



PAMA
paper machinery

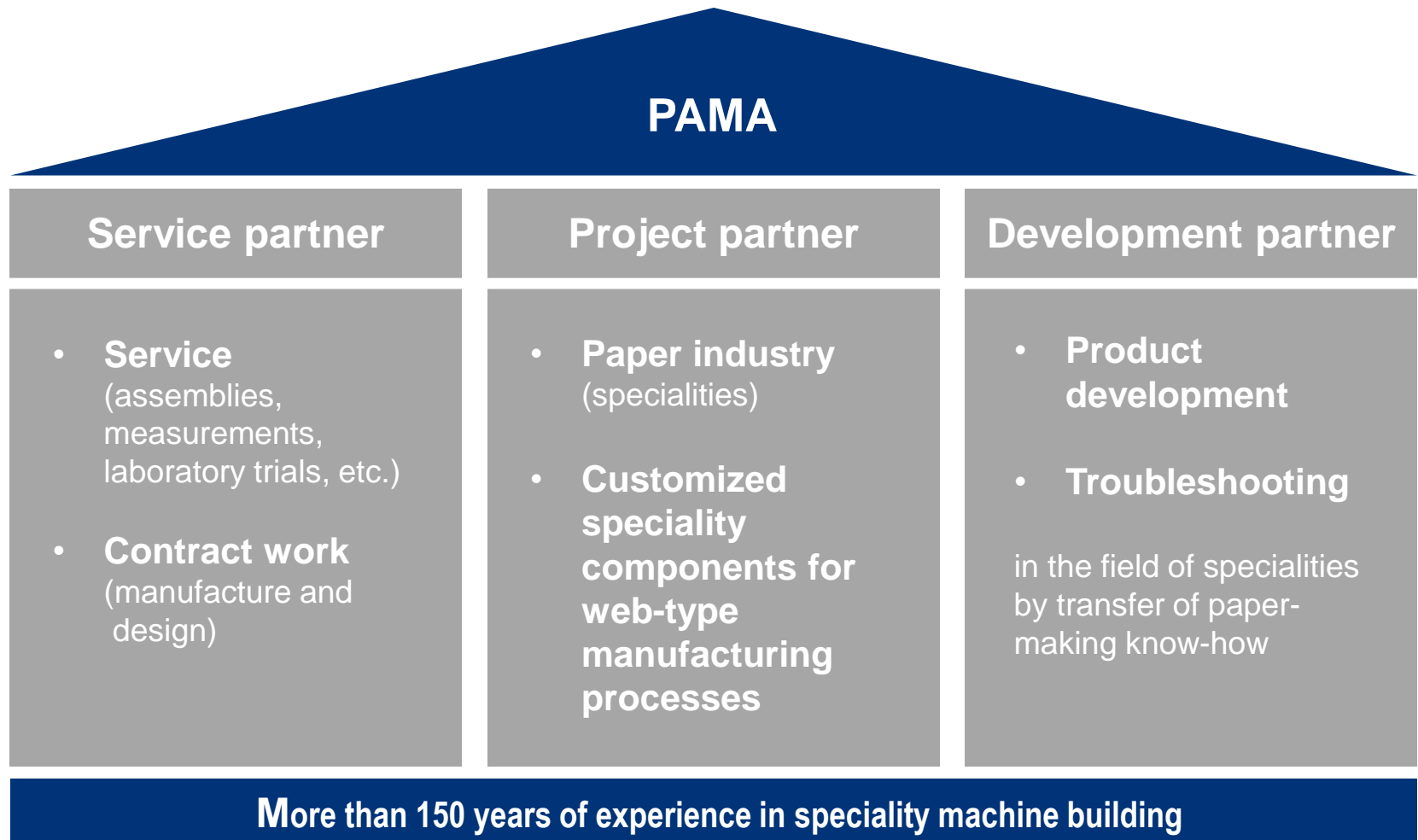
PAMA paper machinery GmbH

**PAMA products
- Summary -**

01.12.2020

customized technology

www.pama-papermachinery.com

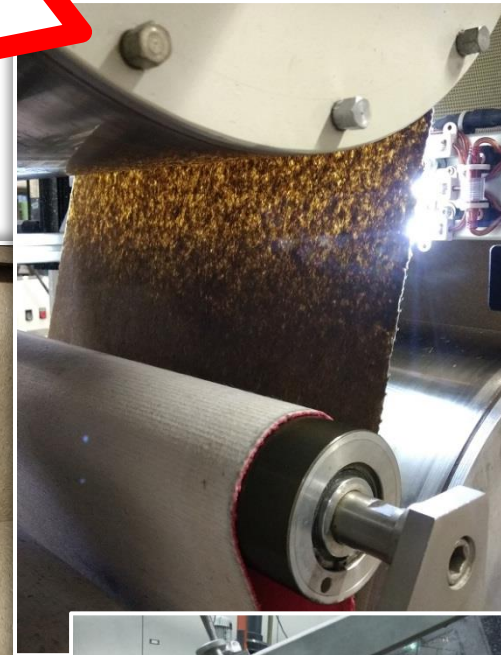


PAMA paper machinery GmbH

Product development

PAMA
paper machinery

NEW



PAMA paper machinery GmbH

Range of products and services



- **Machine components**
for the production of speciality paper and non-wovens
- **Speciality paper machines**
PAMA as supplier of complete plants
- **Equipment for web-type production processes**
Transfer of paper making know how to manufacturing processes of web-type products
- **Service**
in the fields of design and development, project management, engineering, technological design, service, spare parts
- **Contract work**

- **Machine components**

for the production of speciality paper and non-wovens

- **PAMA head** – headbox systems, e. g. high turbulence hb based on lamella technology
- **PAMA top** – practice-proven former concepts
- **PAMA inwi** – advanced inclined wire technology
- **PAMA load** – tailor-made press sections
- **PAMA film** – film press metering unit based on diffuser technology
- **PAMA blade** – coater unit based on diffuser technology
- **PAMA guide** – rope-free threading systems supported by air and vacuum
- **PAMA reel** – process reliable winding

- **Speciality paper machines**

PAMA as cooperation partner for complete plants

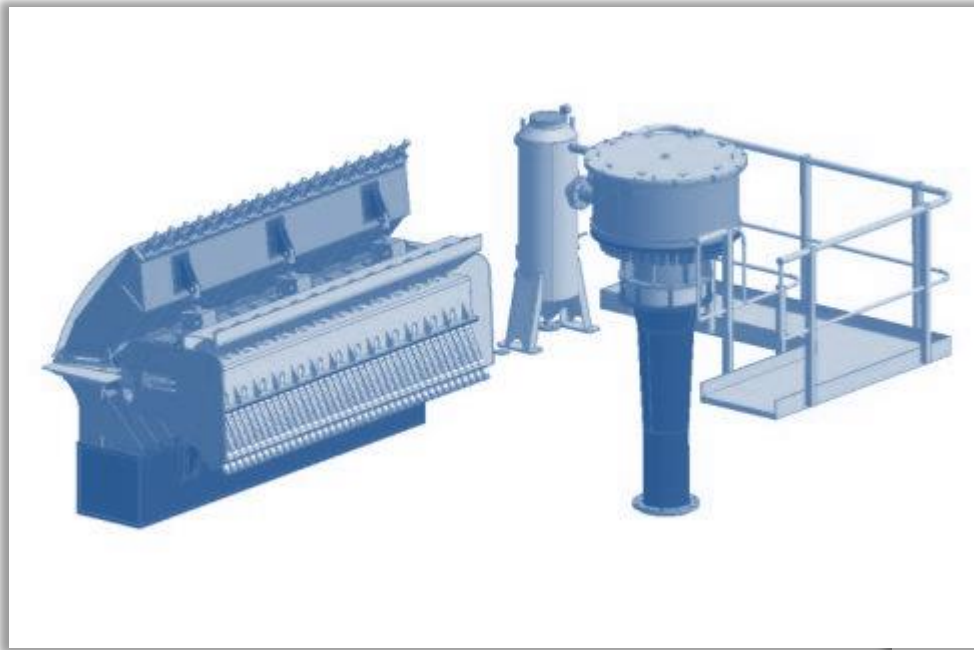
- Inclined wire machines
- Cylinder vat machines
- Transformer board machines
- Pilot paper machines

- **Equipment for web-type production processes**

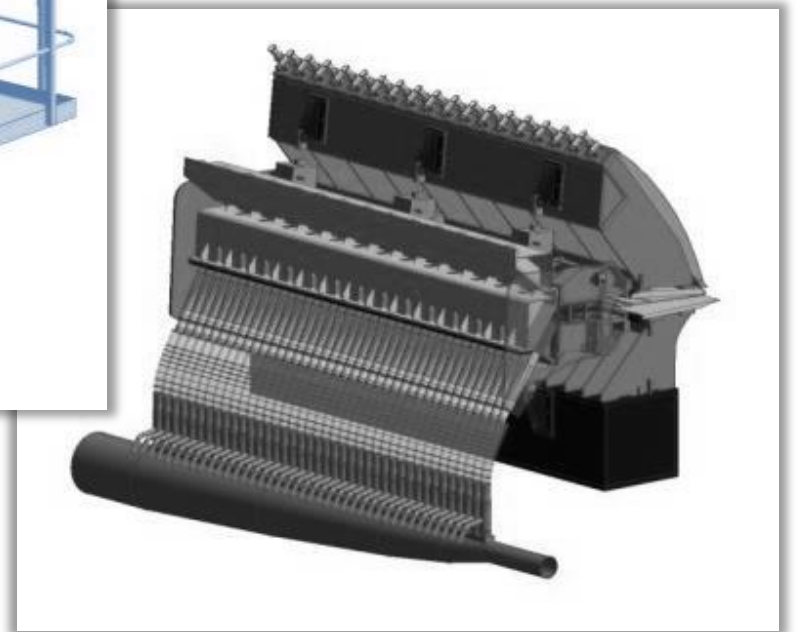
Transfer of paper making know how to the manufacturing process of web-type products

Machine components

Headbox systems **PAMA head**

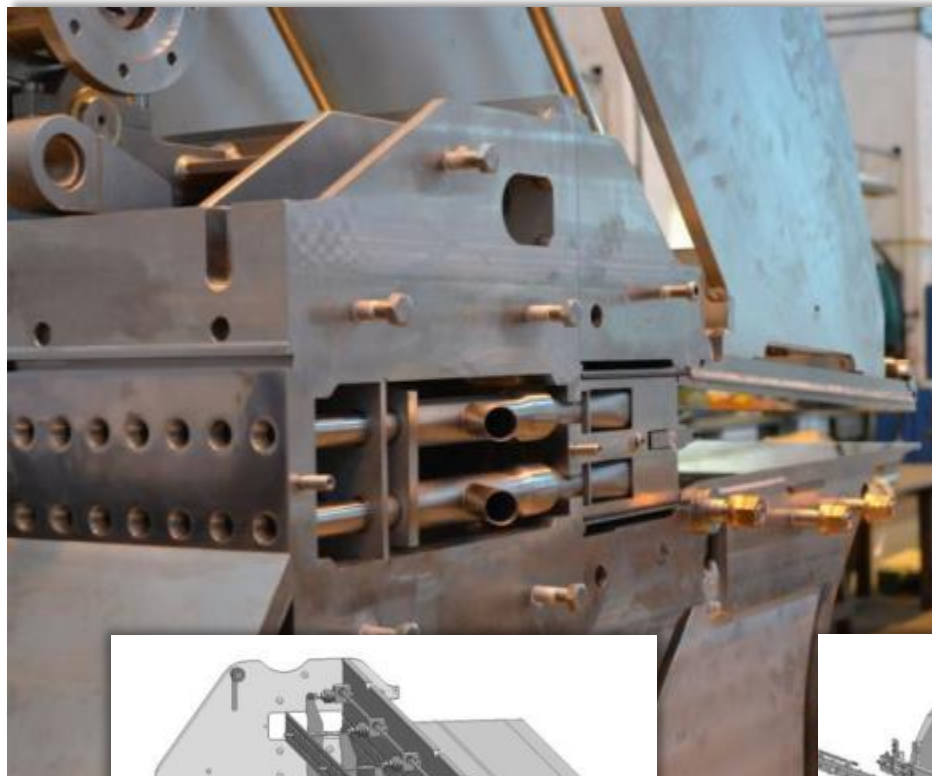


Stock supply
by radial flow distributor or manifold



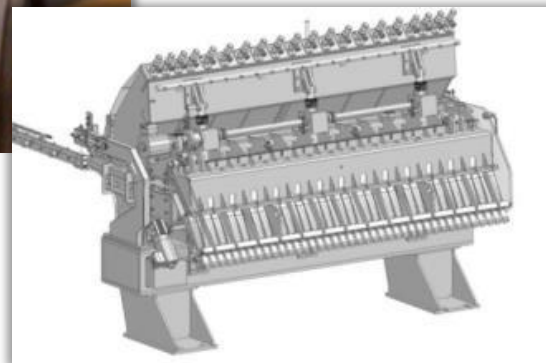
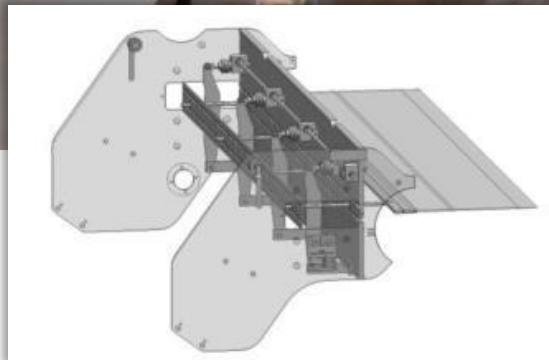
Machine components

Headbox systems **PAMA head**



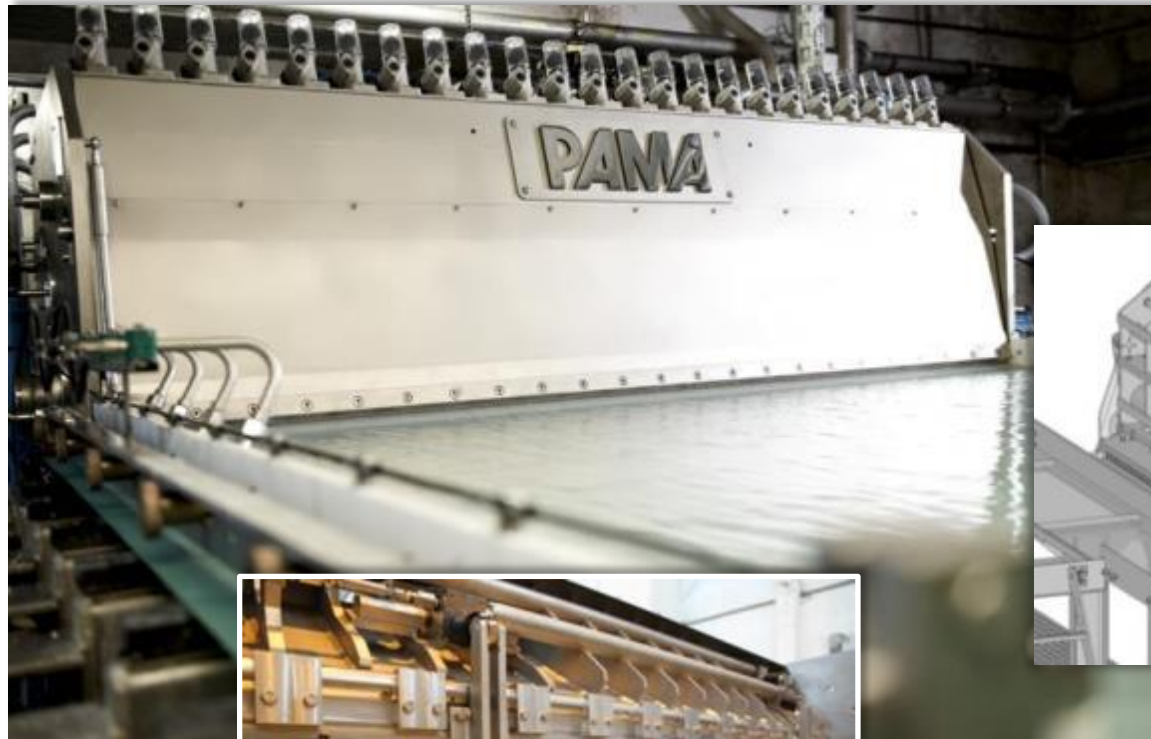
- Packaging paper
- Slice width = 2,600 mm
- $v = 350 \dots 800 \text{ m/min}$
- $m_A = 110 \dots 270 \text{ g/m}^2$
- Sliding lamella
- Variable jet geometry
- Dilution water technology

High turbulence headbox

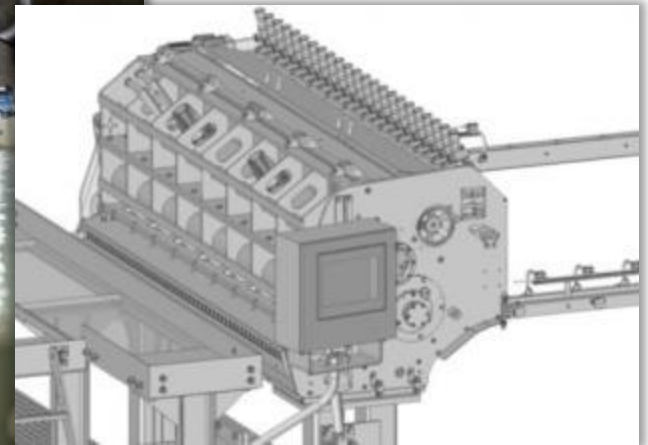


Machine components

Headbox systems PAMA head



Rectifier roll-type headbox



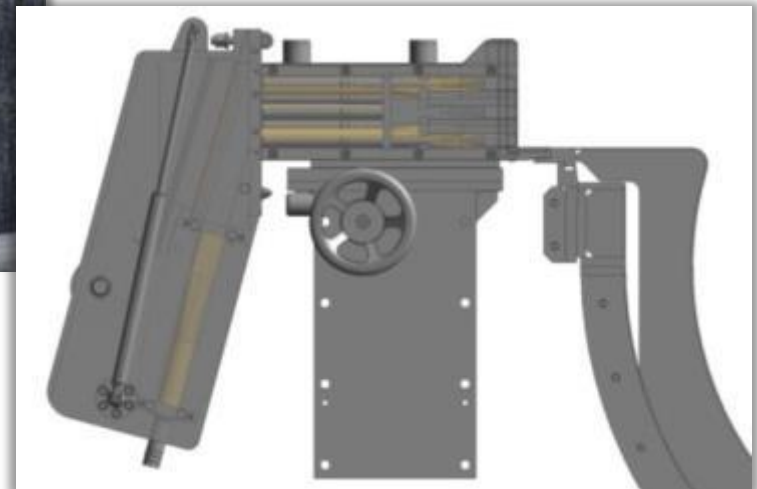
- Highly beaten Paper
- Slice width = 2,200... 3,500 mm
- $v = 90 \dots 220$ m/min
- $m_A = 25 \dots 400$ g/m²
- Good formation at low volume flows

Machine components

Headbox systems PAMA head



- Banknotes with thread guide
- Cotton, linters, security fibres
- Slice width = 800... 2,200 mm
- $v = 30 \dots 120 \text{ m/min}$
- $m_A = 70 \dots 120 \text{ g/m}^2$
- With diffuser technology to achieve an optimum cross profile and a large basis weight range



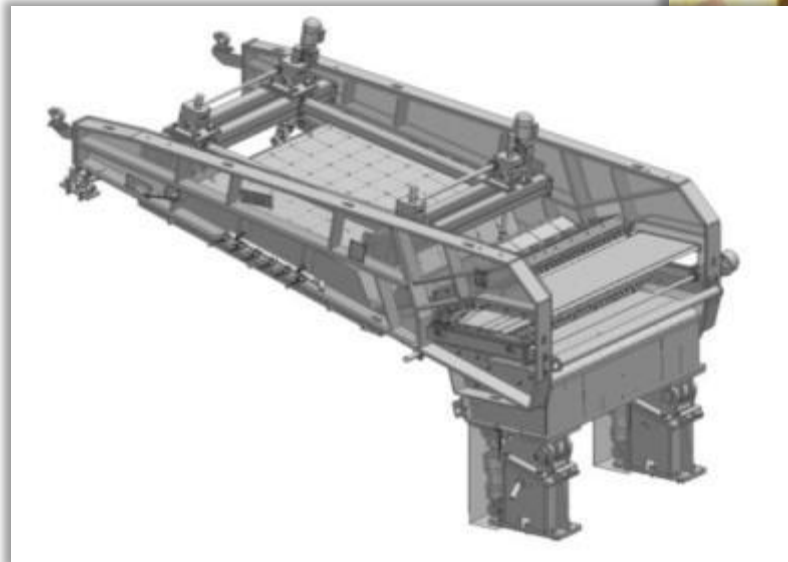
Inlet part of cylinder vat unit

Machine components

Headbox systems **PAMA head**



- Filter non-wovens, tea bags, self adhesive, automotive filtration
- Slice width = 500... 3,500 mm
- $v = 20 \dots 400 \text{ m/min}$
- $m_A = 8 \dots 300 \text{ g/m}^2$
- Single layer, multi-layer



Inclined wire headbox

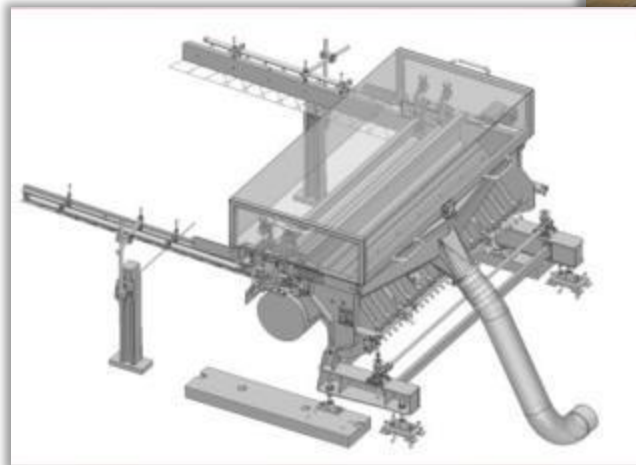
Machine components

Headbox systems **PAMA head**

- Filter plates
- Slice width = 1,500... 2,000 mm
- $v = 4 \dots 6 \text{ m/min}$
- $m_A = 90 \dots 1.600 \text{ g/m}^2$
- For low speeds and low volume flows



Lath headbox

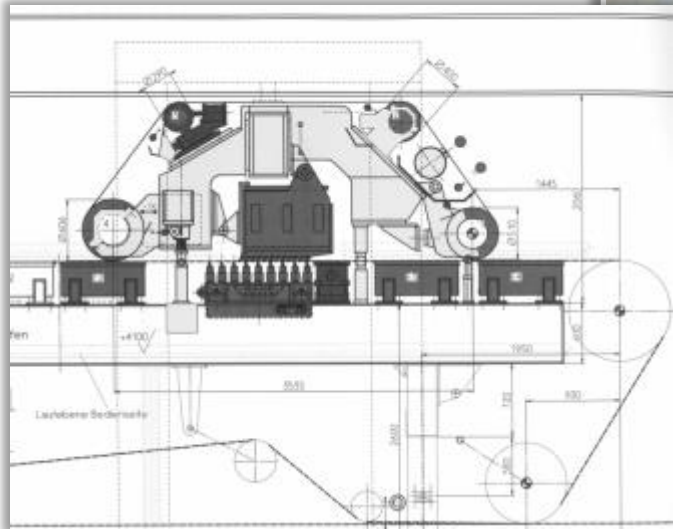
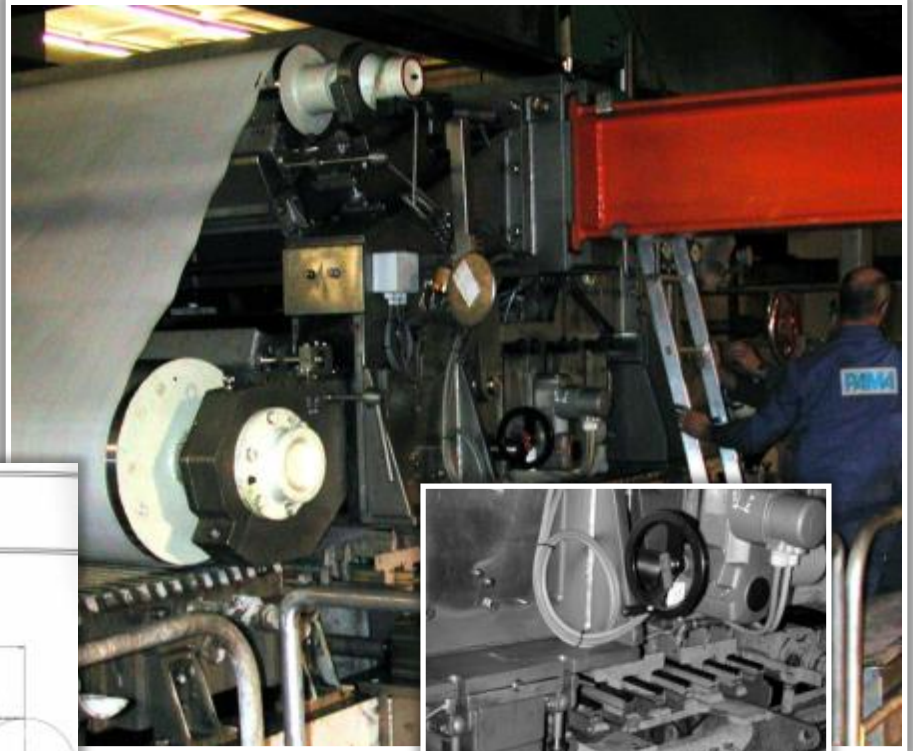


Machine components

Former PAMA *top*



- Duplex board, boxboard
- Web width = 3,500... 4,100 mm
- $v = 50 \dots 600 \text{ m/min}$
- $m_A = 120 \dots 500 \text{ g/m}^2$
- Improvement of formation
- Reduction of two-sidedness
- Increase of dewatering capacity

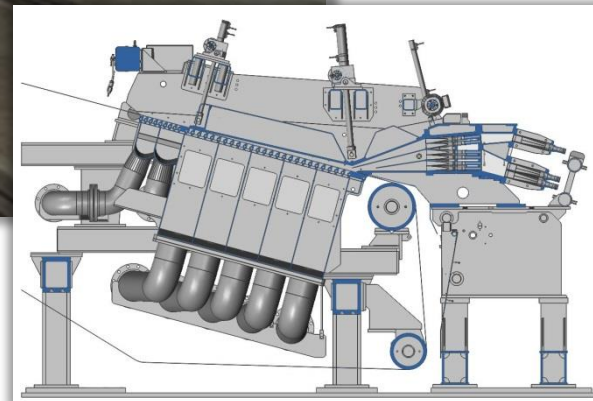


Machine components

Inclined wire PAMA *inwi*



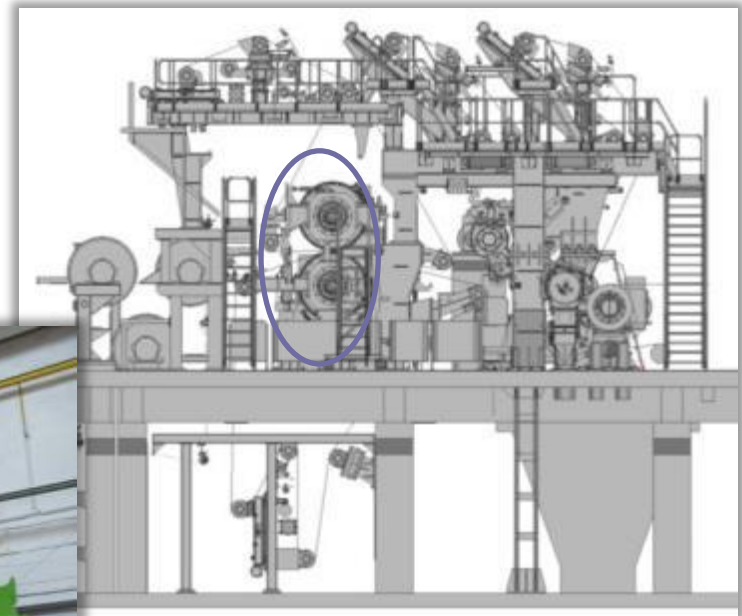
- Special filters
- Web width... 2,800 mm
- $v = 50 \dots 300 \text{ m/min}$
- $m_A = 65 \dots 230 \text{ g/m}^2$
- At very low stock consistencies



Machine components

Press sections PAMA *load*

- Fluting, testliner
- Web width = 2,500... 4,500 mm
- $v = 650 \dots 800 \text{ m/min}$
- $m_A = 80 \dots 350 \text{ g/m}^2$

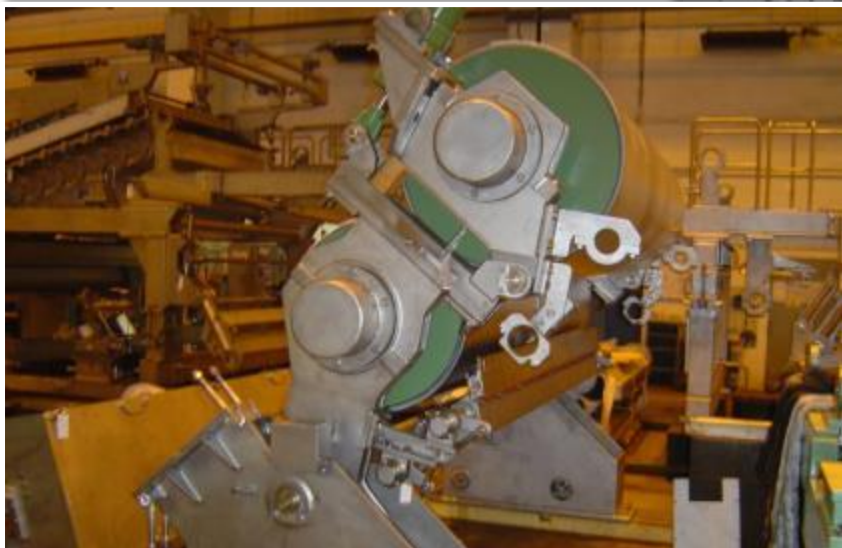
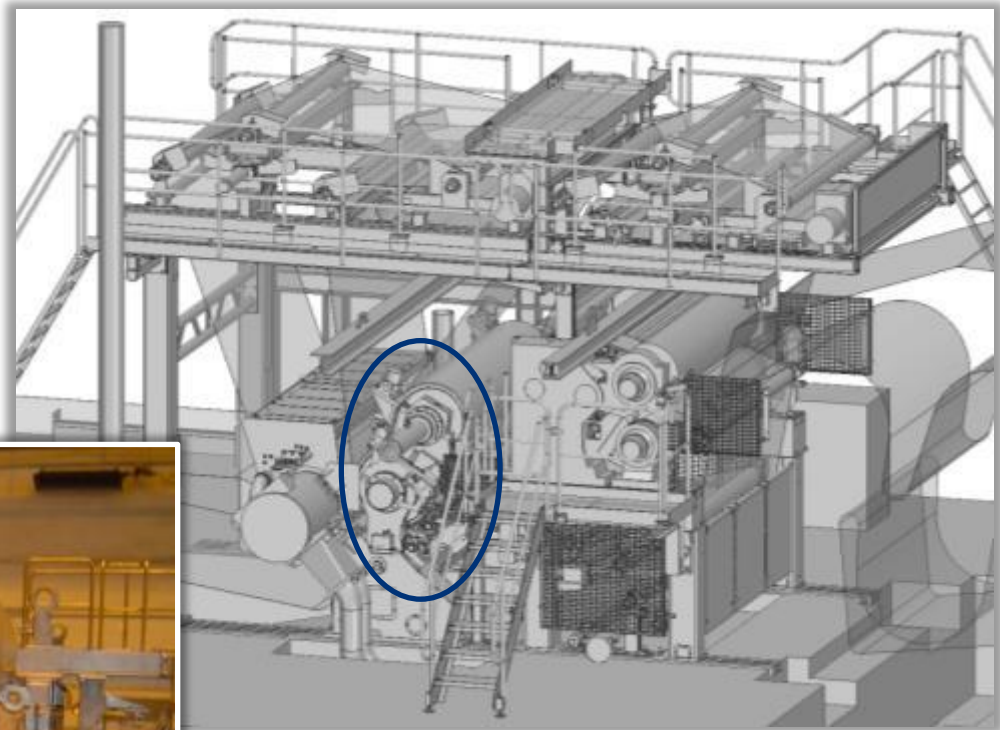


Jumbo press

Machine components

Press sections PAMA *load*

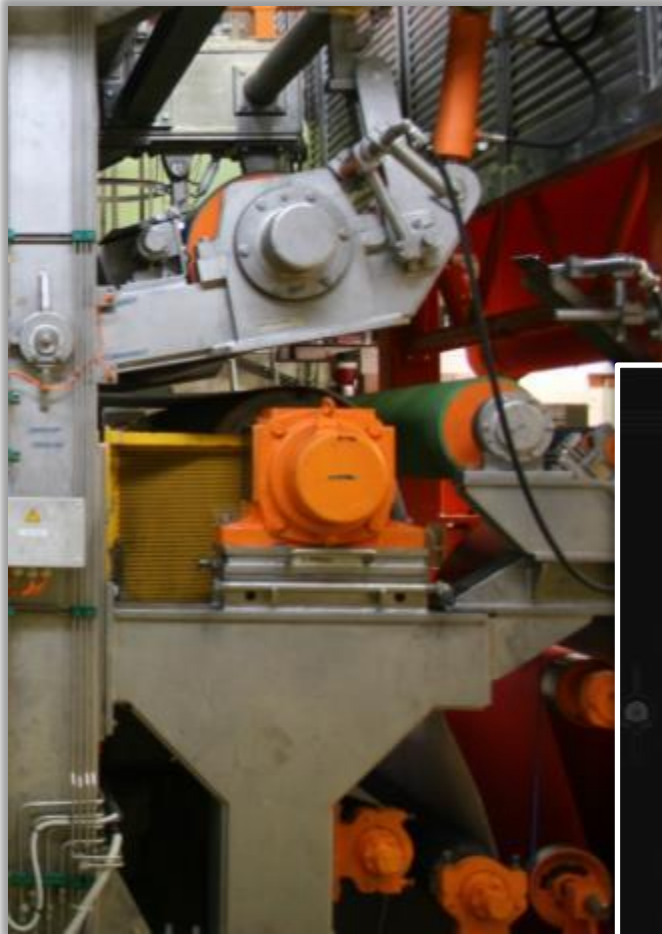
- Grease-proof paper
- Web width = 2,200 mm
- $v = 400 \text{ m/min}$
- $m_A = 30 \dots 100 \text{ g/m}^2$



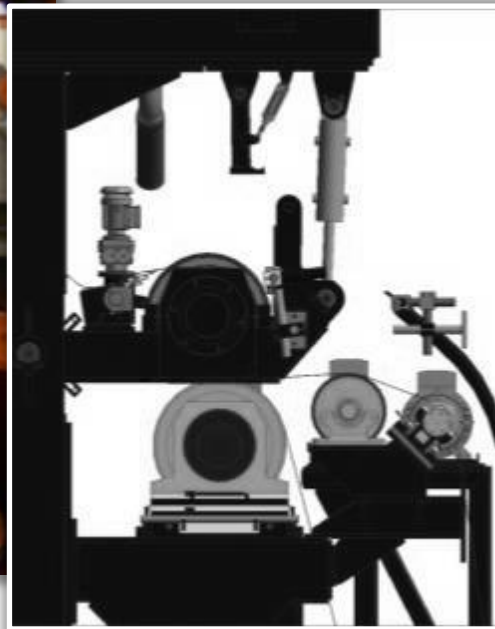
Combi press

Machine components

Press sections PAMA *load*



- Banknotes, labels
- Web width = 4,400 mm
- $v = 800 \text{ m/min}$
- $m_A = 60 \dots 120 \text{ g/m}^2$



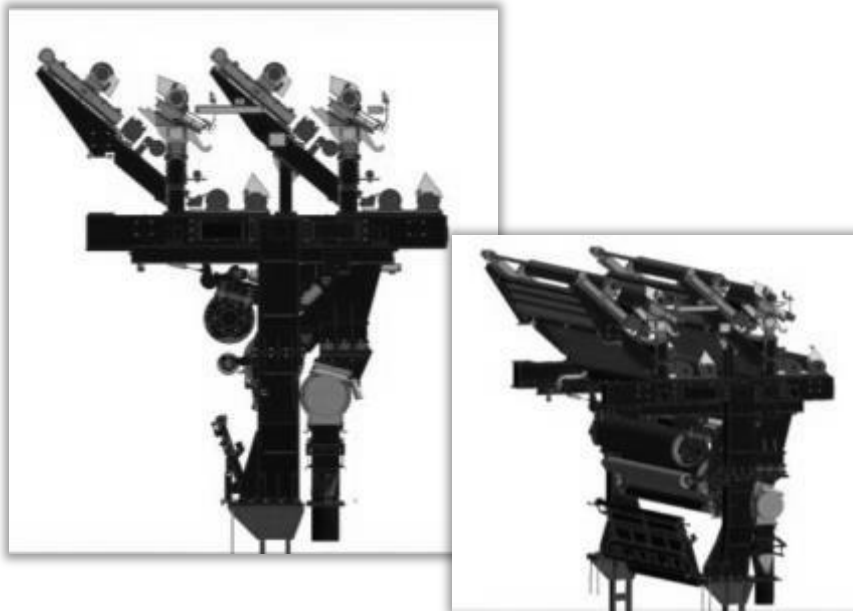
**Straight-through
press**

Machine components

Press sections **PAMA load**

- Fluting, testliner
- Web width = 2,500... 4,500 mm
- $v = 650 \dots 800 \text{ m/min}$
- $m_A = 80 \dots 350 \text{ g/m}^2$

Compact press

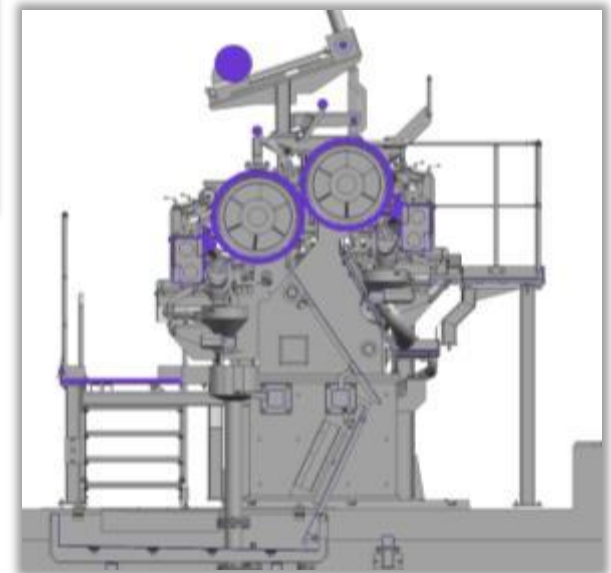


Machine components

Film application unit PAMA *film*



Film press



- Writing and printing paper, drug paper, speciality paper
- Web width = 2,450... 4,850 mm
- $v = 650 \dots 1,000 \text{ m/min}$
- $m_A = 50 \dots 160 \text{ g/m}^2$

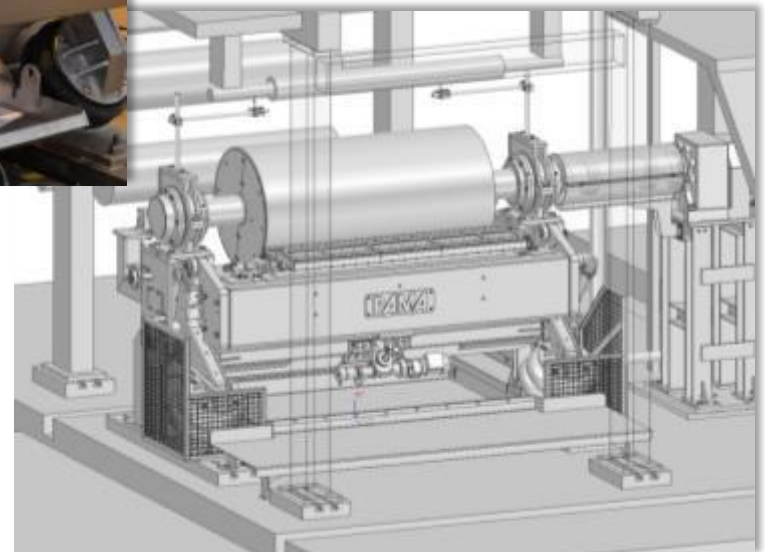
Machine components

Coating unit PAMA blade



Coater

- Non-woven wall paper
- Web width = 1,000... 1,300 mm
- $v = 150 \text{ m/min}$
- $m_A = 65 \dots 240 \text{ g/m}^2 \text{ coated}$

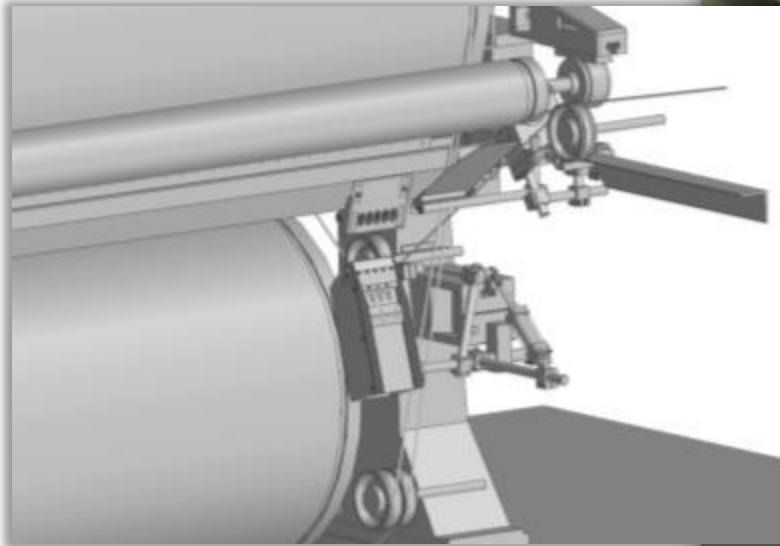


Machine components

Paper threading systems **PAMA** *guide*



- Elegant solutions
- Advanced rope guides
- Rope-free threading systems supported by air resp. vacuum
- Integrable into the whole machine



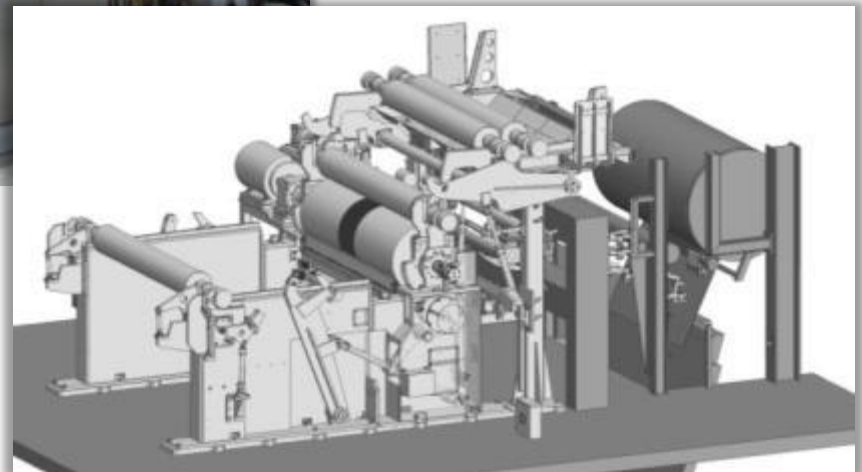
Machine components

Reeler PAMA reel



Pope Reeler

- Testliner, fluting, bookprinting paper
- Web width = 2,200... 4,400 mm
- $v = 150 \dots 1,000 \text{ m/min}$
- $m_A = 90 \dots 230 \text{ g/m}^2$



- **Machine components**

for the production of speciality paper and non-wovens

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- **Speciality paper machines**

PAMA as cooperation partner for complete plants

- Inclined wire machines
- Cylinder vat machines
- Transformer board machines
- Pilot paper machines

- **Equipment for web-type production processes**

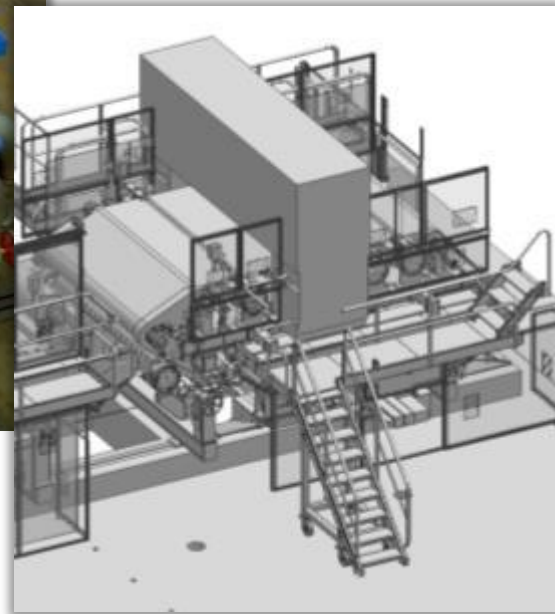
Transfer of paper making know how to the manufacturing process of web-type products

Speciality paper machines

Inclined wire machines



- Glas fibres, synthetic fibres
- Customized treating technology
- Web width = 500... 3,500 mm
- $v = 20 \dots 400 \text{ m/min}$
- $m_A = 8 \dots 300 \text{ g/m}^2$

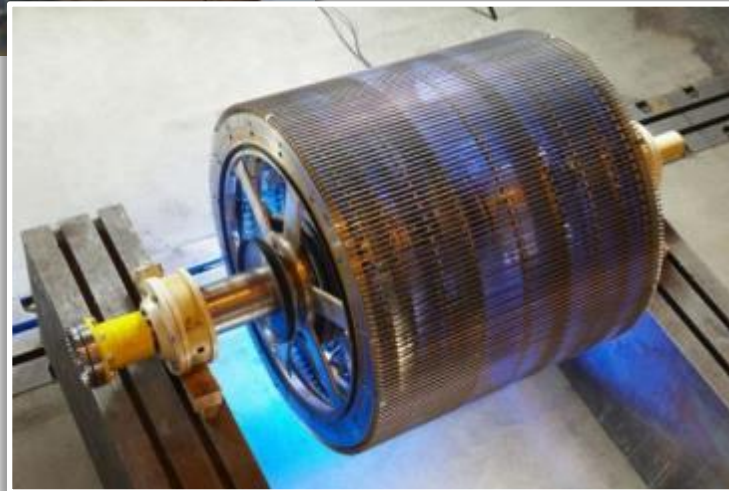


Speciality paper machines

Cylinder vat machines



- Web width = 800... 2,200 mm
- $m_A = 70 \dots 120 \text{ g/m}^2$
- $v = 30 \dots 120 \text{ m/min}$
- Size press/immersion bath
- 100 % cotton/Linters
- 2 layers, short former
- Uniflow vat
- Challenging water marks
- Security feature
- High chemical charges

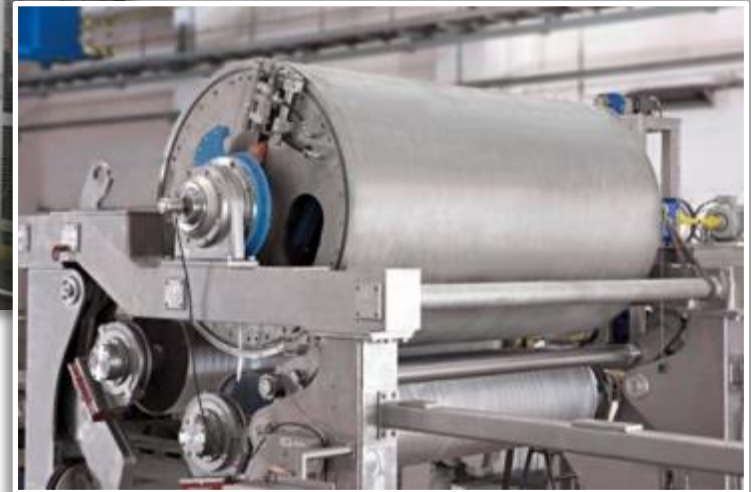
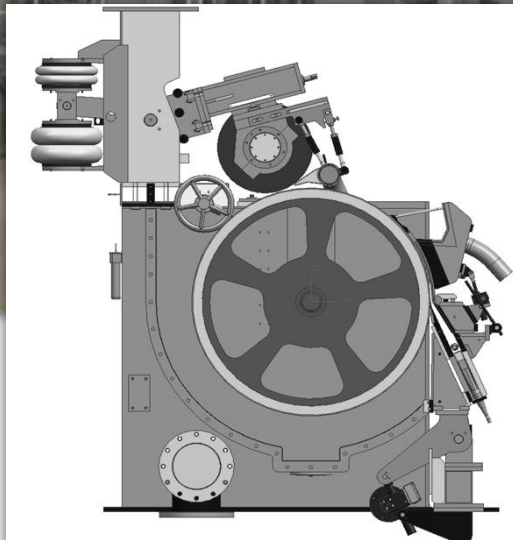


Speciality paper machines

Transformer board machines



- Transformer board
- Web width = 3,400 mm
- $v = 35 \dots 75 \text{ m/min}$
- $m_A = 1,000 \dots 10,000 \text{ g/m}^2$
- 100 % soft wood



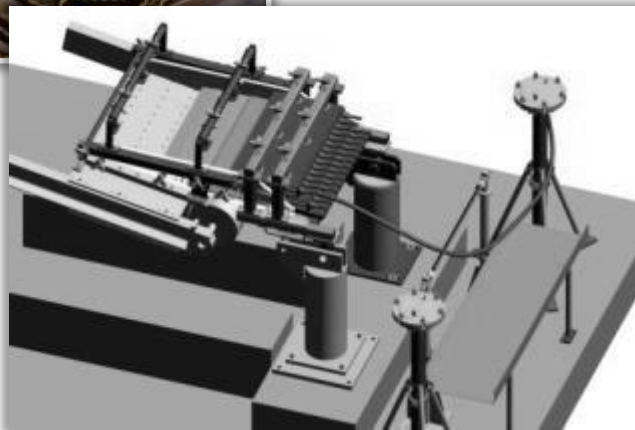
Speciality paper machines

Pilot paper machines



Cooperation with PTS Heidenau
(beating, stock preparation, special checks, REM)

- Variable pilot PM with inclined wire part resp. 2 Fourdriniers
- High variability at low costs in product development and optimization
- Good transferability of the results to industrial scale
- Sample production



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- **Speciality paper machines**

PAMA as cooperation partner for complete plants

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- **Equipment for web-type production processes**

Transfer of paper making know how to the manufacturing process of web-type products

PAMA paper machinery GmbH

Equipment for web-type manufacturing processes



For the production of,
e. g.

- Isolation material
- Synthetic leather
- Clutch facing
- Roofing felt

PAMA paper machinery GmbH

Contract work



PAMA paper machinery GmbH Service



in the fields of:

- Design & Development
- Project management
- Engineering
- Technological design
 - Machine design
 - Calculation of press impulse
- Service
 - Measurement of paper machine
 - Measurement of jet velocity
 - Laboratory trials
 - Analysing of paper sample, esp. Tapio analysis
 - Assembly / Assembly supervising



Many thanks for your attention!

PAMA paper machinery GmbH

Frauensteiner Str. 85

09599 Freiberg

Germany

+49 3731 460 0

info@pama-papermachinery.com

www.pama-papermachinery.com