On-line Conveyor XRF Analyzer CON-X

Application

On-line XRF conveyor analyzer CON-X identifies and measures the concentrations of elements and minerals in ores and other materials on a conveyor belt.

The analyzer detects elements from Al (Z=13) to U (Z=92)

Fields of application

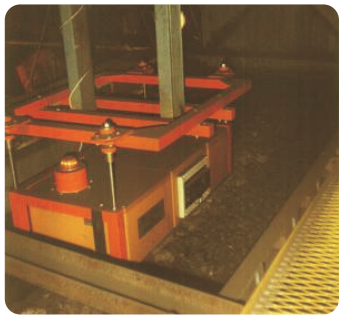
- concentration measurements in mining, reprocessing and metallurgy industry
- ready-made applications for: K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ge analysis in different types of ore. Haven't found the interesting element? Contact us: xrf-sales@bsi.lv

Features

- on-line non-destructive analysis of material composition directly above a conveyor belt
- high precision and stability of results in severe environments: dust, low/high temperature and humidity
- stable measurement results with varying lump size, relative humidity and distance in the allowable range (6-25 cm)
- modifications available for light and heavy element analysis
- simple and convenient operation and service
- empty belt exclusion algorithm
- remote support through Internet
- instrument control and data results provided using OPC communication, 4-20 mA output, Ethernet

Fast pay-back and savings

- savings in raw material used
- savings in time due to the fast analysis
- increased plant's productivity

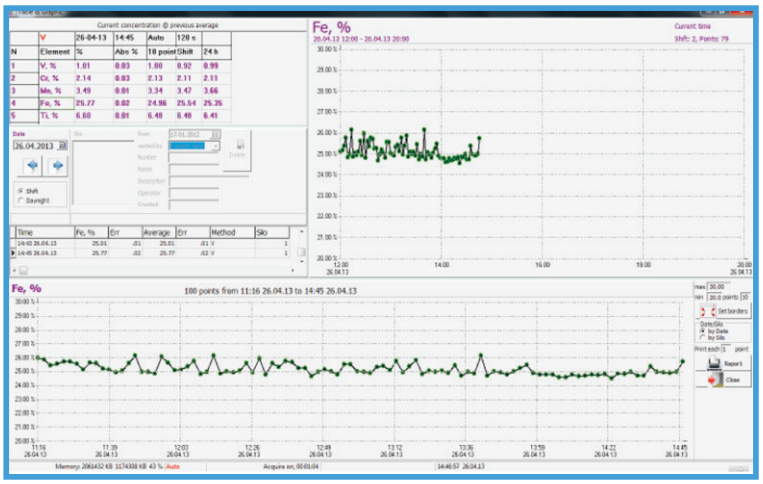


Specifications

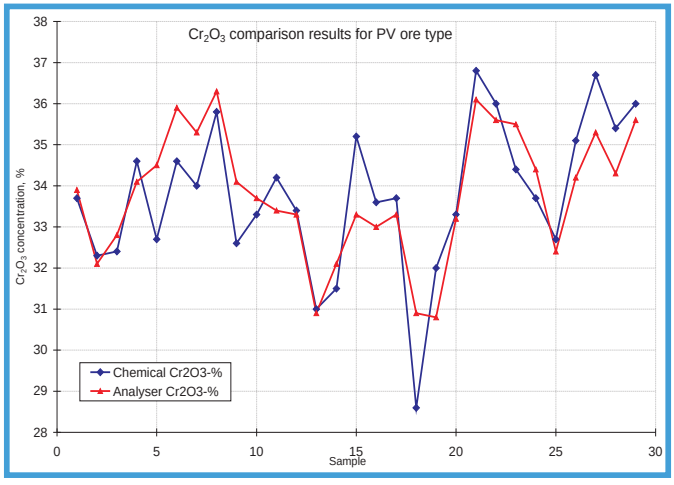
Parameters	CON-X
Detector type:	SDD detector
Energy resolution at 5,9 keV (Mn-K_a), eV:	160
Radiation source:	X-ray tube
Concentration range with measurement time of 5 min:	
- for Al, Si, P	from 8 to 80%
- for S, Cl, K, Ca	from 2 to 95%
- for Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn	from 0,02 to 99%
Dimensions, mm:	890 x 275 x 240
Weight without fixing elements, kg:	45
Enclosure protection:	IP 65
Operational temperature range, ^{0}C:	-20... + 40

The mean square deviation of concentration measurement results in static mode and concentration range 0.5...90% is ±0.25%.The precision of analysis could change depending on the application.

Display window of the CON-X software



Comparison of results with chemical method



Baltic Scientific Instruments
Ganibu Dambis 26
Riga, LV - 1005
Latvia

Phone: (+371) 67383947
Fax: (+371) 67382620
Email: xrf-sales@bsi.lv
www.bsi.lv