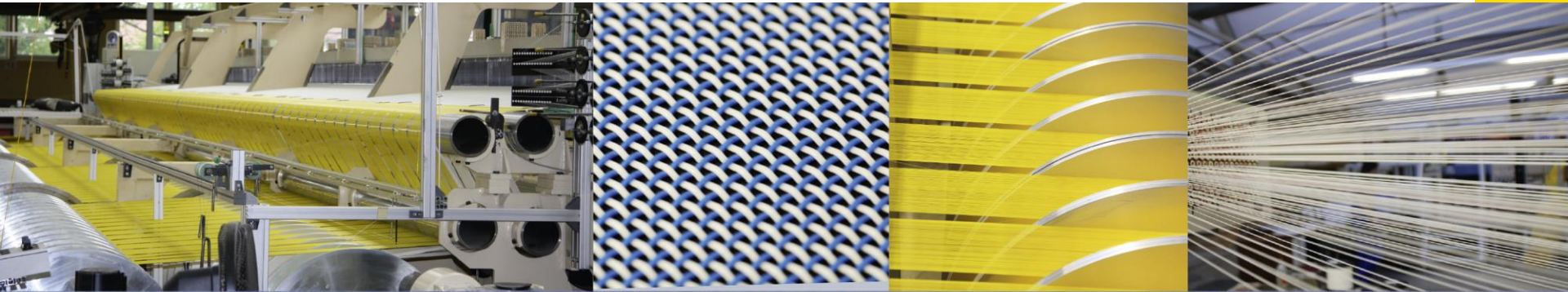


VILLFORTH

Siebtechnik GmbH



Forming Fabrics for Graphic and Decor Papers

Optimum solutions for the production of high quality papers

VILLFORTH – family business since 1870

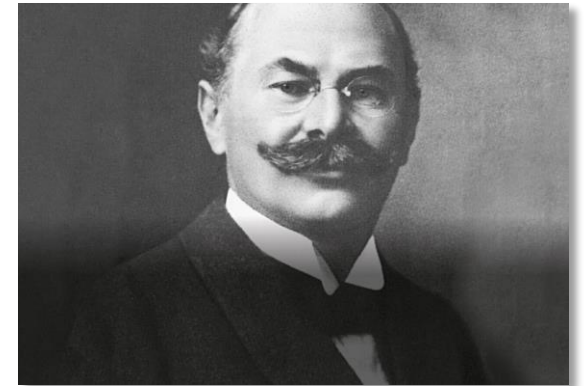
- Villforth Siebtechnik, located in Reutlingen, can look back on 150 years of company tradition, now managed by the fourth generation
- CEO and owner Thomas Villforth operates the company which employs 93 staff
- Our fabrics - raw materials and production process - are 100 % **Made in Germany**



CEO and owner
Thomas Villforth



Company building in
Reutlingen



Founder
Peter Villforth Senior

VILLFORTH – world technology leader



Thomas and Lukas Villforth



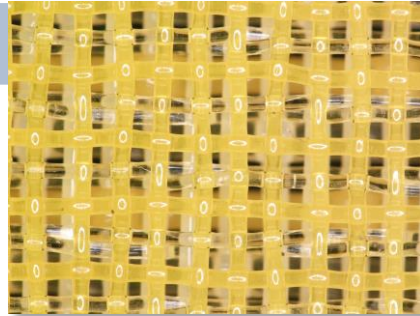
Most modern weaving machine in the world

- We work hard to remain a leading global manufacturer of high-tech fabrics for the pulp and paper industry
- Our R&D department is working on new products and the optimisation of fabric properties to get the best out of your paper machine

Our product range for graphic and decor paper applications includes...

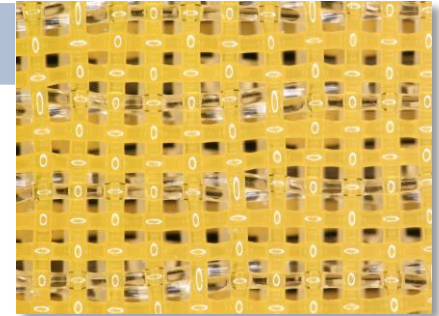
TriplexTop Y

- 3-layer SSB fabric
- Plain weave paper side
- Weft ratio 2:1
- High fibre support



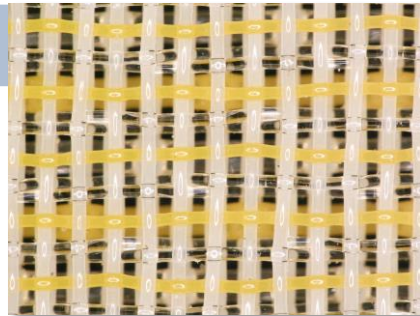
TriplexTop W

- 3-layer SSB fabric
- Plain weave paper side
- Weft ratio 3:2
- Gentle dewatering



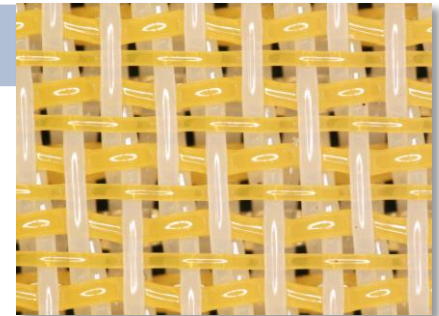
TriplexTop SY

- 3-layer SSB fabric
- Plain weave paper side
- Weft ratio 2:1
- Superfine paper side



DuplexPlus

- 2,5-layer
- Improved drainage
- Gentle dewatering

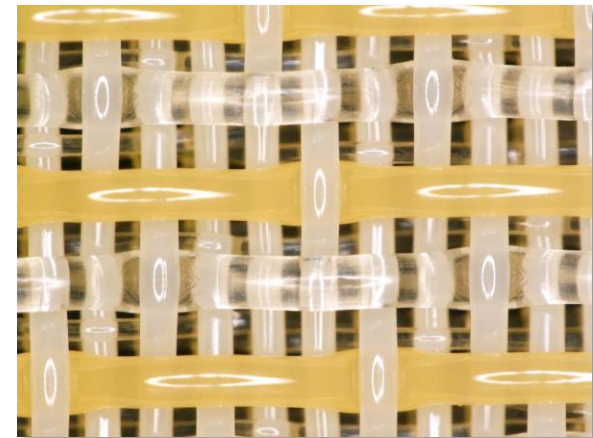
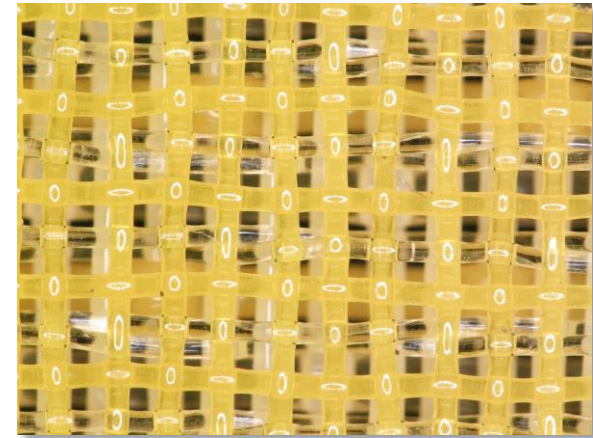


TriplexTop Y

- TriplexTop Y is a weft bound SSB forming fabric of the latest generation.
- The paper side comes with plain weave, 2:1 paper side to machine side weft ratio

Benefits for the Papermaker:

- Highest fiber support leading to maximum **mechanical retention**
- Optimal **sheet profiles** for best printing results
- Cost savings due to lowest **power consumption**
- Efficient machine performance with increased **dewatering capacity**

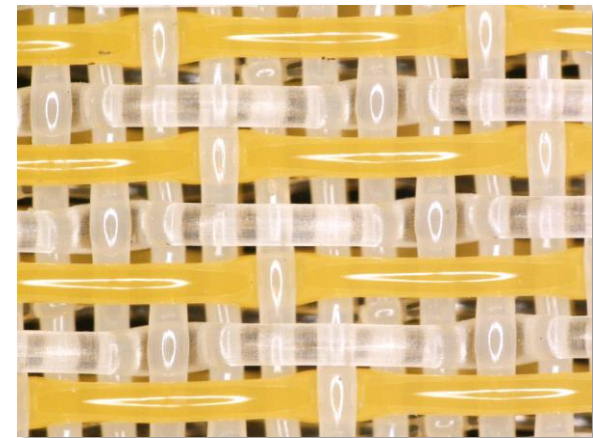
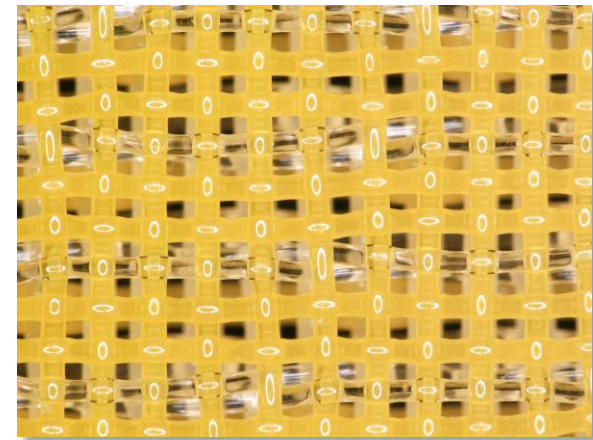


TriplexTop W

- TriplexTop W is a weft bound SSB forming fabric of the latest generation.
- The paper side comes with plain weave, 3:2 paper side to machine side weft ratio
- Proven quality for decor paper applications

Benefits for the Papermaker:

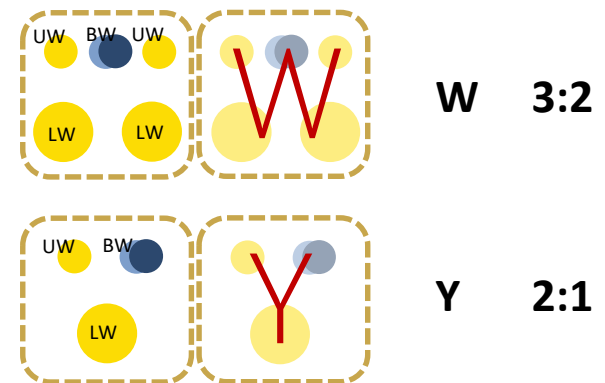
- Optimum **life potential** due to high number of machine side weft yarns
- **Gentle dewatering** for a uniform sheet structure with highest formation
- **High retention** with reduced tendency to fibre carrying leading to increased **machine hygiene**



TriplexTop W / TriplexTop Y

- TriplexTop W and TriplexTop Y are weft bound SSB forming fabrics of the latest generation.
- The paper side comes with plain weave, the weft ratio is either 3:2 or 2:1.
- The forming fabrics combine the previously contradictory demands of great drainage capacity and high fibre support.
- The forming fabrics have been specially developed to meet the highest demands on the dimensional stability and the fabric life.

Cross direction yarn ratio



UW: upper weft LW: lower weft BW: binding weft

TriplexTop Y / TriplexTop W

specification	TriplexTop Y		TriplexTop W	
	<u>Diam.</u> [mm]		<u>Diam.</u> [mm]	
Upper Warp	0,13	PET	0,13	PET
Lower Warp	0,21	PET	0,21	PET
Upper Weft	0,15+0,13	PET/PA	0,13+0,13	PET/PA
Lower Weft	0,25	PET/PA	0,27	PET/PA

- The values listed above are nominal figures.
- The exact parameters of the manufactured forming fabrics are set individually according to the specific requirements of each paper machine.

TriplexTop Y / TriplexTop W

	TriplexTop Y	TriplexTop W
Warp	60 /cm	60 /cm
Paper side	30 /cm	30 /cm
Machine side	30 /cm	30 /cm
Weft	61,5 /cm	65 /cm
Paper side	41 /cm	39 /cm
Machine side	20,5 /cm	26 /cm
Air permeability		
at 125 Pa	345 cfm	320 cfm
Elongation (100 N/cm)	0,79 %	0,87 %
FSI	187	184
DI	35,1	31,7
Caliper	0,88 mm	0,87 mm
Final Caliper	0,63 mm	0,60 mm
	optional: V-POWERLINE	optional: V-POWERLINE

- The values listed above are nominal figures. Exact parameters are set individually.

V-POWERLINE

DURATEC

- Modified machine side for long fabric life



Reduce costs with longer fabric life

or

eRun

- Special yarn material for smoother running
- Combines the advantages of polyester (PET) and polyamide (PA)



Reduce costs with lower power consumption



TOPAZ[©]NT

- Covers the filaments and the cross-over points
- Easier fabric cleaning and increased dimensional stability



Reduce costs with easier cleaning

or

VexClean

- PET based yarn material which greatly simplifies fabric cleaning

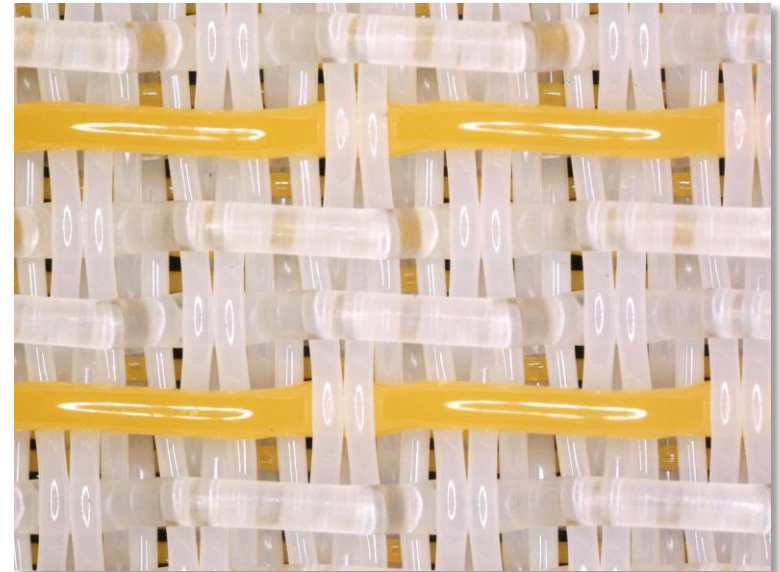


Reduce costs with less downtime and chemical cleaning

DURATEC

For increased fabric life

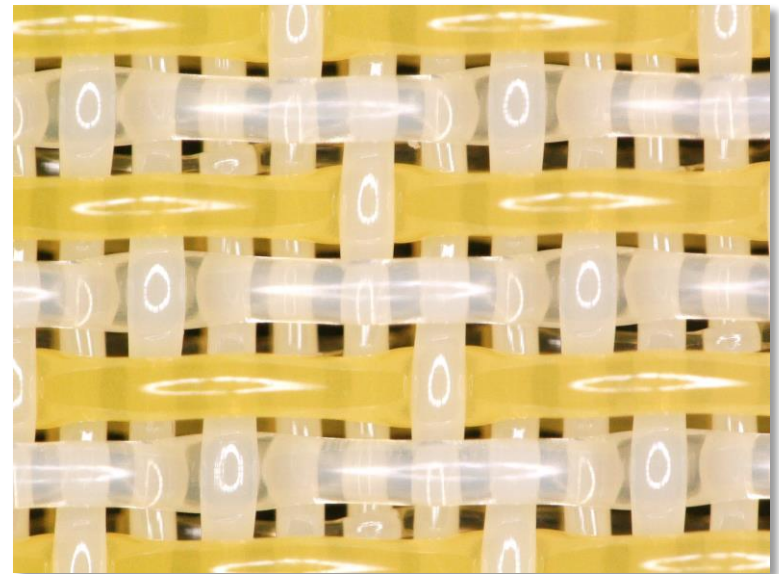
- Machine side modified for long fabric life
- Specially modified PA yarns guarantee longest life times
- PET yarns ensure dimensional stability
- Reduce machine downtime with increased life potential of the fabric



eRun

For reduced power consumption

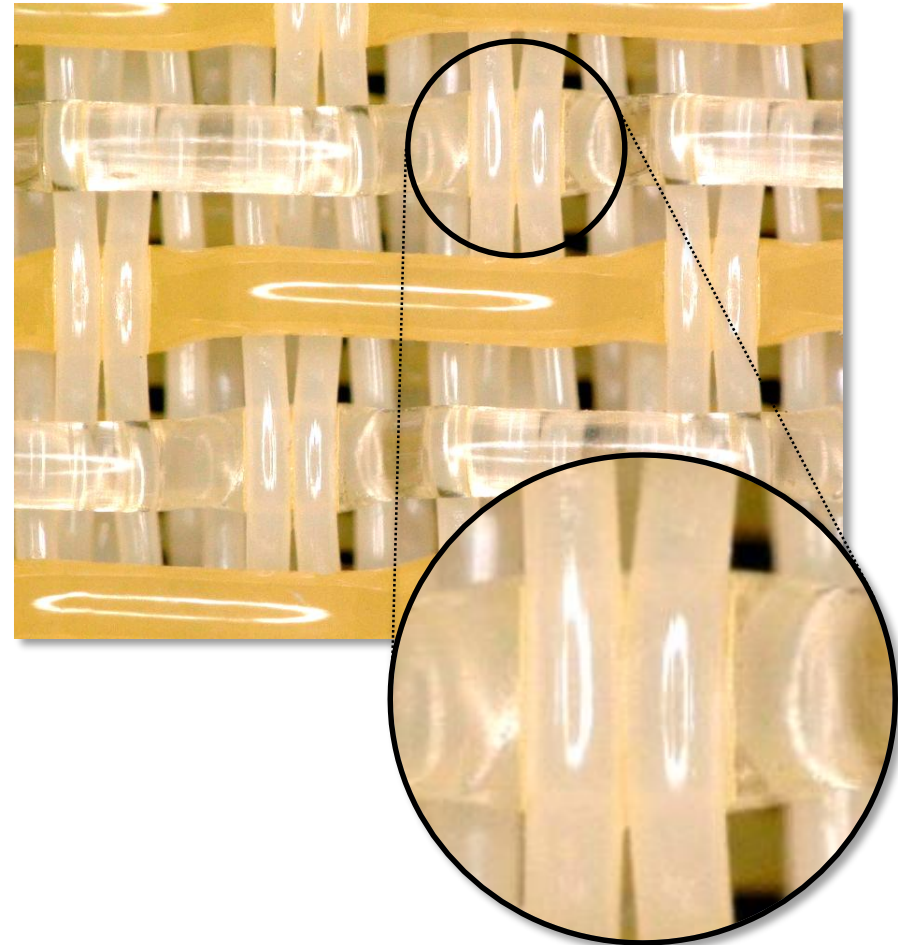
- Newly developed yarn material
- Low coefficient of friction results in reduced drive power
- High dimensional stability
- Forms monoplanes running side together with the alternating PET yarns
- Favours flat lying fabric – no more edge curl



TOPAZ[©]NT

For a cleaner fabric and increased fabric stability

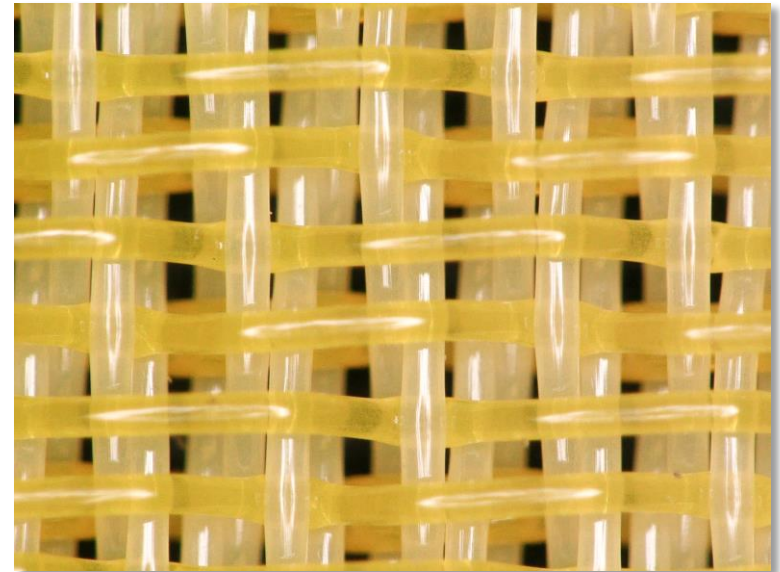
- Covers the yarns and strengthens the cross-over points
- Increased dimensional stability by approximately 30 % in both machine and cross machine direction
- Easy fabric cleaning – prevents contaminants or fibres from becoming wedged in the gaps of fabric
- Reduces internal friction and abrasion
- Permanent for the whole fabric life. Resistant to chemical cleaning agents and hp showers



VexClean

For a cleaner fabric

- Newly developed yarn material based on polyester with modified surface characteristics
- Operates on the basic principle of the lotus effect against contaminants without influencing the dewatering negatively
- Recommended solution against the strongest and most difficult contaminants
- Very high resistance to fabric contamination by all types of **resins**





VILLFORTH supplies the forming fabrics for the fastest and most modern decor paper machines in the world.

Among there are the following:

- Kämmerer Osnabrück PM3
- Koehler Kehl PM6
- Malta-Decor Poznan PM1 & PM2 & PM4
- Malta-Decor Rudawa PM3 & PM5
- Schoeller Technocell Günzach PM11 & PM 12
- Schoeller Technocell Neustadt PM18
- Winbon Schoeller New Materials PM1 & PM2

HIGHLIGHT
DECOR PAPER PRODUCTION

TriplexTop W

Your chance – our responsibility

- We will be happy to create a **specialised proposal** for a tailor- made **VILLFORTH** fabric.
- You will benefit with a **special trial discount**.
- We would be proud to **assist** you on site during the **installation** of your **VILLFORTH** fabric on the machine.

