

Summary of IS 1466:1985 - Specification for Ferrovanadium

When **purchasing ferrovanadium** for use in steel production or other industrial applications, **the primary concerns are its chemical composition, purity, and consistency in quality.** It is an important alloy that enhances mechanical properties of steel, making it crucial for **high-performance applications such as aerospace, automotive, and construction industries.**

Indian Standard IS 1466:1985, developed by the **Bureau of Indian Standards (BIS)**, specifies the quality requirements for ferrovanadium used in steelmaking. The standard outlines the acceptable chemical composition, including vanadium content and the permissible levels of impurities like silicon, carbon, sulfur, and phosphorus.

Key quality parameters specified in IS 1466:1985 include:

- **Vanadium Content:** Typically **Vanadium ranging from 35% to 80% in Ferrovanadium** imparts **desired strength and toughness to the steel.**
- **Impurity Limits:** The standard defines permissible limits for **harmful impurities like sulfur, phosphorus, and carbon.** Excessive levels of these impurities can negatively impact the steel's properties and performance.
- **Size and Physical Form:** Ferrovanadium is typically supplied in various sizes, such as **lumps or powder**, depending on its intended use in the production process. The standard defines the acceptable physical forms and ensures that the ferrovanadium will be easy to handle and mix with the steel charge.
- Ferrovanadium shall be free from **extraneous contaminations** like **slag and non-metallic inclusions.**

IS1466:1985 mandates **rigorous testing.** **Chemical analysis**, including tests for vanadium content and impurities, is required to verify compliance with the specification. Additionally, **physical tests** confirm the material's suitability for use in industrial processes.

The standard also **safeguard consumers** against **counterfeit or substandard products** entering the market. Ferrovanadium that meets IS1466:1985 standards must bear the **BIS Mark (ISI mark)**, providing consumers with confidence that the **product has been tested and verified** to meet the required quality parameters.

By adhering to this standard, manufacturers can be confident in the performance and durability of their steel products. When **buying ferrovanadium, look for the BIS mark (ISI mark)** to ensure it meets these rigorous standards, giving you peace of mind in your **industrial applications.**