Indian Standard IS 10086:2021 - Quality Moulds for Cement, Concrete, and Pozzolana Testing

Moulds for testing **cement**, **concrete**, and **pozzolana** are essential tools in evaluating material **strength** and **durability**. Designed to cast specimens in standardized shapes, they enable accurate testing of critical properties such as **compressive strength**, **flexural strength**, and **tensile strength**. High-quality moulds are vital for consistent, reliable test results, which play a key role in construction quality control.

Consumers expect moulds to maintain **dimensional stability** and demonstrate **durability** under frequent use. Quality moulds must also facilitate easy **de-moulding** to prevent specimen damage and retain exact **dimensions** even under varying environmental conditions.

To address these expectations, **IS 10086:2021**, developed by the **Bureau of Indian Standards (BIS)**, specifies stringent requirements for moulds used in cement, concrete, and pozzolana testing. It identifies suitable **materials** such as **cast iron**, **mild steel**, **ABS plastic**, and **polyurethane** for their durability and stability. For example, cube moulds must have smooth, precise internal surfaces within strict tolerance limits to ensure accurate and reproducible results.

IS 10086 includes detailed **dimensional guidelines** for different types of moulds, including **cube moulds** (ranging from 50 mm to 300 mm), **cylindrical moulds** (150 mm diameter), and **beam moulds** (up to 150 x 150 x 700 mm). Furthermore, the standard mandates **marking requirements** for each mould to ensure traceability, and the **BIS certification mark** signifies compliance with these high-quality standards.

Choosing IS 10086-compliant moulds gives users confidence in the reliability and accuracy of their test results. This standard is highly significant for quality assurance in cement, concrete, and pozzolana testing, assuring that each mould meets the highest requirements for construction testing.