"Furnace Strip Tension Measurement Unit"

**FEATURES**
- For strip tension measurements in a continuous furnace
- Accuracy better than 0.1% of the maximum strip tension
- Non sensitive to thermal expansion of the deflecting roller
- Non sensitive to side load forces
- Based around standard KIS loadcells, low spare part cost
- Easy maintenance and calibration
- Custom design adapted to existing bearing blocks, no need of adapter plates

**APPLICATIONS**
- Strip tension measurement in continuous furnaces for hot galvanizing lines and annealed lines

**DESCRIPTION**
The PST has been specially designed for strip tension measurement into a continuous furnace for high accuracy at both maximum and minimum tension.

The PST tensiometer is using four standards KIS load cells into a specific arrangement which makes the PST tensiometer totally non sensitive to axial forces and bending moments induced by the deflecting rollers due to high thermal expansion.

**OUTLINE DIMENSIONS**
What ever is the profile of the strip tension on the measuring roller, what ever is the mechanical mounting of the measuring roller on the new or existing furnace, the PST will be mechanically adapted to the customer application.
Furnace Strip Tension Measurement Unit

APPLICATION EXAMPLE

Tensiometer PST-80 kN under a furnace roller

SPECIFICATIONS

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>20, 40, 80, 120 and 200 kN</td>
</tr>
<tr>
<td>Accuracy error/repeatability</td>
<td>Better than 0.1% RO</td>
</tr>
<tr>
<td>Accuracy error/repeatability (with one dummy load cell)</td>
<td>Better than 0.5% RO</td>
</tr>
<tr>
<td>Input voltage, recommended</td>
<td>5–10 VDC or VAC</td>
</tr>
<tr>
<td>Input voltage, maximum</td>
<td>18 VDC or VAC</td>
</tr>
<tr>
<td>Rated output (RO)</td>
<td>2 mV/V</td>
</tr>
<tr>
<td>Temperature range</td>
<td>–40 to +80°C (100°C available as option)</td>
</tr>
<tr>
<td>Electrical connection</td>
<td>Shielded four conductor cable or connector</td>
</tr>
<tr>
<td>Materials</td>
<td>Load cells stainless steel, mechanics yellow chromate zinc plated or stainless steel</td>
</tr>
</tbody>
</table>

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