Measurement Products

Printing houses worldwide take benefit from DCOS Sweden’s professional productivity projects and ABB’s accurate tension measurement systems

Measurement made easy

To fulfil the company motto “Productivity in printing”, DCOS Sweden in Kinna, Sweden emphasizes that one of the most important customer requirements in the printing business is accurate and consistent web tension measurement.

All DCOS deliveries of web tension products includes ABB’s Pressductor Radial Tensiometer Load Cells (PRT load cells) providing accurate web tension measurement and control to printing houses worldwide.

Background
Newspaper production is globally facing major challenges; declining circulation, excess capacity, profitability and an uncertain future. Investment bands for the new press will most likely be extended. At the same time the utilization of many printing presses increases as a result in gaining efficiency. The requirements for profitability, quality and production stability remain.

Productivity in printing is DCOS Sweden’s watchword. That they stand for and that they realize.

"ABB has delivered PRT load cells and PFEA tension electronics to DCOS since the company start in 2004", comments Maria Turesson.

"The printing houses need stable web tension control, they certainly get it through the combination of ABB’s robust and accurate load cell measurement together with DCOS’s drive and control regulation."
What are your comments on the ABB load cells?

We asked Andreas Andersson, Product Manager and Maria Turesson, Purchase & Administration at DCOS.

"In general, our customers want their printing presses to be up and running all the time; High availability is very important in the printing business. With ABB load cells there has been an absolute minimum of disruption. That is very good!

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PFEA-electronics, going together with the load cells, is easy to operate, easy to zero-set and easy to program.

With ABB tension system the printing houses have perceived a real quality increase in their printing processes and the web tension control are very smooth and even.

Speed is also a very important factor in the offset printing process and over the years we have seen that the ABB load cells are working very well in high speeds. Old idlers in the printing press can sometimes be quite “jumpy”. Then it is important with accurate web tension measurement and a control loop that can compensate the tension variations. ABB load cells are doing a great job in this matter."

More benefits:
- Setting the unwinding unit at an optimal value is made easy with ABB load cells
- Also, stretching the material in the flexo printing presses is made easy with ABB load cells

Supplied equipment

ABB Force Measurement supplies PRT load cells to around 15 complete offset printing presses per year, mainly to the in-feeder and out-feeder sections of the machine.

Average number of load cells used per printing press: 4-16 load cells.

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<tr>
<th>Data for offset printing press</th>
<th>120 m/sec</th>
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<td>Max speed of the web in an offset printing press</td>
<td>120 m/sec</td>
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<td>ABB load cells installed in DCOS’s customer printing presses</td>
<td>Pressductor Radial Load Cells (PRT), models PFRL 101A and PFRL 101B</td>
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