Weiteq

BELT SCALES
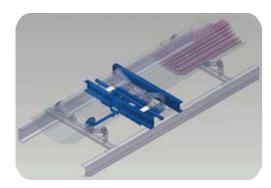**WBS - Series**

WEITEQ Belt Scale
WBS-Series

For continuous weighing of a wide range of bulk materials on belt conveyors
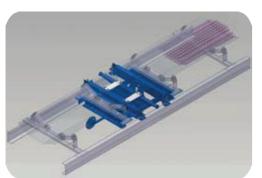- Flexible implementation depending on accuracy requirements and actual lay out of belt conveyor.
  Special solutions for legal-for-trade applications
- Long term repeatable accuracy due to robust construction and direct load transmission design that
  eliminates pivots and lever arms
- Easy installation and alignment with minimum modifications required to existing conveyor structure
  and components

WBS-1
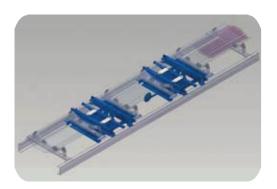### Single idler belt scale

with accuracy 1.0%

- Continuous weighing, flow rate and totalizing functions
- For the control of process equipments
- Material load indication (minimum/maximum)
- For short conveyors

WBS-2
Double idler belt scale

with accuracy 0.5%

- Continuous weighing, flow rate and totalizing functions
- Measurement of a "master" component in blending systems
- Material input/output monitoring
- Batching and feeding functions with feeder control

WBS-4
Four idler belt scale

with accuracy 0.25%

- High accuracy weighing and material
- Loading of train cars, trucks or ships in batch mode
- Input/output material monitoring in ports, quarries and mines
- Special load cells available for low material loading applications

Main features

- Flow rate (t/h) indication
- Totalizing amounts (t), 3 counters (1 not-resettable);
- Belt load determination (kg/m)
- Belt speed determination (m/s)
- Batch mode with feeder control and shift measuring
  in a point of material unloading
- Continuous weigh feeding mode with feeder control
- Automatic taring
- Calibration function with material or test weight
- Automatic compensation for variation in conveyor belt
  weight part of existing belt on the weighting
  measurements
- Multiple digital and analog outputs
- Speed sensor input
- Serial interfaces RS232, RS485 (Ethernet, Modbus,
  Profi bus)
- Power supply
  AC 110 V (-15%) to 240 V (+10%), 50/60 Hz or
  DC 12 V (-15%) to 30 V (+10%)
- Operating temperature range -25°C to +45°C

Scope of supply (standard)

- Weighbridge
- Speed sensor
- Junction box
- Load cell cable (depending on distance to
  weighing controller)
- Integrator (or weighing controller)
- Dimensional drawing
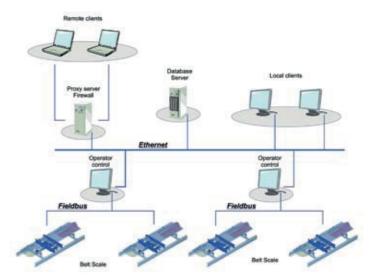- Set of operational and service manuals

Options

- Integrated calibration device (manual or
  electrical activation) with test weights
- Scale quality idlers
- Computer workstation with belt scale
  software for monitoring and
  data forming

System integration features

- Can be used with other equipment such as:
  metal detectors, material moisture measuring
  devices and material analyzers
- Multiple belt scale inputs for monitoring several
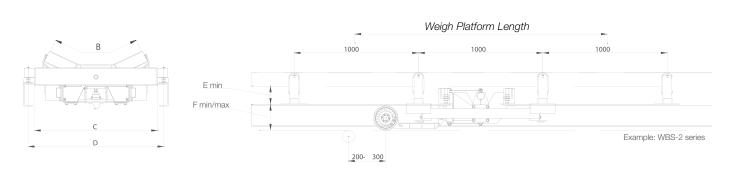 processes

Scales field bus net

Technical Data

WEITEQ TYPE	WBS-1	WBS-2	WBS-4
Flow rate	up to **3,000 t/h**	up to **6,000 t/h**	up to **6,000 t/h**
Belt speed	up to **3.5 m/s**	up to **3.5 m/s**	up to **3.5 m/s**
Accuracy	±**1.0 % *)**	±**0.5 % *)**	±**0.25 *)**
Environment	**-25°C** to **+45°C** **IP68, IP65**	**-25°C** to **+45°C** **IP68, IP65**	**-25°C** to **+45°C** **IP68, IP65**

*) accuracy is:
- specified relative to actual flow rate within measurement range of 1:10, ensured if belt scale is installed in accordance with the installation manual and rules

Dimensions

Example: WBS-2 series

WBS-1 series:	WBS-1/04	WBS-1/05	WBS-1/06	WBS-1/08	WBS-1/10	WBS-1/12	WBS-1/14
B (belt width)	400	500	650	800	1000	1200	1400
C	440	440	440	680	680	680	680
D	700	800	950	1150	1350	1600	1800
E	150	150	150	170	170	170	170
F	100/400	100/400	100/400	100/400	100/400	100/400	100/400
weight, kgs *)	35	45	55	70	105	120	135

WBS-2 series:		WBS-2/05	WBS-2/06	WBS-2/08	WBS-2/10	WBS-2/12	WBS-2/14
B (belt width)		500	650	800	1000	1200	1400
C		645	790	990	1190	1440	1640
D		740	890	1090	1290	1540	1740
E		150	150	150	150	150	160
F		210/480	210/480	210/480	210/480	210/480	210/480
weight, kgs *)		145	155	170	180	195	210

WBS-4 series:		WBS-4/05	WBS-4/06	WBS-4/08	WBS-4/10	WBS-4/12	WBS-4/14
B (belt width)		500	650	800	1000	1200	1400
WBS-4 is using two WBS-2 with same dimensions C, D, E, F							
weight, kgs *)		290	310	340	360	390	420

*) Belt scale weights are given without weight of carrying idlers