

Web tension with FMU and G4

Application: Force Measurement

Industry Sector(s): Paper & Pulp

The Customer

The customer is a major paper producer operating in Sweden.

Customer Inquiry

The customer wanted to improve production in three sections of its paper machine. The first project was to replace old load cells/web tension units in the dry section of the machine. The existing web tension units were not handling temperature fluctuations well and therefore not measuring web tension accurately.

In the wet section of the paper machine, the customer wanted to add more web tension units in the wire and felt section to get better control of web tension. This was necessary to meet the recommended web tension set by suppliers of other parts to the machine and to avoid having high web tension which causes increased wear and tear and ultimately more downtime.

Paper drift from side to side was also a major problem for the customer, causing paper to be produced wider than necessary in order to compensate. The extra margin would be trimmed and the trimmed paper scrapped. So it was desirable to add more web tension measurement to get better control and avoid this waste.

Solutions and Equipment

We supplied the G4 instrument with force measurement software, FMU, and other special load cells to measure web tension. After testing our products, the customer decided to use our equipment in the whole machine and dropped a competitor's web tension measurement units. Among the advantages of the G4 were the multi-channel options that allowed the customer to measure and compare the tension on several points, such as the tender and drive side. The G4 also gives them the flexibility to add channels later. Together with the KIS load cell, the customer found our G4 solution was very easy to install and set up.

Key Features:

- Insensitive to temperature changes
- Multi-channel instrument

BLH / Nobel Weighing Systems
Brands of VPG Process Weighing



Figure 1: G4 and FMU-1

Customer Comments

“With the quality of Nobel KIS load cell, FMU and the flexibility in number of channels for the G4, we save a lot of production downtime and unexpected stops. Each unexpected stop is very costly since it holds up the entire production of paper. The G4 gave us options in terms of how many places we could measure the web and compare sides.”

“The combination of an accurate sensor, insensitive to temperature changes, in combination with the G4 instrument gave us an optimal solution”

Click here to open web version: <http://www.vishaypg.com/process-weighing/case-study/41007/>

(web version offers further leading hyperlinks to up to date Product Datasheets, other Related Documents like Manuals, Brochures, possibly videos, or many more)

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