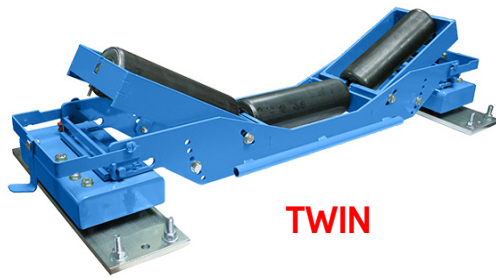
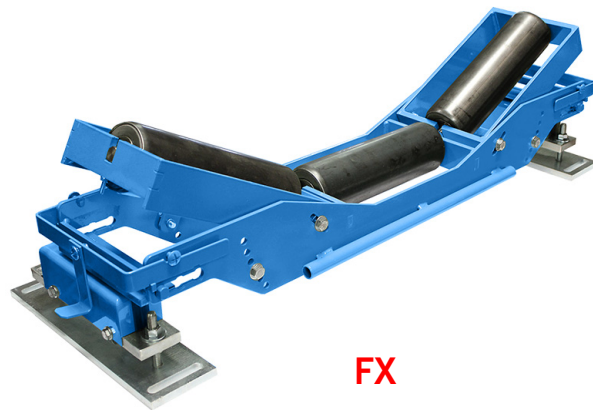


# FX / TWIN

## Single station infrastructure scale



**TWIN**



**FX**

FX and TWIN scales were designed for weighing bulk products in the extractive, mineral, cement, fertilizer or phosphates production, agri-industry, sugar refinery, timber, recycling industry market sectors and other activities using belt conveyors.

The scales can be installed in a new conveyor or can easily replace an existing conveyor roller station. These continuous weighing infrastructures can be combined with PRECIA MOLEN I 410 BS electronics (see data sheets ref. 04-41-81 FT and 04-41-82 FT).

The accuracy of these scales can be from +/- 0.5 % to +/- 1 % for a conveyor having a belt width up to 1200 mm for FX model and beyond for TWIN model.

### General description

The FX / TWIN scales consist of three elements:

- 2 identical strain gauge sensor blocks equipped with an integrated overload stop and a clamping system for transport.  
The FX blocks have a built-in adjustment device allowing adjusting the weighing trough height with respect to the conveyor troughs.
- 1 specific roller station manufactured according to the current conveyor section to be equipped. For ISO 53300 and DIN 53301 standard conveyors, this station is equipped with an adjustment device allowing selecting the trough angle between 20° and 45° depending on the one on the conveyor.

Whatever the conveyor profile, a station consists of:

- Screws incorporated into the weighing trough allowing height adjustment of the 3 rollers and the fine alignment of each roller with respect to those of the upstream and downstream stations. This device allows carrying out a real weighing plan and eliminate measuring disturbances related to banding.
- Two standard weight brackets allow suspending the standard weights easily and carrying out a calibration safely because the brackets are outside of the conveyor.
- A protective tube passes the sensor cable to the junction box or weight transmitter.

Usually, the addition of a scale on a conveyor requires shimming all stations upstream and downstream of the weighing influence area in order to separate the weighing portion from the conveyor chassis. Thanks to the weighing station low profile design, this shimming is eliminated and simplify the installation. This infrastructure is common to FX and TWIN models.

Bending under carrier station load is not detrimental to simple handling but becomes a source of error when we want to weigh. The FX / TWIN infrastructure are specially designed for continuous weighing and combine rigidity and lightness in order to transfer the entire weight onto the strain gauge sensors. If the need for precision or accuracy is less important, it is possible to reuse a conveyor station and install a MBW modular scale without specific weighing infrastructure (see data sheet ref. 11-01-13 FT).

Taking these elements into account results in a rugged and reliable totalizing scale that can be installed on any type of conveyor and in most severe operating conditions.

The TWIN model is particularly suitable for extra wide conveyors or large grain size products.

#### ▼ Finish

- Painted steel (RAL 5012 baked or epoxy paint).
- 304L or 316L stainless steel.
- Aluminium infrastructure for low density product weighing.

### Application

Bulk product weighing, flow measurement, daily or accumulated production totalling during the phases of extraction, processing, pre-storage, etc.

### European and international metrological certification

- Directive 2004/22/CE.
- Recommendation OIML R50.

### European and international compliance

- Directive 2004/108/CE for Electromagnetic compatibility
- Directive 94/9/CE for ATEX atmospheres\*.

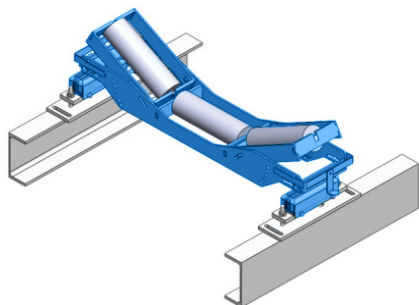
\* ATEX version on request.

## Installation

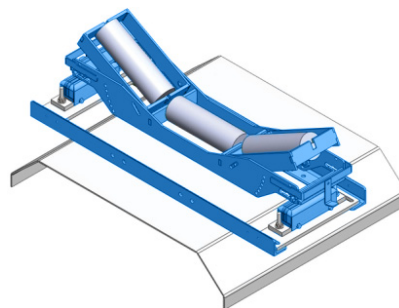
The FX / TWIN totalizing scales can be installed on any type of trough belt conveyor with a heavy or light frame, in profiles, shell, lattice or tubular.

▼ Installation examples

### On profile chassis



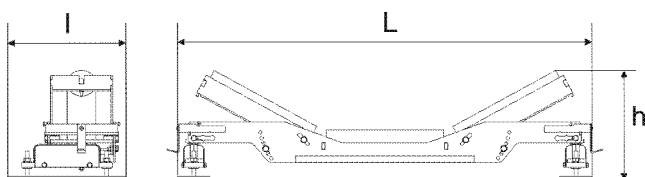
### On shell chassis



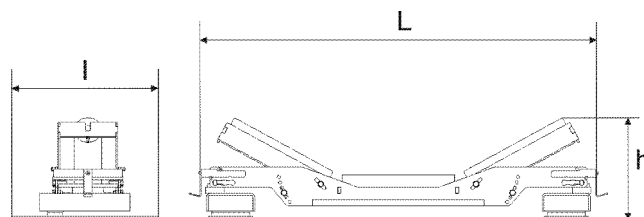
The FX / TWIN belt scales are very easy to install when replacing an existing roller station since all it needs is two drilled holes on each side of the chassis or on the flat area of the box.

## Dimensions and weight

### FX model



### TWIN model



belt width	roller ø	L	l	h	Weight (kg)
500	89	760	364	290	29
650	89	910	364	320	32
800	89	1060	364	390	34
1000	89/133	1280	364	415	36
1200	89/133	1470	364	480	60

belt width*	roller ø	L	l	h	Weight (kg)
1000	89/133	1320	470	420	36
1200	89/133/159	1440	470	480	60
1400	133/159	1560	470	540	64

\* Possible width up to 2400 mm on request.  
All dimensions are in mm.

## Options

304 L or 316 L stainless steel construction

SA 2 ½ sandblasting

ATEX 3D - Other areas on request

Low temperature - 20 ° + 60 °C

Rollers

Standard weights

### Your specialist

Non contractual illustrations. Precia-Molen reserves the right to alter the characteristics of the equipment described in this brochure at any time.

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