IS 8917: Specification for steel plates for galvanizing pots — Summary

IS 8917:1978 specifies the requirements for **steel plates** utilized in the **manufacture of galvanizing pots**. These pots play a vital role in the **hot-dip galvanizing process**, which involves coating steel with molten zinc to provide **corrosion protection**.

Emphasis is made on the following essential quality parameters:

- **High Pot Life:** The steel must **resist dissolution** in molten zinc, ensuring a longer lifespan for the pot. This is achieved by minimizing **carbon and silicon content**.
- **Weldability:** Since galvanizing pots are generally **welded**, the steel should guarantee **weldability** to prevent defects and maintain pot integrity.
- **Freedom from Defects:** The steel is **cleanly rolled plates** that are free from **cracks, laminations, surface flaws**, and other **harmful defects**.

IS 8917:1978 incorporates various measures to ensure that the steel meets requirements:

- **Chemical Composition:** The standard defines **two grades (A and B)** with specific limits for **carbon, manganese, sulphur, phosphorus, and silicon**. Lower levels of these elements enhance pot life.
- **Manufacturing Process:** It specifies acceptable **steelmaking processes** (open hearth, electric, basic oxygen) and promotes the use of **refiners (Al, Ti, Zr)** for achieving finer grain size.
- **Testing:** The standard outlines procedures for **chemical analysis** and **check analysis** on finished plates to verify compliance with compositional limits.
- **Marking:** Each plate must be **marked with the cast number, manufacturer's name/trademark,** and **color code** for traceability and identification.

The **Steel and Steel products Quality Control Order** mandates that Steel plates for galvanizing pots **sold**, **manufactured**, or **imported** in India comply with **IS 8917**

By adhering to **IS 8917:1978**, manufacturers can ensure the quality of **steel plates for galvanizing pots**, thereby enhancing longevity and performance.