# Dual-Sided Hot Metal Sampler



## Product Overview

DKKI Dual-Sided Hot Metal Sampler is engineered for precise and reliable sampling of molten iron and steel. Designed to meet the rigorous demands of spectrographic analysis, this sampler delivers high-integrity samples with minimal contamination, ensuring accurate chemical composition readings in laboratory environments. Its dual-sided design provides two clean, sand-free surfaces, allowing analysts to select the optimal side for testing. This feature significantly reduces sample rejection rates and enhances operational efficiency. Additionally, the sampler's sintered-sand covered probe acts as a protective barrier, preventing any contamination during immersion and ensuring ultra-clean samples suitable for high-precision analysis. The sampler's robust construction and immersion-ready design make it ideal for use in harsh metallurgical conditions, including blast furnaces, converters, and ladles. The sampling process involves molten metal entering a pre-chamber and filling a vertical sample cavity. This ensures consistent sample volume and geometry, which are critical for repeatable analytical results. The sampler is compatible with automated measurement systems, integrating seamlessly into existing workflows. Whether used in steel mills or foundries, the Dual-Sided Hot Metal Sampler supports high-throughput environments by delivering dependable samples that meet stringent quality standards. Its proven performance and ease of use make it a trusted solution for metallurgical laboratories worldwide.

## Key Features

- Dual clean surfaces for flexible analysis
- Sand-free sample faces for accuracy
- Consistent sample geometry and volume
- Robust design for high-temperature immersion
- Optimized for special steel alloys, low-carbon, and ultra-low-carbon steel grades
- Compatible with automation systems
- Reduces sample rejection rates
- Enhances lab throughput and reliability
- Easy integration into existing workflows

## Why DKKI

- Proven success for over three decades
- ISO 9001:2015 certified quality
- In-house testing under real operating conditions
- Free expert support and comprehensive training
- On-site consulting and troubleshooting
- Fast order processing with flexible logistics
- Standard products, customizable options
- Transparent partnerships that build trust
- Proactive customer engagement

## Application Areas

- Steel and iron production facilities
- Metallurgical laboratories and research centers
- Blast furnace and ladle sampling operations
- Foundries conducting chemical composition analysis

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## Technical Specifications

| Parameter | Details |
|---|---|
| Immersion Time | Typically 4–6 seconds |
| Temperature Range | From 1500 up to 1850 |
| Sample Geometry | Vertical cylindrical chamber |
| Disk Thickness | 12 mm |
| Disk Diameter | 34 mm |
| Pin length | 34 mm |
| Pin Diameter | 4.5 mm |
| Filling Methods | Immersion (by Gravity) |
| Sample Chamber Material | Ceramic Mold with Cooling Plates Made of Steel |
| Chamber Entry | Quartz Tube with a Protective Cap of Thin Steel |
| Filling Direction | Side Entry |
| Immersion Angle | As Near as Possible to the Vertical Plane |
| Immersion Depth | 200mm under Melt Surface |
| Cardboard Tube Length | 600 mm / 1200 mm (Customizable upon Request) |
| Compliance & Certifications | ISO 9001:2015 ISO 14284 ASTM E1806 - 09 |
| Storage Conditions | Dry Environment Avoid Direct Sunlight or Corrosive Fumes |
| Shelf Life | 2 years under proper storage conditions |

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