

## Lindauer Dornier, Germany has successfully installed Pressductor Radial Tensiometer Load Cells (PRT load cells) in their film stretching machines

All film stretching machines from Lindauer Dornier are running with PRT load cells providing an accurate web tension measurement



### What has been achieved?

We ask the responsible design engineer at the department Special Machines, Mr. Armin Nickman:

"The reason for installing PRT load cells from the beginning was to control and improve the film tension measurement and speed control in our film stretching machines. This has turned out very well and as a consequence we have achieved the following:

- The ABB load cells deliver very stable tension measurement over time
- Our customers, the end-users, believe in Lindauer Dornier's extensive experience with ABB load cells. We convince the end-customers that ABB load cells are the best
- We feel confident with ABB and its robust web tension systems
- In general, concerning tension measurement load cells in Lindauer Dornier machines, ABB is our standard"

"ABB is our standard"

From aircraft to weaving and film stretching machines: Engineering expertise with passion  
Aircraft manufacture was completely forbidden in Germany by the Allied Forces, which forced the worldwide renowned aircraft manufacturer Dornier to look for a new field of activity after the war. The result was textile machines, initially shuttle weaving machines.

The Lindauer DORNIER GmbH was then founded in 1950 after moving to the main company location in Lindau-Rickenbach.

The first machines were shuttle weaving machines and drying plants for the Paperboard, paper and gypsum fireboard industry and new modern applications extended the range. Film stretching machines were also added later.

The introduction of rapier weaving machines in 1967 set the stage for the company's advancement to being the largest German weaving machine manufacturer with an excellent international reputation. Air-jet weaving machines were added to the product line in 1989. Dornier achieves around 70% of its overall turnover with the system family comprising rapier and air-jet weaving machines.

A patented circular expander set new quality standards for textile finishing machines used in processing circular knit goods. Dornier is a market leader in plastic film production plants.

Today, Lindauer DORNIER GmbH, with 1200 employees in three factories, exports 90% of its products worldwide. (For more information, visit [www.lindauer-dornier.com](http://www.lindauer-dornier.com))

### Supplied equipment

In the last four years ABB Force Measurement has supplied 71 Pressductor Radial Tensiometer Load Cells (PRT load cells model PFRL 101D) and 28 Control Units to almost 30 running installations at Lindauer Dornier customer sites worldwide.

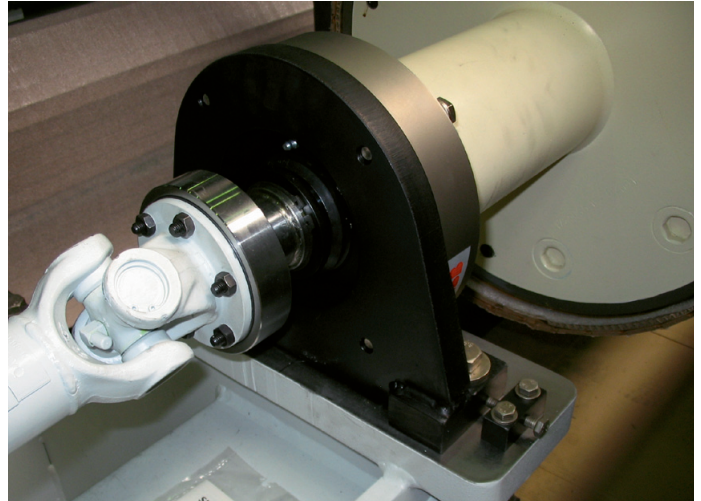
#### Data for film stretching machines

Complete film production lines for BOPET (biaxially-oriented polyester) or BOPP (biaxially-oriented polypropylene) film

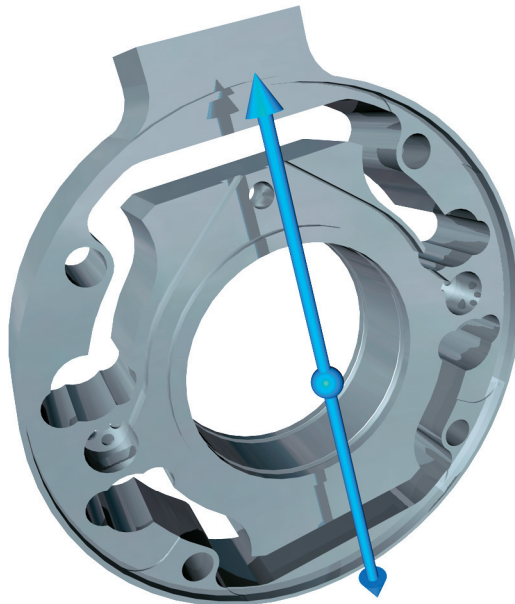
Film width	up to 9000 mm
Film thickness	up to 350 $\mu$ m
Film speed	up to 550 m/min
ABB load cells installed, especially in the Take-up transfer units for film tension measurement and speed control	Pressductor Radial Tensiometer Load Cells (PRT), model PFRL 101D

Pressductor Radial Tensiometer Load Cells (PRT load cells) installed in film stretching machines from Lindauer Dornier.

No matter what the wrap angle is or where the measurement roll is located on the machine, the PRT load cell is simply rotated to pick up the ideal measurement force component.



An ABB PRT load cell (Pressductor Radial Tensiometer Load Cell) mounted at the first roll of a Take-up transfer unit in a film production line.



### Contact us

#### ABB AB

Force Measurement

S-721 59 Västerås, Sweden

Phone: +46 21 32 50 00

Fax: +46 21 34 00 05

Internet: [www.abb.com/pressductor](http://www.abb.com/pressductor)

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