



## Product Data Sheet

# Coal Mill - CO Gas Analysing System

### Coal Mill Fire Detection

Early detection of fires in coal pulverising mills is essential to avoid catastrophic damage to plant and to avert the threat of injury to personnel. Detection and measurement of carbon monoxide levels produced by combustion within the mill is a proven method of detection of coal mill fires.

Any such system must be capable of detecting CO in the mill whether the mill is idle or in operation and must do so with absolute integrity, for long periods and with minimal maintenance.

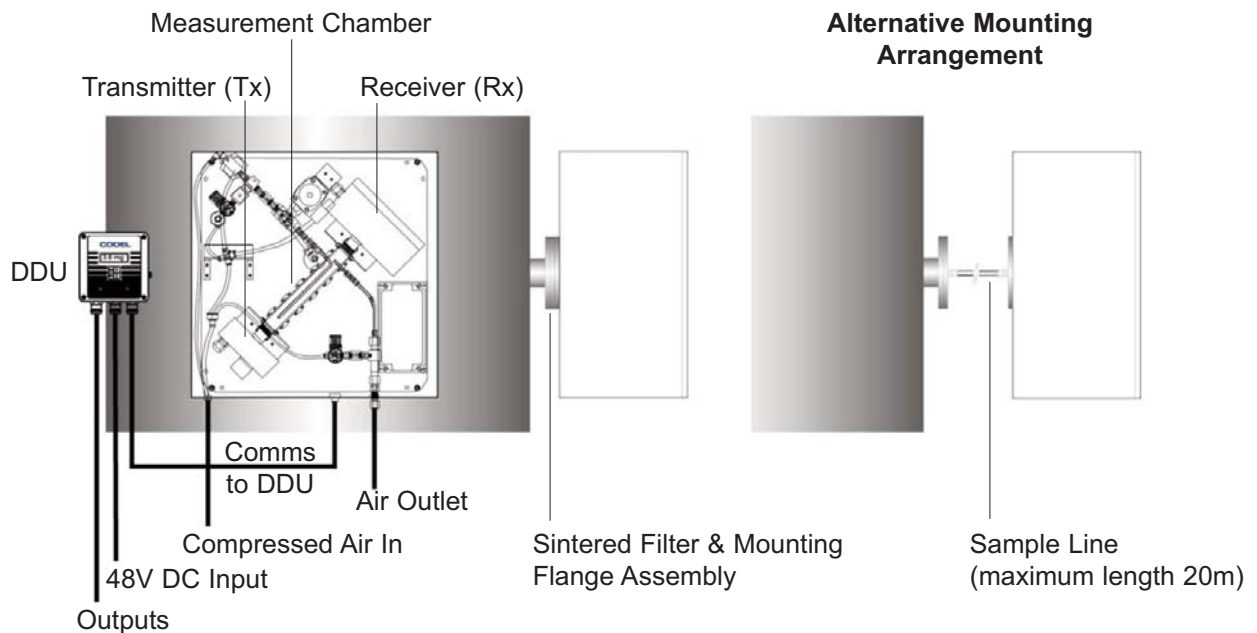
### CO Analysing System

Because of the hostile environment and dust-laden nature of the gas, conventional extractive systems are generally inadequate in conditioning and transporting the gas prior to analysis. The CODEL system samples the gas content of the mill outlet through a steel sintered filter mounted in the wall of the mill outlet duct.

- infrared gas analyser with stainless steel measurement chamber
- low maintenance operation
- high dust loading operation
- automatic zero calibration
- remote data display unit; data in ppm

The sample gas requires no pre-conditioning and is carried by a sample line and pump to a measurement chamber equipped with a compact infrared gas analyser; the measurement chamber is trace-heated to avoid corrosive condensation. Integral valves provide automatic calibration and filter cleaning routines.

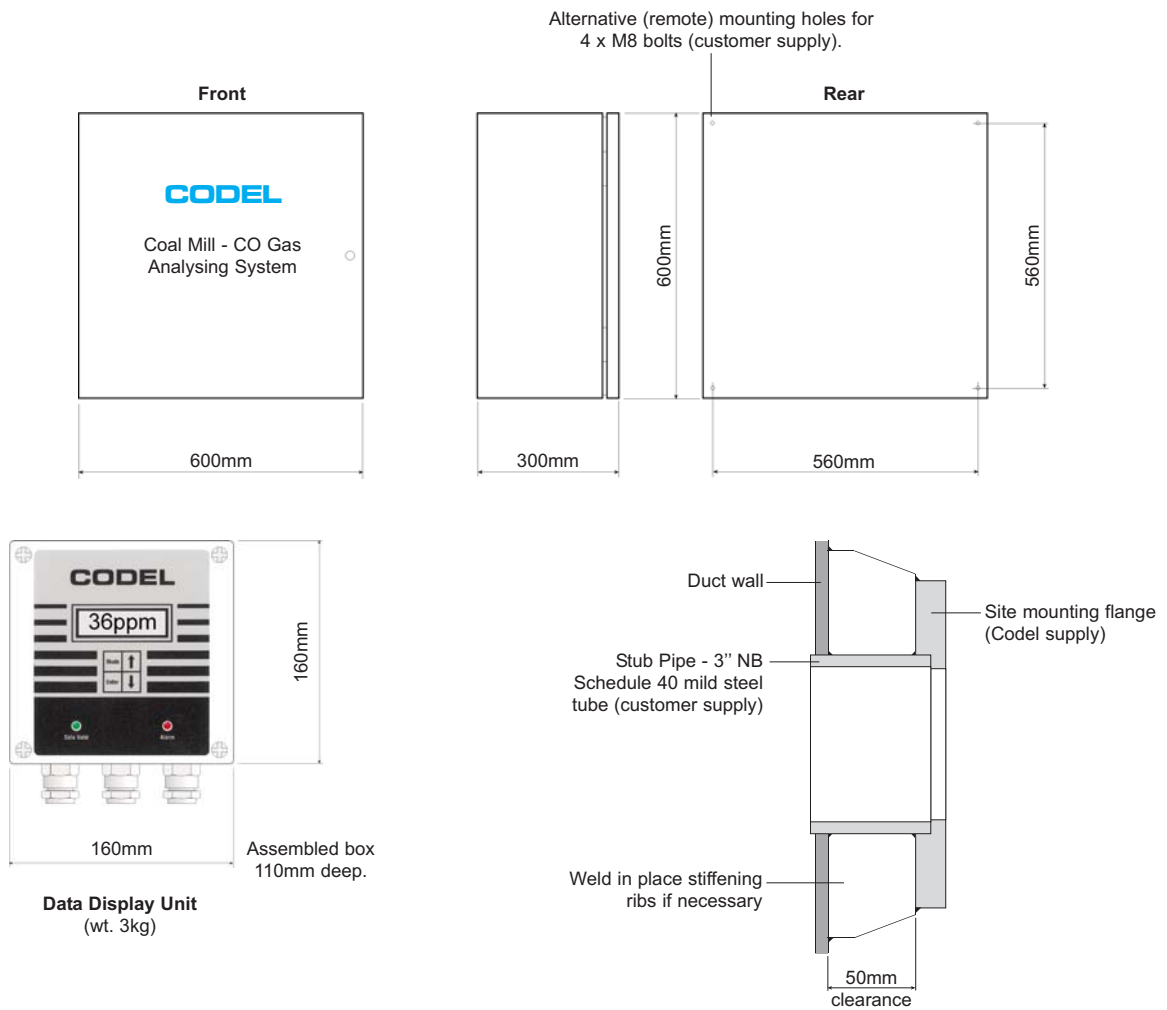
The CODEL mill fire prevention system incorporates a rugged, industrial-quality analyser, close-coupled to a dedicated point of analysis, to provide measurement confidence in this demanding application.



### Total Solutions - Total Confidence



## System Layout



## Specification

Operating Principle	: infrared absorption	Power Requirement	: 48V DC, 125VA
Span	: fully selectable in the range 0-10,000ppm (CO)	Compressed Air Requirement	: 20 litre/min continuous @ 5 bar (120 litre/min during calibration), clean, dry & oil free
Accuracy	: $\pm 5$ ppm	Display	: 32 character alpha-numeric back-lit LCD
Repeatability	: 5ppm	Keypad	: 4-key soft-touch entry
Calibration	: frequency 24 hours	Construction	: Structure powder coated mild steel to IP66
Calibration Period	: 4 minutes	<b>Compliances</b>	
Response	: 30 seconds to T 90	EMC	: 89/336/EEC directive compliant
Analogue Output	: 4-20mA proportional to CO	Low Voltage	: 73/23/EEC directive compliant
Contact Outputs	: High CO alarm, data not valid		
Serial Digital	: RS485		

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