

Industrial Process Analysis System

21 / Online Analysis System for the Metallurgical Industry

【PRODUCT DESCRIPTION】

TK-2000 Series Metallurgical Gas Analysis System is designed for oxygen content and calorific value measurement in coal pulverizing, gas producer, blast furnace and converter gas.

Adapted to high-dust working conditions, it features high stability and safety, supporting single-point and multi-point automatic sampling analysis.



【PRODUCT FEATURES】

- Equipped with dual high-efficiency sampling probes and regular nitrogen backblowing, the system handles humid and dusty blast furnace top gas steadily. The pretreated sample gas is delivered to analyzers. Adopting full-automatic PLC control with LCD display and 4~20mA analog output, it supports synchronization and interlock with industrial controllers.
- For coke oven gas containing tar, dust, benzene and naphthalene, multi-stage filtration, tar removal and dehumidification purify sample gas before analysis. This PLC-based system also features LCD display and 4~20mA output for industrial interlock. It is applicable in flammable gas hazardous areas.

【TECHNICAL PARAMETERS】

Converter gas recovery is a typical energy-saving project. Converter steelmaking operates in short dynamic cycles. CO content (up to 70%) determines gas recovery, while O₂ detection guarantees operational safety. Real-time monitoring and rapid response are core technical requirements. These are the analysis and detection points for converter gas recovery.

Monitoring Point	Measured Component	Process Purpose	Typical Range	
Cold End	Before ID Fan	CO	Recovery Control	0 – 100%
	After ID Fan	O ₂		0 – 3%
Before Gasholder		O ₂	Safety Control	0 – 3%
Gasholder Top		CO		0 – 300 ppm
After Gasholder Before Electrostatic Precipitator		O ₂		0 – 3%
Hot End	Before Primary Pipe	CO, O ₂	Recovery Control	Same as Cold End