

Non-contact Weight Scale

CONTI-SCALE *Mark 1*

Continuous panel weight measurement

CONTI-SCALE measures the board weight continuously and very precise – also in „endless production“ (without gaps between panels).

Because the measurement is non-contact the tare weight of the conveying system has no influence to the measurement accuracy which is the case in mechanical scale systems. Also high speed and vibrations have no negative effect.



Is this an isotopic smoke detector?

This question could be raised by local acceptance authorities, which have been asked to approve the handling of the CONTI-SCALE. The designation **35MBq (1mCi)** equates to the radiation of an isotopic smoke detector. In comparison: Weight-per-Unit-Area Gauges (used in earlier times) located before the press employed Americium sources of 3.500 MBq (100mCi). The radiation level of the CONTI-SCALE is just 1/100th of that figure. It can, therefore, be concluded that an exposure problem doesn't exist. The advantages of using an Americium source are considerable. The high stability of the low-energy isotopic measuring radiation results in high accuracy. No other supplier of measuring technology can offer this today.

Furthermore: The cost to the plant to install equipment of this high technical level is very reasonable and available at a very competitive price.

CONTI-SCALE consists out of several measuring tracks which are located crosswise to production. This allows evaluating the distribution of the weight per unit area lengthwise and crosswise. Taking the known board dimensions (length x width) into consideration the weight will be shown. If in addition the board thickness also is fed in the system the distribution of the density can be displayed.

Installation Locations

- Before or after the hot press
- Before or after cross cut saw

Technical Data

- | | |
|-------------------------------|--|
| ■ Technology: | very low isotopic radiation
Americium 241
35 MBq (1 mCi) |
| ■ Number of measuring tracks: | unlimited,
typical 3, 5 or 7 |
| ■ Scanning width per track: | 100 mm |
| ■ Production speed: | max. 180 m/min. |
| ■ Thickness: | max. 90 mm |
| ■ Measuring range: | 1 to 50 kg/m ² |
| ■ Accuracy: | see on right side |

Remote Control

Technical assistance is available by „EWS-Online Support“.

Software

Clearly arranged visualization by PiperWare Software. (Please see description in this brochure).

- Cross profile per panel and trend
- Lengthprofile per panel and trend
- History

Data Evaluation by EWS „GAUGE-CONTROLLER“

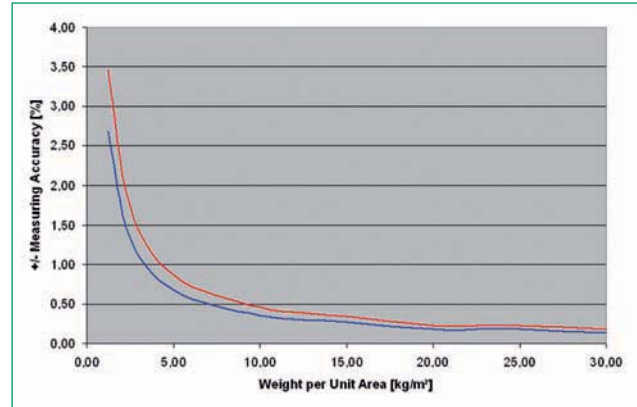
- Real time operating system
- Fieldbus connection for data exchange
- Network connection for visualization-PC

Optional

- Connection to PLC by OPC-Interface
- Calibration in endless production without gaps between boards (EWS patent)
- Interfacing of thickness gauge for evaluation of density

Features

- Insensitive to high speed and vibrations
- Continuous measurement, no stop of panels required
- Very small space of 300 mm only for installation
- No re-calibration required
- Very low maintenance required



Area Weight	3 Tracks	5 Tracks
1,25 kg/m ²	±3,5%	±2,7%
2,50 kg/m ²	±1,7%	±1,3%
5,00 kg/m ²	±0,9%	±0,7%
10,00 kg/m ²	±0,5%	±0,4%
15,00 kg/m ²	±0,3%	±0,3%
20,00 kg/m ²	±0,2%	±0,2%
25,00 kg/m ²	±0,2%	±0,2%
30,00 kg/m ²	±0,2%	±0,2%

Accuracy

Note!

% values refer to the weight per unit area, whereas mechanical weight scales refer to max. measuring range.



- 1 Panel weights (100)
- 2 Panel densities (100)
- 3 Weights per area (100)
- 4 Cross profile weight per area (last panel)

