

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	L	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	A															
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu			
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm						



On-line Conveyor XRF Analyzer CON-X

Application

On-line XRF conveyor analyzer Con-X is used to identify and measure the concentration of the elements and minerals in ores and 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 applications for: K, Ca, Cr, Fe, Co, Cu analysis in different types of ore. Haven't found the interested element? Contact us: xrf-sales@bsi.lv

Features

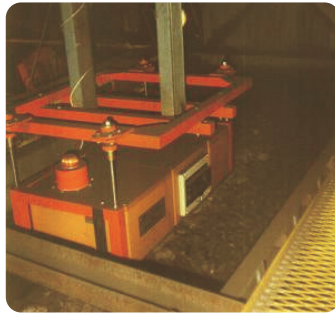
on-line non-destructive analysis of material composition directly above a conveyor belt

high precision and stability of the results in a severe environment: dust, low/high temperature and humidity
atomic constant library and software for concentration calculation by the combination of the methods of fundamental parameters and empirical coefficients
independence of the measurement results from lump size, relative humidity and distance in the allowable range (6-25 cm)

few modifications for light and heavy element analysis
simple and convenient operation and service
empty belt exclusion algorithm

Fast pay-back

economy of raw material
recycling of used material
time economy due to the express analysis

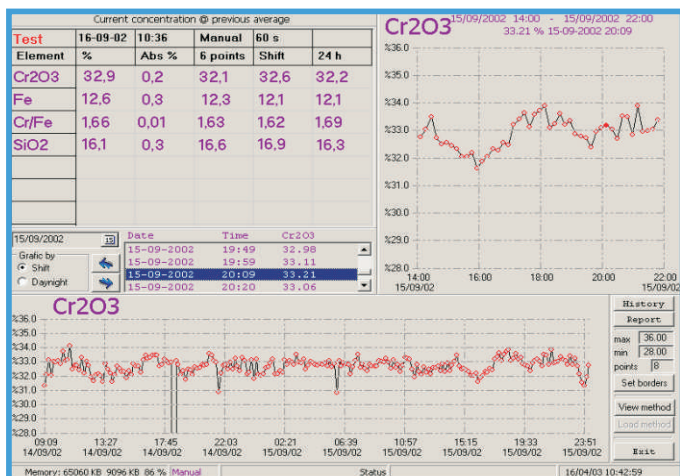


Specifications

Parameters	CON-X 01	CON-X 02
Detector type:	Si(Li) detector	SDD detector
Energy resolution at 5,9 keV (Mn-K _α):	250	160
Radiation source:	X-ray tube	X-ray tube
Concentration range with measurement time 5 min:		
- for Al, Si, P	from 10 to 80%	from 8 to 80%
- for S, Cl, K, Ca	from 5 to 92%	from 2 to 95%
- for Sc, Ti, V, Cr, Mn, Fe, etc	from 1 to 98%	from 0,2 to 99%
Dimensions, mm:	1050 x 480 x 280	760 x 480 x 280
Weight without fixing elements, kg:	58	37
Enclosure protection:	IP 55	IP 55
Operational temperature range, °C:	-10... + 35	-20... + 35
Start-up time, min:	50	20

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.

Working window of the Con-X software



Comparison of the results by the chemical method

