

# IS 4109:2023 – Kadahi - Specifications

## Product Definition:

The *kadahi* is a traditional Indian cooking vessel, known for its ability to handle high-heat cooking methods essential in Indian cuisine, such as deep-frying and sautéing. The BIS standard IS 4109:2023 outlines requirements for these *kadahis*, specifying materials, construction quality, dimensions, and performance tests to ensure safety and durability in household use.

## **Consumer Expectations for Quality:**

Consumers seek *kadahis* that are durable, heat-resistant, and safe for intensive use. Key quality indicators include sturdy construction, heat-resistant handles, secure joints, and resistance to leakage, ensuring the vessel's longevity and safety. Additionally, consumers expect standardized sizes for compatibility with household stoves and reliable manufacturer information for product traceability.

#### How IS 4109:2023 Meets Consumer Expectations:

IS 4109:2023 addresses these needs by setting clear standards for materials, manufacturing, and testing:

<u>Materials</u>: The standard mandates the use of high-quality hot-rolled carbon steel or grey cast iron for the *kadahi* body, with specific grades for handle and rivet materials. This ensures strength and heat resistance essential for safe cooking.

**Design and Dimensions:** It specifies acceptable shapes (round and bowl types) and standardized sizes, ensuring that *kadahis* fit common kitchen equipment. Guidelines on thickness and handle positioning contribute to ease of handling and stability.

<u>Manufacturing Requirements</u>: The standard requires *kadahis* to be either pressed or forged to the appropriate shape and to have handles that are securely attached by riveting or welding. These methods ensure that joints remain strong and free from defects like cracks or sharp edges, contributing to a safer product.

## Testing Procedures:

- 1. <u>Pull Test:</u> This test confirms the strength of *kadahi* handles by applying a specified weight for a set period, ensuring the handle can withstand loads without loosening or damage.
- 2. <u>Leakage Test</u>: The *kadahi* is filled with boiling water for 15 minutes to check for leaks around rivets and welds, ensuring it remains secure even under high heat.

<u>Marking and Traceability</u>: Each *kadahi* must be labeled with essential information, including material grade, size, manufacturer name, and identification marks. This not only assures consumers of the product's quality but also aids in traceability.

IS 4109:2023 assures that *kadahis* meet stringent quality and performance standards, giving consumers confidence in their safety, durability, and longevity. Looking for the BIS mark ensures that the *kadahi* complies with these quality parameters, delivering peace of mind and value for everyday cooking needs.