

TCO Endpoint Control System Probe for Steelmaking

This endpoint control system utilizes a probe for non-inverted converter steelmaking processes. It accurately monitors and controls Total Carbon Oxygen (TCO) levels to ensure optimal steel quality and process efficiency.



ADDITIONAL IMAGES



Product Overview

TCO End-point Control System

The TCO End-point Control System is designed for non-inverted converter steelmaking processes ranging from 40 to 150 tons. By utilizing an automated detection probe introduced through the discharging port, the system measures molten steel temperature, oxygen content, and carbon levels within 8-12 seconds. This solution eliminates the need for furnace switching, significantly improving productivity, saving energy, and reducing refractory consumption.

Technical Performance

Measurement Parameters

12 s

Testing Speed

1790 °C

Temperature Range

1500 ppm

Oxygen Content

Testing Success Rate

95 %

Operational Specifications

Carbon Content Range

0.03% - 0.15%

Temperature Accuracy

10 °C

System Components

System Modules

- Probe-release device
- Detection probe
- Signal processor
- Display unit

System Benefits

Operational Advantages

Increased Productivity, Energy Saving, Reduced Splashing, Lower Refractory Wear