ANDRITZ Küsters Nonwoven

Technical Center

nonwoven excellence

ANDRITZ Küsters Technical Center

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- Textile calender
- Wetlaid / wetlace pilot line

ANDRITZ Küsters Technical Center

Equipment

With the installations at our Technical Center, we stand as your partner for developing own products and production technologies.

Besides calenders and wet finishing units with individual configuration options, ANDRITZ Küsters also has a complete wetlaid / wetlace laboratory line.
Additionally our Technical Center has a new textile calender concept, the texcal trike.

A team of competent process engineers would be pleased to support you.

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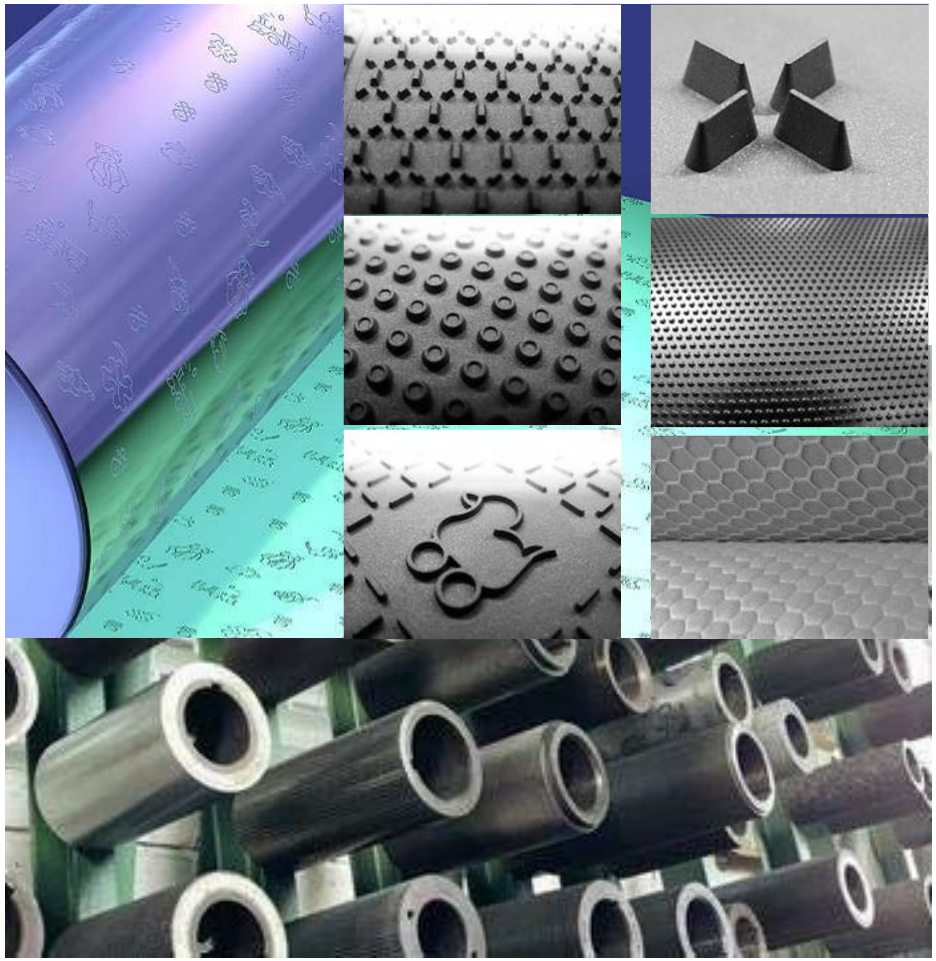
Calenders and rolls

In Krefeld three pilot calenders (300 mm roll width), an ultrasonic laminating calender (300 mm roll width) and one production calender (2000 mm roll width) are currently available on a surface area of over 600 square metres, plus a large selection of engraved, smooth and elastic rolls.



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Nonwoven calenders

Our technical center comprises of 4 different pilot calenders for nonwoven and textile applications:

- 3 roll laboratory calender (1)
- 3 roll laboratory calender (2)
- 2 roll laboratory calender
- ultrasonic laboratory calender

Various roll combinations and configurations can be applied.

Nonwoven calenders

Fields of application

- embossing (e.g. wipes)
- calibrating (e.g. meltblown)
- laminating (e.g. roofing material, filter)
- thermobonding
- perforating (e.g. top-sheets)
- compacting (e.g. wetlaid)
- comparison between thermal and ultrasonic laminating

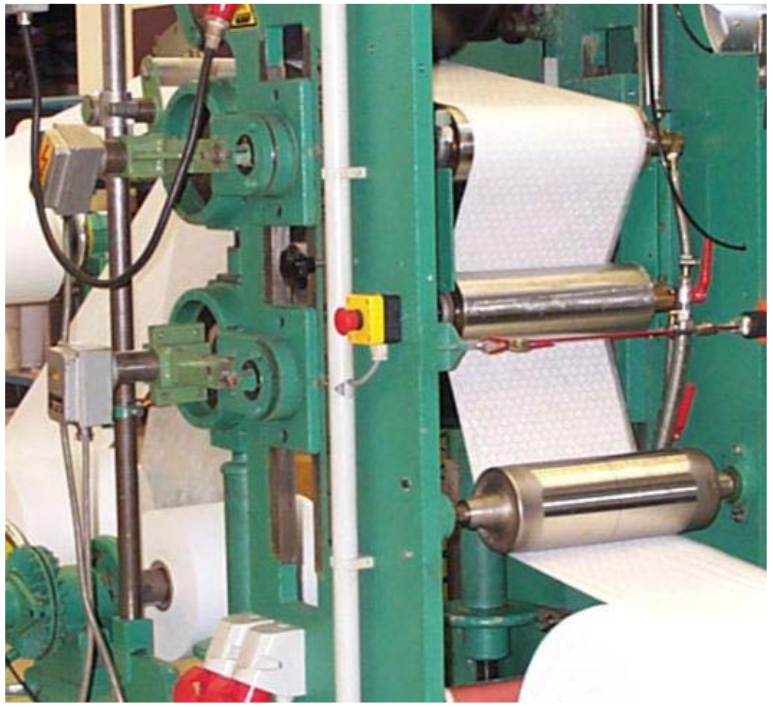
3 roll laboratory calender (1)

Basic trials and pilot production

- roll width: 300 mm
- max. web width: 280 mm
- V max: 300 m/min
- PL: 10 – 320 N/mm
- T max: 350° C
- main applications: basic trials and pilot production

3 roll laboratory calender (1)

Laminating and embossing of wipes in one step



3 roll laboratory calender (1)

Perforating

3 roll laboratory calender (2)

Special applications

- roll width: 300 mm
- max. web width: 280 mm
- V max: 250 m/min (500 m/min with external batching)
- PL: 10 – 400 N/mm
- T max: 350° C
- main applications: special applications (high temperature compaction of e.g. aramid)

2 roll laboratory calender

Basic trials with engraved shells

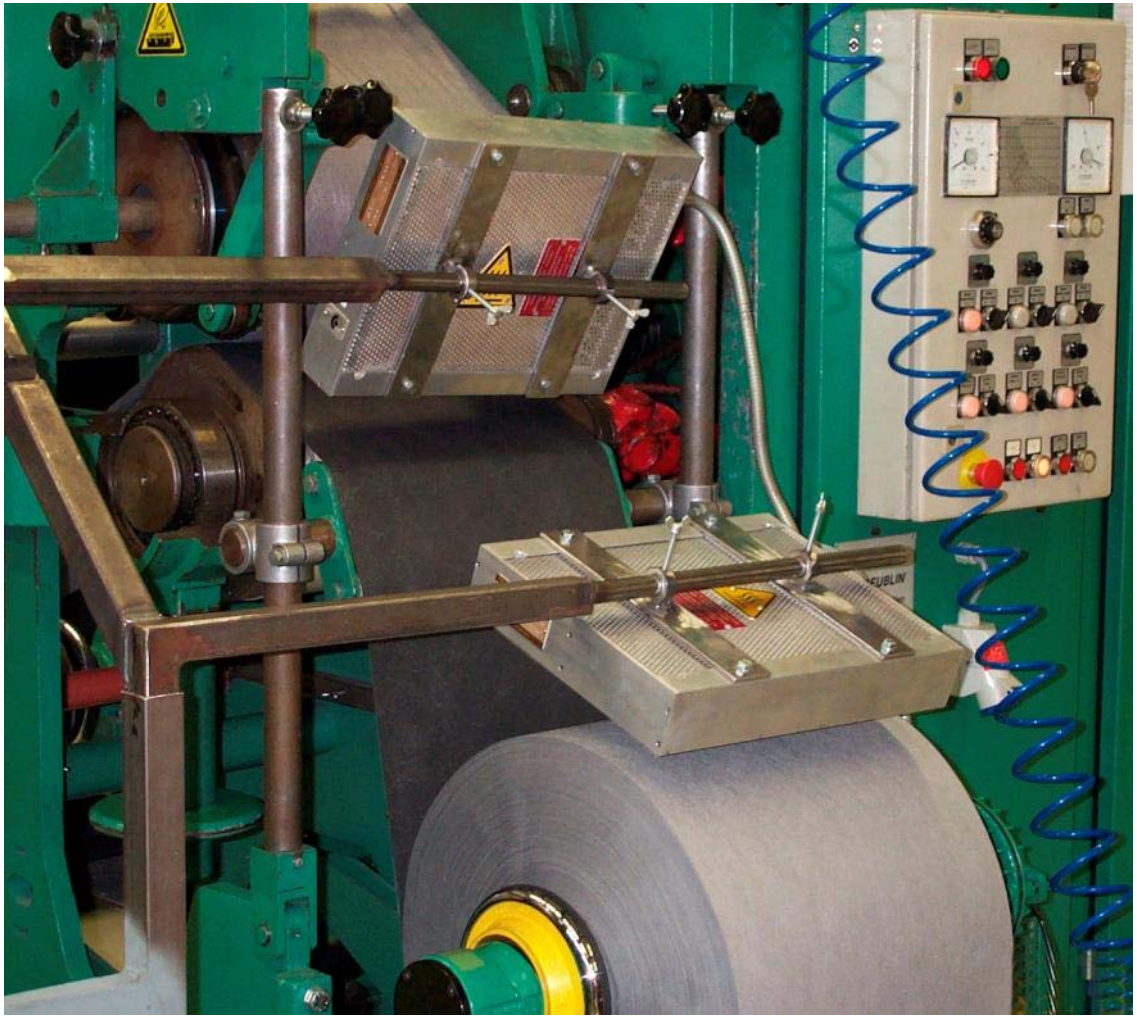
- roll width: 300 mm (rolls and engraved shells applicable)
- max. web width: 280 mm
- V max: 80 m/min
- PL: 10 – 320 N/mm
- T max: 350° C
- main applications: basic trials with engraved shells
- friction drive: up to 300%

2 roll laboratory calender

Embossing of wetlaid (coffee filter)

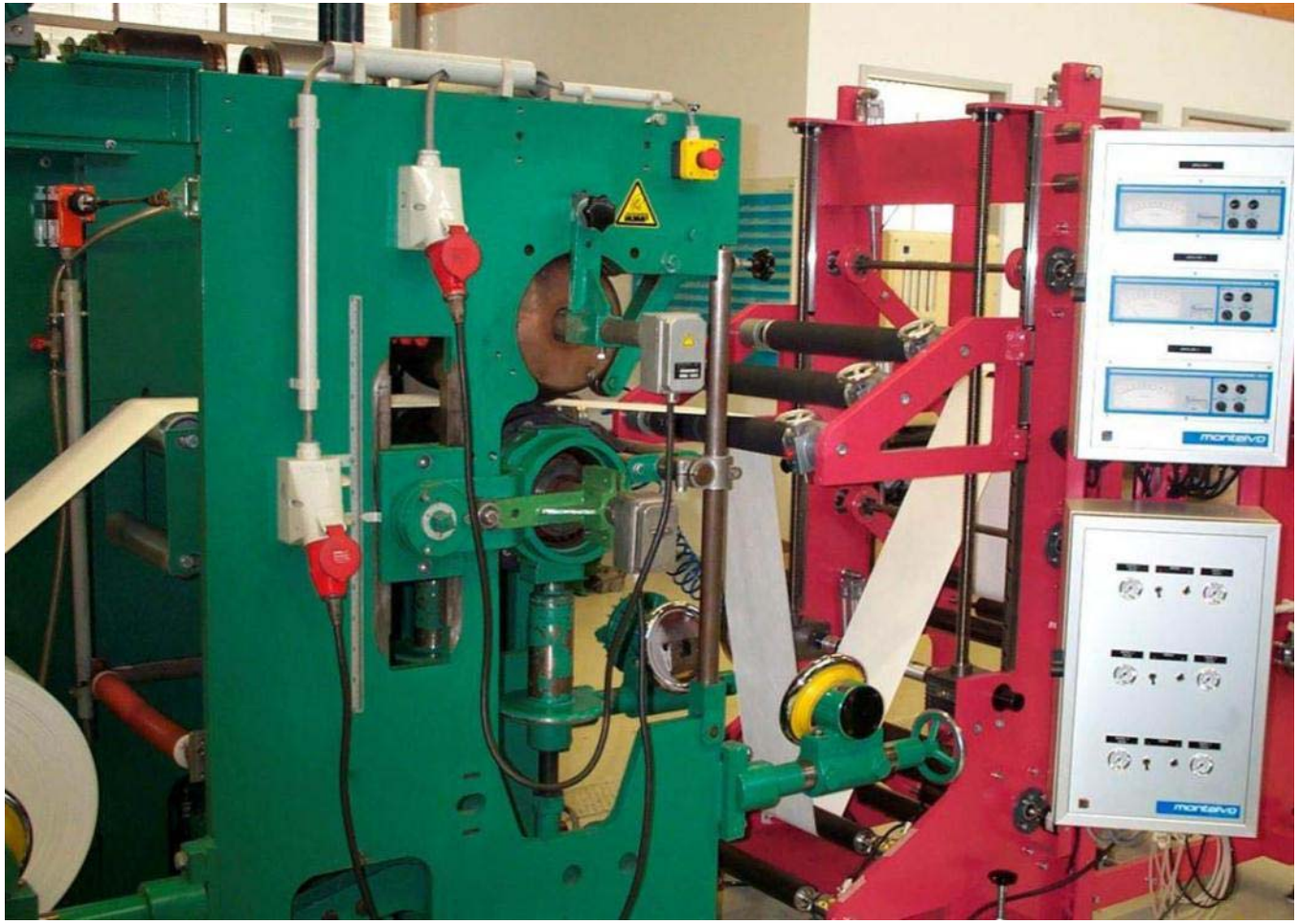
2 roll laboratory calender

Basic trials: laminating of spunbond



2 roll laboratory calender

Prototype production: calibrating of PBT meltblown



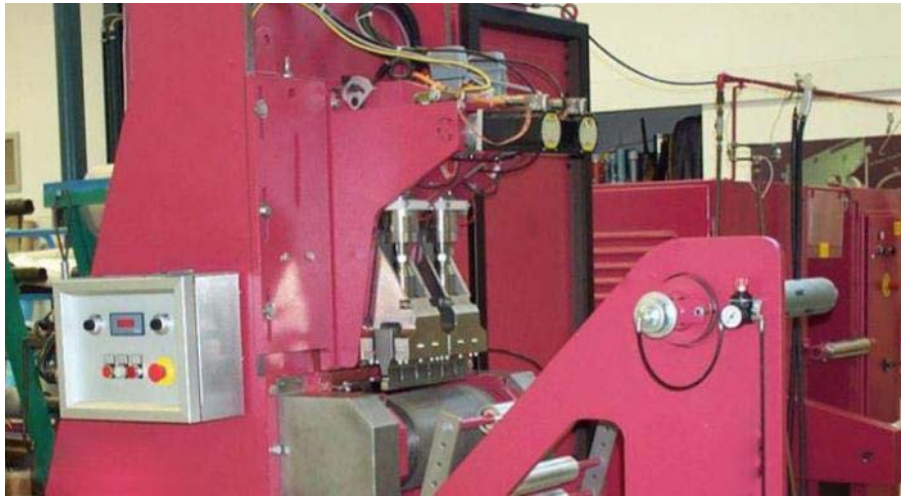
2 roll laboratory calender

compacting of film under “cleanroom conditions”

Ultrasonic laboratory calender

Laminating

- roll width: 300 mm
- max. web width: 300 mm
- V max: 300 m/min (mechanical)
- main applications: laminating



New textile calender concept

texcal trike

- State-of-the-art texcal trike production calender (2,000 mm surface width)
- for the production of delicate, technical textiles with very high density
- 3-roll calender with S-Roll, Xpro Roll and heated steel roll in a triangular roll arrangement
- extremely flexible production
- absolute flatness, air permeability, and defined thickness profiles

Wetlace pilot line

nexline wetlace

Wetlace pilot line (300 mm width):

- pulper
- vats for two layers
- a headbox with distributor
- inclined wire dewatering section
- hydroentanglement
- a six-cylinder dryer
- including winder

The components are on a rail system so that they can be configured in different arrangements.

Wetlace pilot line

nexline wetlace

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