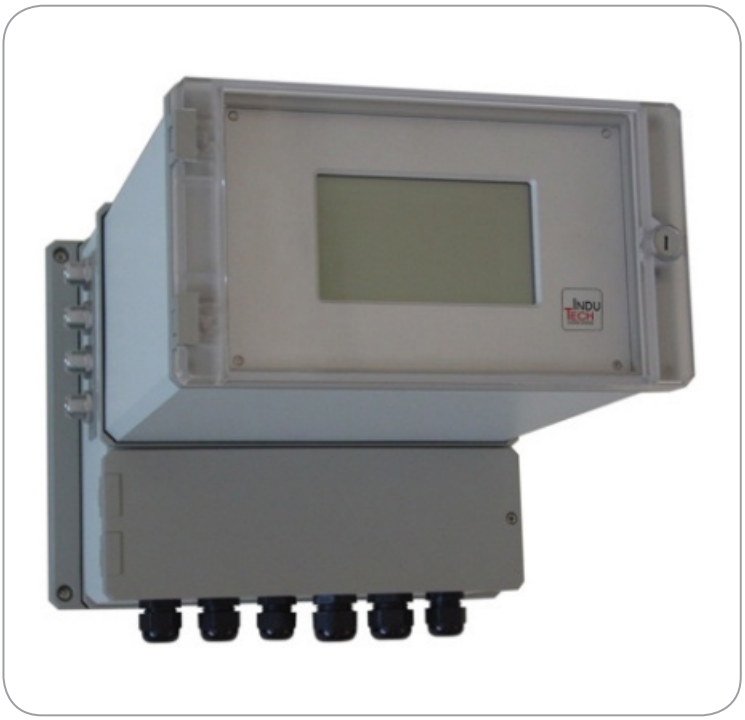
PMD® 2450
Precision Microwave Device

INDU TECH process controls

Online Microwave Moisture Measurement

accuracy of up to 0.1 %

- Moisture content of non- and low- conductive materials
  optional: area weight compensation
- Density of aqueous solutions / Brix
- Concentration of aqueous solutions
  optional: compensation of air bubbles
- Carbon in flyash



Advantages:

- **Precise**
  high selective on water

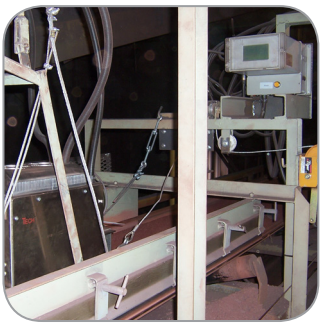
- **Inline**
  contactless measurement of solids directly at the existing conveyor without extensive mechanical sampling devices.

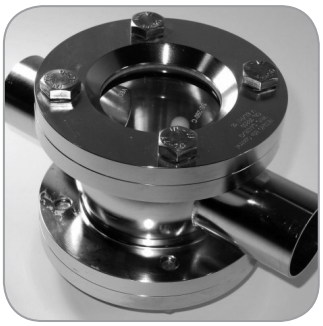
  Measurement of fluids directly in pipes.

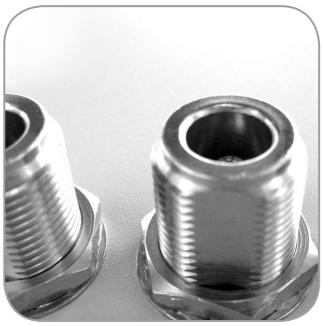
- **Representative**
  measuring a large percentage of material due to the transmission geometry.
  The whole volume is analyzed, not only the surface.

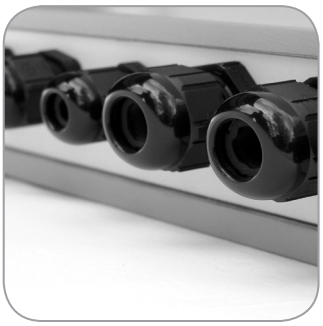
Application examples:

coal | minerals | iron ore | magnesite | wood chips | pulp | woodboards | gipsumboards | steel industry | cement industry | building industry | mining | coal power station | paper industry | chemical industry | wood industry | food industry









Technical Specifications PMD® 2450

Cabinet	protection: IP 65	weight: 9.0 kg dimension: 30.5*24*37.5 cm (H * W * D)
Display	touch screen: 114 mm x 64 mm graphical display: 128 x 256 Pixel	display back light with automatical shut down touch screen Matrix: 6 x 16
Power Requirement	90 - 260 Volt AC, 45 - 65 Hz	
Measuring Principle	microwave-transmission measurement: The measured material is transmitted with microwaves.	attenuation and phase shift caused by the material is determined.
Microwave Unit	frequency: 2.4 - 3.0 Ghz transmitted power: < 0,01 mW dynamic range: 70 dB	precision: < 0.2 dB, < 0.3° / GHz synchronisation with optional weight compensation.
I/O	microwave	2 N-connectors for input and output 2 N-connectors for reference cable
	counter: - area weight compensation - tachometer	max. 6 counters, 16 bit opto-decoupled, pulse width > 0,5 µs voltage: 4.5 V - 30 V
	digital input signals: - measurement (start/stop) - sampling (start/stop) - batch (start/stop) - belt signal (start/stop) - type selection	8 digital inputs, opto-decoupled required input signal: potential free contact
	digital output signals: - alarm outputs - collective failure - sampling indication	4 digital outputs relays contacts: active (24V) or passive (contact)
	analog input signals: - area weight compensation - temperature	2 x 0/4 - 20 mA, or PT 100 analog input, 12 bit, in potential free with common ground for all I/Os optional potential free separate for each channel optional 0-10 V inputs
	- analog output signals	4 x 0/4 - 20 mA analog out, 12 bit, in common potential-free optional potential free for each channel
	serial interface	1 serial interface, RS 232 or RS 485, potential free
Operating Temperature	0 - 50°C	no condensation
Storage Temperature	-40 - 70°C	no condensation
Sensor	various antennas or measuring cells	

Remote service
is available for all instruments via modem or internet. This saves time and money.
This device is also available with explosion protection for Zone 22.

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representative: