered pre-hardened, meaning it does not require additional heat treatment. It also has excellent toughness, wear resistance, and dimensional stability.

Q: Is Toolox® used for mold-making?

A: Toolox® is ideal for mold-making due to its high toughness and resistance to thermal fatigue, ensuring long-lasting performance in demanding environments.

Q: Is Toolox® fatigue resistant?

A: Toolox® is an exceptionally clean steel with high toughness. These are properties that give the steel excellent fatigue resistance, which increases the lifespan of the tool or machine component.

Processing & machining

Q: Can Toolox® be easily machined?

A: Yes, Toolox® is designed for excellent machinability, allowing for efficient milling, drilling, and turning without excessive tool wear. High-quality cutting tools and optimized machining parameters are recommended.

Q: Can Toolox® be welded?

A: Yes, Toolox® engineering and tool steel is designed for easy welding and hot cutting. It is fully weldable in all grades and dimensions. SSAB provides full documentation for welding and cutting best practices.

Q: Can Toolox® be cut by sawing?

A: Yes, Toolox® can be cut by sawing. SSAB provides guidelines on blade selection, cutting parameters, and chip formation.

Q: Can Toolox® be surface-treated for additional hardness?

A: Yes, Toolox® is highly suitable for surface treatments such as nitriding, laser hardening, and induction hardening to further enhance its performance.



Environmental & quality guarantees

Q: Are there environmental benefits to using Toolox®?

A: Yes. Since Toolox® is pre-hardened it doesn't need heat treatments after processing, which reduces energy consumption and environmental impact.

Q: What guarantees does SSAB provide for Toolox®?

A: Each Toolox® plate and round bar is tested to ensure consistent properties. SSAB guarantees precise dimensions and mechanical characteristics for every batch.

Q: What does HBW mean in steel specifications?

A: HBW stands for Hardness Brinell Wolfram, indicating that the hardness is measured by pressing a wolfram carbide ball into the steel surface. Toolox® is available in different grades with hardness levels from 275 to 490 HBW.