


Calibration

Belt Length




Press  then enter access code: 7086

>  > *Setup?* > *Cal Menu* > *Scale n* > *BeltLgth*


In a typical conveyor, the weight of the belt will vary along its length. This may be due to repairs, wear or other factors. When the scale zeroes the weight of the belt, the most accurate way to do this is to measure the average weight over one or more complete revolutions.

As such, the Integrator needs to know the length of the belt. The *Belt Length Calibrate* function provides an easy way to measure the belt length. The process is to tell the scale when a known point on the belt passes by (for example, a paint mark or join).

Complete the following:

- 1) Locate a mark on the belt.
- 2) When the selected mark on the belt passes by, press .
The display will increment up showing the length of belt passing by.
- 3) When the selected mark passes for a second time, press .
The display will show the measured belt length (in meters).
- 4) Press  to save the belt length as the **BeltLgth** value.

Zero Calibration

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3.2.1.3. Zero Calibrate (Zero Cal)

>  > Setup? > Cal Menu > Scale n > Zero Cal


The Integrator needs to know the weight exerted by the empty belt. This *Zero weight* (force) is then subtracted from the total weight to calculate the true weight of the load.

- ▶ **Live** – The *Zero Calibration* is done with the belt running empty.

Live Calibration (Live)

The Integrator will take the average of weight values over one or more full revolutions of the belt (as defined by the **BeltLgth** setting). The Integrator uses this average value as the Zero setting.

Set the number of full belt revolutions to measure. For 'long' belts, a setting of **1** is normal. For 'short' belts, use more than **1**. For good accuracy, the 'live' zero calibration should take measurements for at least one minute.

- 1) Make sure the belt is empty and running.
- 2) Press  to start the zero process. The display shows the percentage complete. (The lower line of the display shows the current apparent weight). Pressing any key while the percentage complete is counting up will abort the cycle.

NOTE: With the belt running it is typical for the displayed weight to fluctuate by a small amount above and below **0**. This occurs because of the weight changes of the belt along its length. This is not a problem, but the 'average' value should be **0**.

- 3) Press  when complete. The updated calibration is automatically saved.

Span Calibration

Press  then enter access code: 7086

3.2.1.4. Span Calibrate (Span Cal)


>  > Setup? > Cal Menu > Scale n > Span Cal

The *Span Calibration* function allows the Integrator to determine the relationship between signal from the load cell and applied weight. A zero calibration should be performed before attempting the span calibration.

Live - The span calibration is done with the belt running either with test weights 'hanging' from the scale frame, chains or other method.

Live Calibration (Live)


The Integrator will take the average of weight values over one or more full revolutions of the belt. The Integrator uses this average value to calculate the span setting.

The minimum test weight value is displayed briefly before the test weight value can be entered. The display then calls for the test weight value. The value may be entered using the numeric keypad. Pressing  will confirm the displayed value.

If a test weight is used, it should be hung from the scale frame so that its full weight is applied to the load cell. Alternatively use a roller chain or similar.

Now set the number of full belt revolutions to measure over. For 'long' belts, a setting of 1 is normal. For 'short' belts, use more than 1. For good accuracy, the 'live' span calibration should take measurements for at least one minute.

Make sure the belt is running.

Press  to start the span process. The display shows the percentage complete. (The lower line of the display shows the current apparent weight). Pressing any key while the percentage complete is counting up will abort the cycle. Once the process is complete (percentage reaches 100), the Integrator automatically adjusts its calibration settings.

NOTE: With the belt running it is typical for the displayed weight to fluctuate by a small amount above and below the target. This occurs because of the changes of the weight of the belt along its length.

The Span Calibrate Mode will end and the new scaling factors saved when  is pressed.

Adjust Span

Code: 2217

Enter what Loadrite scale says

Enter what the weigh bridge/known weight is