

INDUSTRIES



mining



chemicals



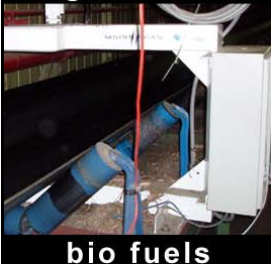
building



food



agriculture



bio fuels

MEASURING MOISTURE IN NICKEL

Application Note

Customer

The customer's Canadian mining and refining operations are now among the largest in the world. The customer manufactures primary nickel used in melting applications, specialty nickel products, and plating products.

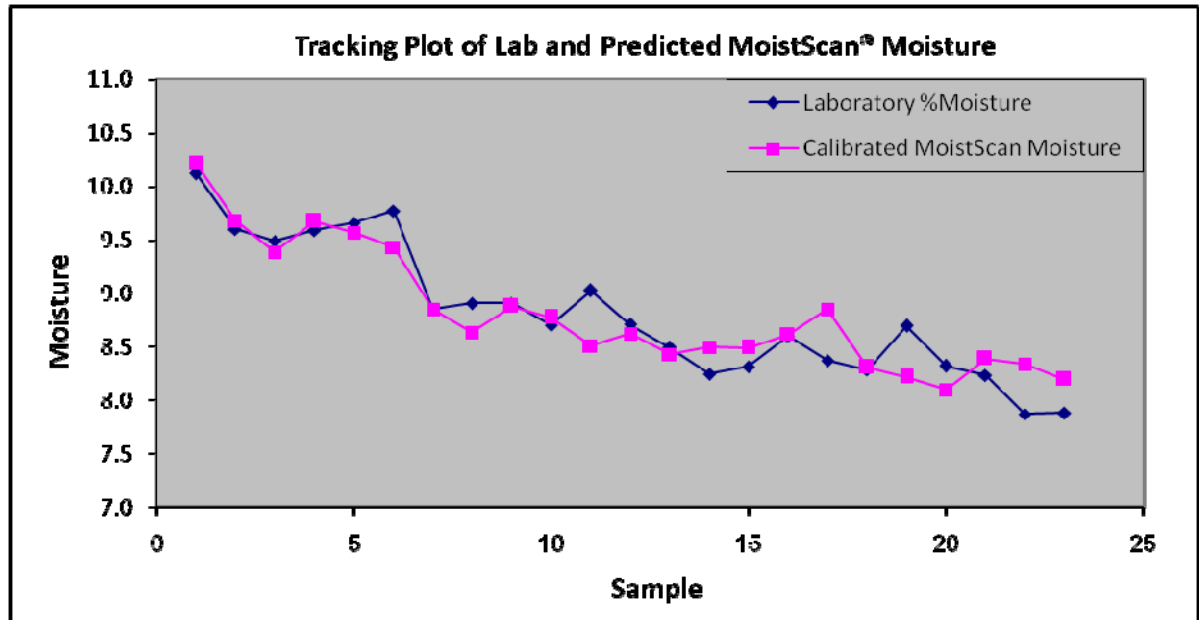
Installation

A MoistScan[®] MA-600VDF online microwave moisture analyser is installed over the rotary disc filter. Nickel concentrate is dewatered and filtered using batteries of rotary disc filters to produce a fine concentrate which is vacuumed past the MoistScan[®] MA-600VDF into a collecting chute for drying.



Benefit

The analyser controls the rotational speed of the disc which controls the moisture content of the filtrate enabling our customer to produce an enriched nickel matte which is able to be refined to produce a high-purity nickel product.



Application Summary

Material	Nickel Ore
Instrument	MA-600VDF
Location	Rotary Disc Filter
Bed Depth	3mm to 15mm
Particle Size	≤1MM

Moisture	8% to 10%
Belt Speed	0.5 rpm
Temperature	20°C to 30°C
Precision	Best possible
Use	Process automation and feed-back Control