

# SINGLE IDLER BELT SCALE

## MODEL BSP 500

### Features

- Simple installation
- Accurate (1%) and reliable design
- Stainless steel double ended shear beam load cell
- Optional jockey wheel speed sensor running on return belt
- Junction box with spring loaded push in terminals
- Zinc plated surface finish with all mounting hardware



### Application

Belt Weighers are used for the continuous acquisition of flowrates and totalised amounts. Fitted in either new or existing belt conveyors, they can be employed for a variety of tasks:

- Measurement of production rates in plants
- Accountability of received and shipped amounts
- Maximum or minimum load limit alarms
- Batching, in loading stations
- Pre-feeder control

The sturdy design ensures a high degree of reliability and availability.

### Construction

The standard belt weigher comprises:

- Fully floating weighing platforms
- Two double ended shear beam stainless steel load cell(s) of IP67 construction
- IP65 cable junction box
- IP65 Tail drum speed sensor
- Mounting and adjusting bolts

### Options include:

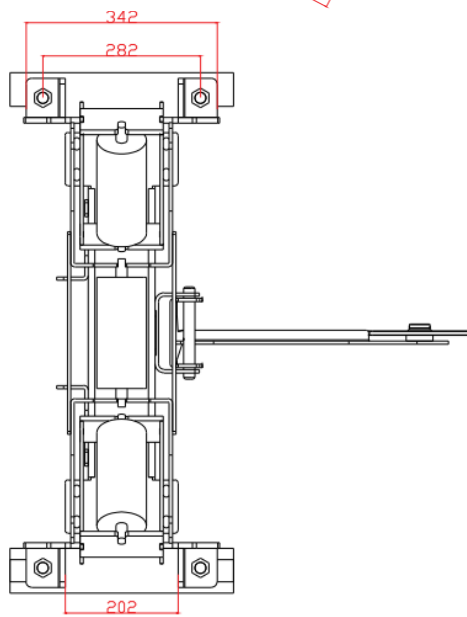
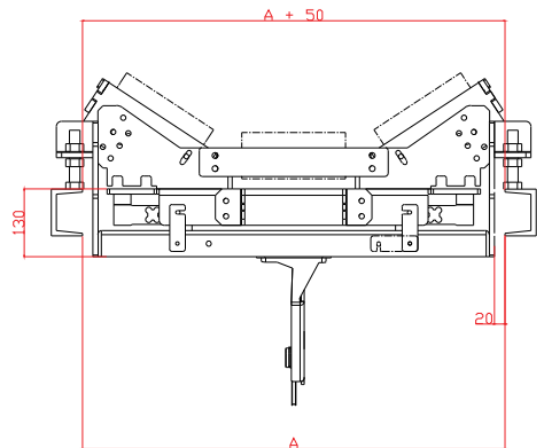
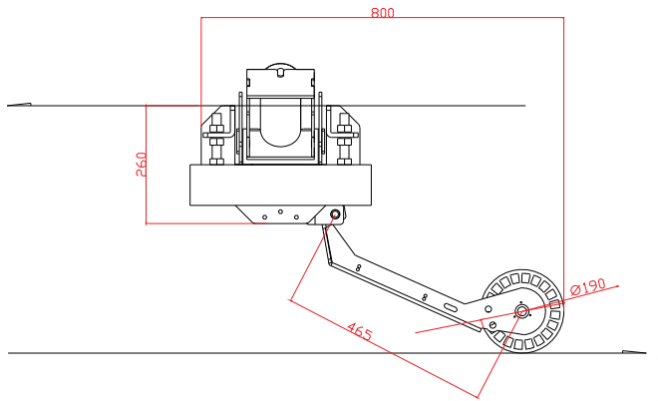
- Weigh quality idler sets with screw adjustment (for precise idler alignment,  $\pm 0.2\text{mm}$ )
- IP65 Cable junction box in 316 stainless steel
- Friction jockey wheel running on return belt

### Operating Principle

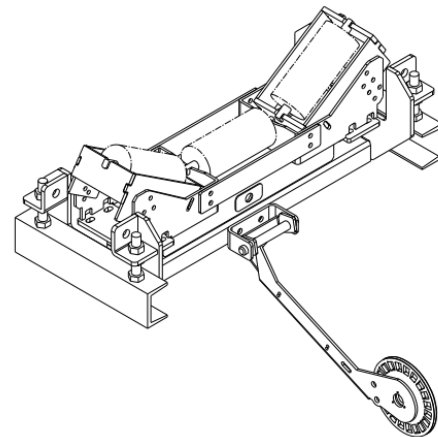
The belt weigher comprises load cells that measure the load on the weigh length while a speed transducer acquires the belt speed. The controller calculates both the instantaneous load and the totalised amount. The BSP.500 features two stainless steel double ended shear beams mounted on each conveyor stringer. The modular design also results in a lighter construction better suited to the working range of the load cells.



# Specifications



**A-internal distance of the conveyor frame 600....1500mm**



# Applications

<b>Belt widths</b>	300 to 1200mm
<b>Accuracy</b>	±1% (subject to installation)
<b>Idler troughing angle</b>	20 to 35°
<b>Belt Speed</b>	0.1 to 3 metres per second
<b>Idler Base Angle Size</b>	50 x 50 to 90 x 90mm angle

# Models & Configuration

Belt Scale	Model	Description	Part Number
	BSP.100	Belt Scale, 100kg capacity with junction box	NS16008A
	BSP.200	Belt Scale, 200kg capacity with junction box	NS16008B
	BSP.500	Belt Scale, 500kg capacity with junction box	NS16008C
<b>Controller</b> (see separate datasheet)	WB 400	WB 400 controller in IP65 Mild Steel control box 220VAC	PS7901
	WF 400	WF400 controller in IP65 stainless steel control box 220VAC	PS7902
	5AN	4-20mA output for WB/WF 400 controller	PS48A1
	PS12	110-240VAC to 12VDC cabinet power supply	PS177A1
<b>Speed Sensor</b>	TDS	Tail drum mounted speed sensor	PS3802
	JWS	Jockey wheel speed sensor	PS1401

All belt scales should be installed in accordance with our recommendations for the planning in of belt scales (NIYANCELL M0002) and the installation and