Foundry Sampler for Ferrous and Non-Ferrous Metals



Product Overview

In response to the need for precise and reliable analysis in Optical Emission Spectrometry (OES), DKKI Foundry Sampler has been engineered as an efficient and optimized replacement for traditional sampling methods, such as spoon sampling. This sampler is specifically designed to prevent the formation of free graphite and any contamination, thereby establishing ideal conditions for the accurate and repeatable measurement of key elements, including Carbon (C), Silicon (Si), and Sulfur (S), in various ferrous and non-ferrous metals such as cast irons, ductile iron, pig iron, and non-ferrous metals like copper, brass and similar alloys. DKKI Samplers are manufactured using high-quality raw materials and advanced production technologies, supported by a rigorous quality control system in accordance with ISO certifications. This ensures consistent sample reliability and uniformity with every use. The samplers are produced in disc-type formats with thicknesses ranging from 4 to 12 mm, conforming to the ISO 14284 standard. They are supplied in standard paper tubes for convenient handling and use. These features enable faster analysis, significantly reduce the need for re-sampling, and enhance compliance with international standards in both industrial and research laboratory settings.

Key Features

- Prevents free graphite formation during solidification.
- Blocks external contaminants from sample structure.
- Ensures precise, repeatable key element measurements.
- Enables accurate silicon analysis in cast irons.
- Reliable sulfur determination in ferrous metals.
- Rapid sampling design for molten metal.
- Reduces re-sampling and rework requirements.
- Compliant with international standard ISO 14284.
- High-quality materials ensure consistent performance.
- Disc-type samples in 4-12mm thicknesses.

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

- Induction Furnaces
- Secondary Metallurgy
- Casting Units

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CERTIFIED
ISO 9001:2015
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Technical Specifications

Parameter	Details
Immersion Time	3 - 6 seconds
Temperature Range	Up to 1600°C
Sample Shape	Round
Disk Thickness Option	4 mm / 6 mm /8 mm / 10 mm / 12 mm
Disk Diameter	34 mm
Filling Methods	Gravity Fill
Sampling Chamber Material	Sintered sand mold surrounded by double steel disks
Chamber Entry	Sintered sand with a protective cap of thin paper
Filling Direction	Side Entry
Immersion Angle	45 degrees
Overall Probe Length	Standard 120 mm / Paper tube length customizable on request
Compliance and 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

Packaging Information

Probe Length	Probes per Pack	Packs per Pallet	Probes per Pallet
120 mm	25	40	1000

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