CONVEYOR BELT SCAFFOLD MONITOR

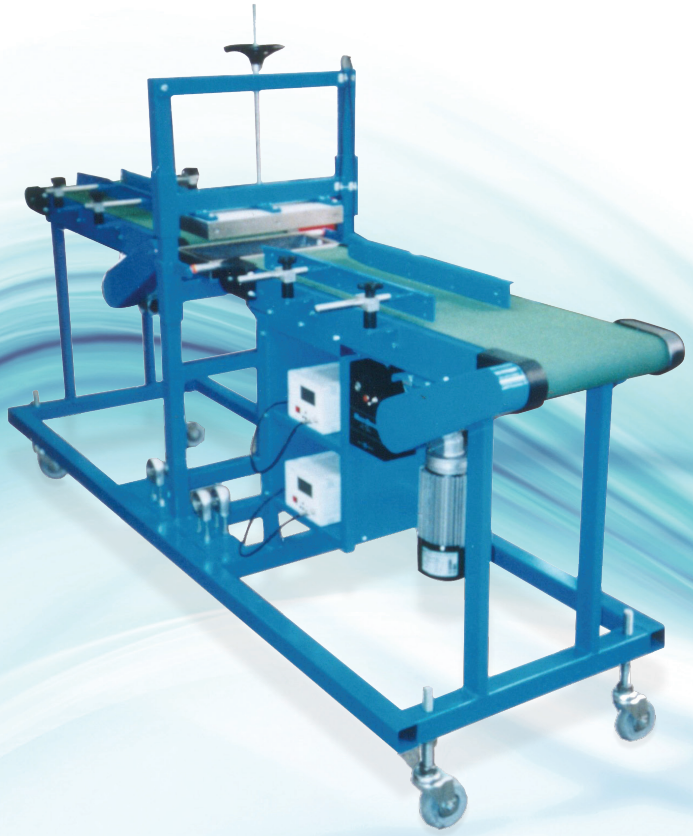
This conveyor belt monitoring system is designed to provide automatic monitoring of beta/gamma or optionally alpha/beta/gamma contamination on scaffold planks or poles.

The system consists of a mobile central unit containing the conveyor belt drive system and measuring electronics and separate mobile loading and unloading take-up tables with rollers.

The Scaffold Monitor provides a reliable, consistent method of monitoring large area surfaces over a large number of samples not practical with hand held probes.

FEATURES

- Large, high sensitivity lead shielded area (366cm^2). Rugged sealed proportional counters with 4.5 mg/cm^2 titanium windows
- 2 independent alarming ratemeters with automatic background subtraction
- Variable speed conveyor from 50cm/min
- Independent audible and visual alarms for top and underneath surfaces
- Emergency stop and reversing controls
- Adjustable height upper and lower detectors
- Adjustable guide rails for scaffold poles or planks
- Roller for Melinex foil to allow protection of lower detector
- 12.7mm lead detector shielding on all sides
- Detectors height adjustable from measuring surfaces



SPECIFICATION

Detectors	2x PC-3662 rugged sealed proportional detectors with 4.5 mg/cm^2 titanium windows
Dimensions	Active area: 366 cm^2 Active width: 325 mm Active length: 115mm
Lead Shielding	12.7 mm thick, surrounding both detectors
Detector Efficiency	^{90}Sr/^{90}Y: 27% ^{60}Co: 10.5% ^{239}Pu: 10% ^{137}Cs: 23% ^{147}Pm: 5% ^{14}C: 4% ^{55}Fe: 5%
Min. Detectable Activities	At 10mm from detector with belt speed 0.6m/min ^{60}Co: 20Bq ^{14}C: 100Bq ^{137}Cs: 8Bq ^{55}Fe: 370Bq
Electronics	2x ratemeter AARM-91 : one for each detector
Power Requirements	220/110 V AC, 50 Hz

CENTRAL UNIT MECHANICAL SYSTEM INCLUDES:

- Conveyor belt drive speed control from 0.5 - 5 m/min
- Reverse drive - switch control
- Conveyor belt width 300 mm
- Adjustable guide rails from 0 to 300 mm
- Top and bottom detector height adjustment from 0 to 150 mm
- Melinex roll to protect lower detector
- Overall dimensions 240 x 70 x 100 cm

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