



Indian Standard IS 16645:2018 - Moulded plastics footwear- Lined or Unlined polyurethane boots for general industrial use

When buying polyurethane boots for general industrial use, it is essential to choose boots with **excellent grip, long life, flexibility, and strength** to ensure they perform well under all conditions. Selecting the correct footwear is crucial, as low-quality boots can compromise both safety and work efficiency.

Boots are a critical safety component for industrial work. Indian Standard **IS 16645**, developed by the **Bureau of Indian Standards (BIS)**, outlines the safety and performance requirements for polyurethane boots used for general industrial purposes. It covers both fabric-lined and unlined boots, ranging in style from ankle boots to full thigh height.

This standard ensures that boots are manufactured using materials with appropriate hardness, strength, and load-bearing capacity, along with adequate resistance to water and tearing. Key tests in the standard, such as **resistance to flexing, tensile properties, hardness, and soling resistance to cut growth** under various conditions, ensure that the boots can withstand high loads, flexing, and emergencies without tearing. This increases the durability of the boots and enhances safety, keeping your legs well-protected.

Boots are also tested for long-lasting performance under a range of conditions. Tests like **resistance to flexing and the cold flex temperature specification of less than -35°C** simulate long-term wear, ensuring that your boots remain safe and functional throughout their lifespan, even in extreme conditions.

Markings on the boots provide crucial information for selecting the right footwear. For example, size 9 UK indicates the appropriate fit, while trademarks and Indian standard numbers help consumers identify high-quality shoes from specific manufacturers.

The DPIIT Quality Control Order mandates that all moulded plastics footwear—lined or unlined polyurethane boots for general industrial use—sold, manufactured, or imported in India **shall comply with IS 16645 and display the BIS Standard Mark**. This ensures that Indian consumers receive high-quality and safe boots.

In summary, IS 16645 is your assurance that the polyurethane boots you purchase are **safe, durable, and of high quality**. The next time you buy PU boots for general industrial use, look for the BIS mark to ensure they meet these standards, giving you peace of mind and enhancing your performance.