

IS 11890: 1987 SPECIFICATION FOR HIGH PURITY PRIMARY ALUMINIUM INGOTS 'FOR REMELTING FOR SPECIAL APPLICATIONS

High Purity Primary Aluminium Ingots for Re-melting for Special Applications defines the specification for **high-purity primary aluminum ingots** designed for use in specialized applications such as **electronics, aerospace, and pharmaceutical industries**. These ingots are typically **99.80% pure** or higher, ensuring they meet the stringent requirements of industries where even trace impurities could impact performance, such as in **precision manufacturing** or **high-conductivity applications**.

Consumers expect **ultra-high purity aluminum** with minimal impurities like iron, silicon, copper, and other elements that can affect the material's electrical conductivity, strength, and corrosion resistance. Consumers demand **consistent chemical composition** to ensure reliability in manufacturing processes, such as **semiconductor production** or **aerospace component fabrication**. **High-purity aluminum ingots** must possess **excellent malleability, workability, and re-melting characteristics**, allowing them to be used in **precise industrial processes** without degradation.

IS 11890 outlines the purity levels for aluminum ingots, mandating **99.80% purity** and above. The standard also sets guidelines for **chemical composition**, ensuring that **trace elements** like iron, copper, and silicon remain within specified limits, ensuring high-quality re-melting properties. Rigorous testing procedures and **spectrochemical analysis** ensure the product meets these **purity and composition standards**. Additionally, IS 11890 provides guidelines for **packaging, marking, and traceability**, ensuring the ingots are delivered with the necessary documentation for consumers to verify their **quality and authenticity**.