A large US manufacturer of roofing shingles has successfully installed Pressductor® PillowBlock load cells in their process lines.

The Pressductor® PillowBlock load cells provide accurate web tension measurement and improve product quality.

**What has been achieved?**

The maintenance operations supervisor had the following comments:

“ABB load cells are very robust and they can really take the harsh environment in our tough production process. The Pressductor load cells, certainly a really good and reliable product, have been running for two years now in our process lines without any problems. Eventually we will replace the load cells in the other Roofing factories.

The Pressductor load cells operate consistently and the repeatability is very good. They react very fast, they have a fast step response and there is no calibration needed. Also, there is no maintenance with ABB tension measurement systems, a real benefit!

Tension electronics PFEA 113 works very well and is easy to operate. You just push the button and you zero it, as simple as that!

Something we really appreciate is that the tension system follows the pre-set target tension level in a perfect way.

In the hot section of the process line there is a "slippery" part where the tension system is compensating in order to reach the perfect tension. This function works just perfect!

During installation it was easy to fit the load cells into the alignment. We only had to align the rolls.

Altogether, with Pressductor tension measurement systems ABB has helped us to get better.”

**Supplied equipment**

ABB Force Measurement has supplied Pressductor PillowBlock Load Cells, Mini-PillowBlock Load Cells and PFEA tension electronics.

”With Pressductor tension measurement systems ABB has helped us to get better”
**ABB PillowBlock load cells with Pressductor® Technology**

ABB’s Pressductor® load cells are sensitive and accurate yet rugged, reliable and compact. They can withstand high overloads and vibrations, and operate over a wide range of tensions. With more than 80,000 load cells delivered since 1963 they have been proven ideal for any web converting application such as coating, laminating, printing, slitting winding/unwinding and many others.

The well-proven Pressductor® load cells combined with the tension electronics, offer a user-friendly web tension measurement system with superior long term performance leading to higher productivity and product quality and higher profit for the converter.

<table>
<thead>
<tr>
<th>Properties</th>
<th>PillowBlock</th>
<th>Mini PillowBlock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating principle</td>
<td>Pressductor® Technology</td>
<td></td>
</tr>
<tr>
<td>Load cell material</td>
<td>Stainless steel</td>
<td></td>
</tr>
<tr>
<td>Nominal load</td>
<td>0.5 – 20.0 kN</td>
<td>0.1 – 1.0 kN</td>
</tr>
<tr>
<td></td>
<td>112 – 4500 Lbs</td>
<td>22 – 225 Lbs</td>
</tr>
<tr>
<td>Overload capacity</td>
<td>500% of nominal load</td>
<td>300% of nominal load</td>
</tr>
<tr>
<td>Working temp range</td>
<td>-10 to +105°C</td>
<td>-10 to +80°C</td>
</tr>
<tr>
<td></td>
<td>+14 to +221°F</td>
<td>+14 to +176°F</td>
</tr>
</tbody>
</table>

**Contact us**

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