Loadcells for Web Tension Control



Web Tension measurement is achieved by strain gauge loadcells, either a narrow web roller loadcell mounted in the path of the material being processed or compressive cells fitted in a swinging arm mechanism.

The narrow web transducer combines a bearing mounted idler roller and two tension sensing elements in a single package. It measures tension in the moving web of material.

The loadcell is very accurate and not affected by material position because the sensing elements are located at each end of the roller.

The sensing elements measure total web tension regardless of the web position on the roller.

The loadcell is available in three widths up to 14", with load ranges from 5Kgs, 10Kgs, 20Kgs and 50Kgs or equivalent imperial loads. Mounting is via a single bolt or flange with four bolts.

The loadcells may be fitted direct to the machine or in conjunction with the TSC range of tension control mechanical systems.

Applications

Input unwind, intermediate and rewind of web tension for rotary die cutting and setting of web tension for the laminating and print registration in label manufacture, medical and automotive products and coil winding.

Compressive loadcells are usually employed in swinging arm or similar mechanical layouts where it is not possible to fit the roller loadcells.

These loadcells can give higher sensitivities than roller types typically 0.2Kgs to 10Kgs requiring a more complex mechanical arrangement, but giving a wider dynamic range with operator adjustment.

Specifications

 $\begin{array}{lll} \mbox{Accuracy:} & \pm 0.5\% \mbox{ of FSD} \\ \mbox{Repeatability:} & \pm 0.25 \mbox{ of FSD} \\ \mbox{Temperature Coefficient:} & 0.2\% \mbox{ of FSD/deg F} \\ \end{array}$

Excitation: 5 Volts Roller Diameter: 3.50"

We reserve the right to change specifications as deemed necessary with continuous improvement

NAMAS Calibration Traceability on all Products and Services





Torque Systems

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Electronic Manufacture

Web Tension Control