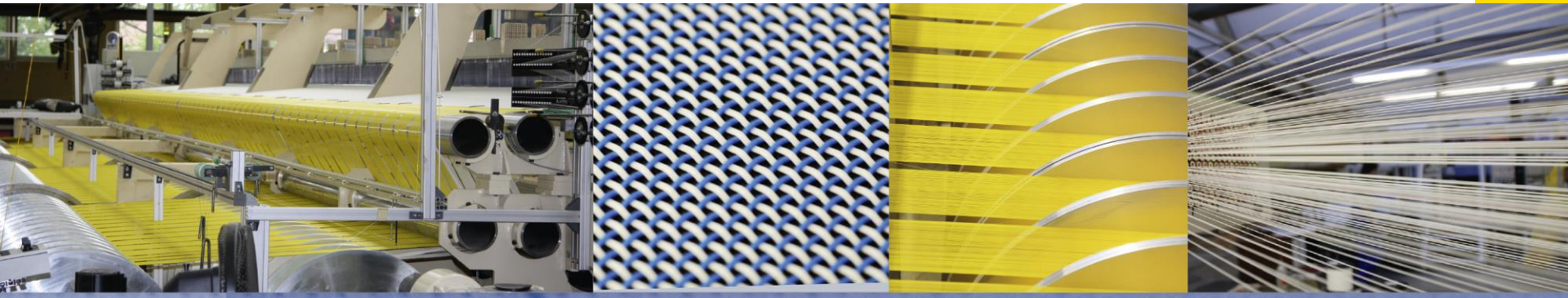
VILLFORTH
Siebtechnik GmbH



Forming Fabrics for Board & Packaging Machines

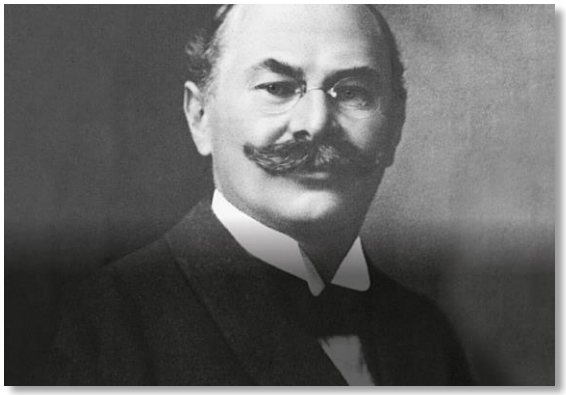
Optimum solutions for the production of brown & kraft grades

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

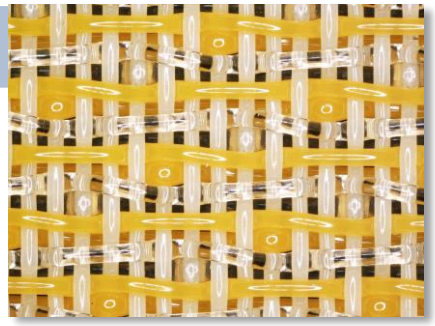
Most modern weaving machine in the world

- 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 board and packaging applications includes…

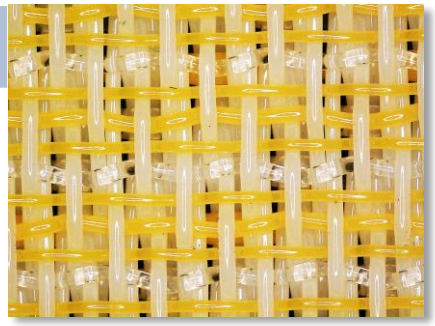
DuplexSuperKraft

- 1,5-layer
- Easy to clean
- Good drainage properties



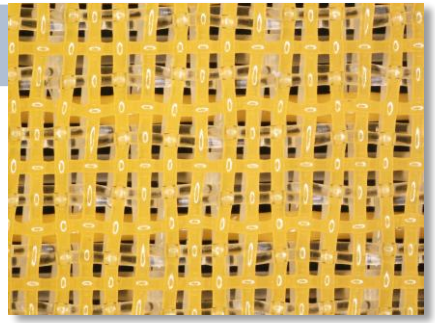
DuplexExtraKraft

- 2,5-layer
- Great runability
- Easy to clean



TriplexTop K

- 3-layer SSB fabric
- Plain weave paper side
- Weft ratio 3:2 (KW)
- Weft ratio 2:1 (KY)



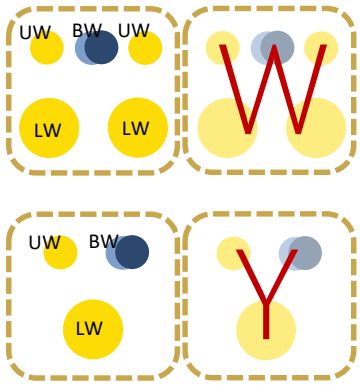
TriplexTop

- 3-layer SSB fabric
- Plain weave paper side
- Weft ratio 3:2 (W)
- Weft ratio 2:1 (Y)
- Fine fabric e.g. for top layer

TriplexTop KW / TriplexTop KY

- TriplexTop KW and TriplexTop KY 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 previously contradictory demands of great **drainage capacity** and high **fibre support**.
- The fabrics have been specially developed to meet the highest demands of **dimensional stability** and the fabric life.

Cross direction yarn ratio



W **3:2**

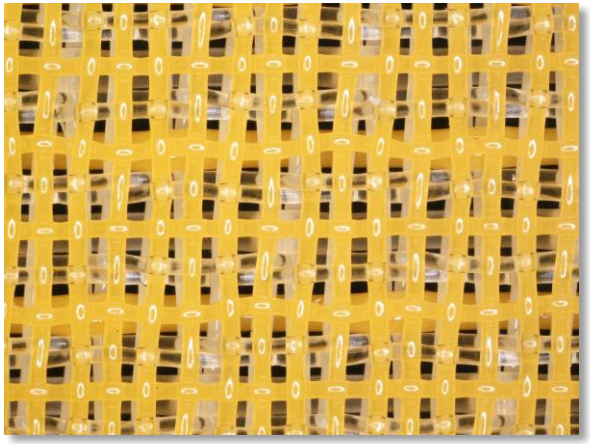
Y **2:1**

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

TriplexTop KW / TriplexTop KY

Benefits for the Papermaker:

- Achieve cost savings through high **fibre retention** and reduced use of chemical additives.
- Reach record running times with maximized **wear volume**, increased **fabric stability** and abrasion resistant yarn materials on the roll side.
- Improve machine **runability** with fewer paper breaks and reduced downtimes through having a cleaner wet end with less fibre- and water carrying.
- Improve formation by increasing **sheet support** and paper side yarn density while maintaining highest **dewatering capacity** to allow increased headbox flow.

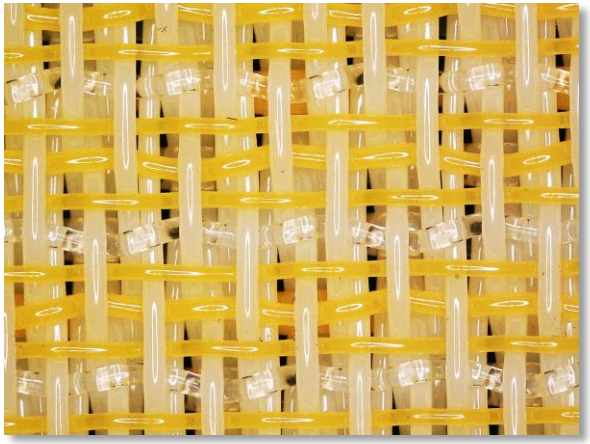


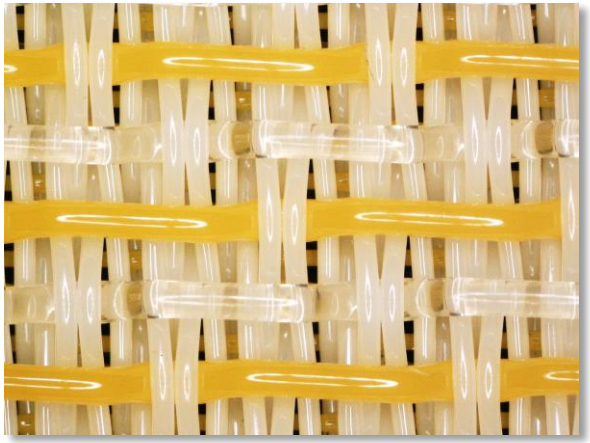
DuplexExtraKraft

- Reliable running performance. High **dimensional stability** and thus good sheet profiles.
- High **wear volume** with great life potential
- Open structure for increased **drainage capacity** even with lower vacuum levels

Benefits for the Papermaker:

- Cost savings through longer **fabric life**, minimal downtime and increased dewatering capacity
- Improves the **runnability** of the machine
- **Easy to clean** fabric design leads to greater productivity





TriplexTop KW / DuplexExtraKraft

	TriplexTop KW		DuplexExtraKraft	
specification	Diam. [mm]		Diam. [mm]	
Upper Warp	0,21	PET	0,27	PET
Lower Warp	0,27	PET		
Upper Weft	0,22+0,20	PET/PA	0,30+0,20	PET/PA
Lower Weft	0,45	PET/PA	0,45	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 KW / DuplexExtraKraft

	TriplexTop KW		DuplexExtraKraft	
Warp	**44**	**/cm**	**42**	**/cm**
Paper side	22	/cm		
Machine side	22	/cm		
Weft	**33,25**	**/cm**	**31,5**	**/cm**
Paper side	20	/cm	21	/cm
Machine side	13,25	/cm	10,5	/cm
Air permeability				
at 125 Pa	440	cfm	460	cfm
Elongation (100 N/cm)	0,75	%	0,5	%
FSI	105		80	
DI	22,3		19,2	
Caliper	1,29	mm	1,38	mm
Final Caliper	0,84	mm	0,93	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

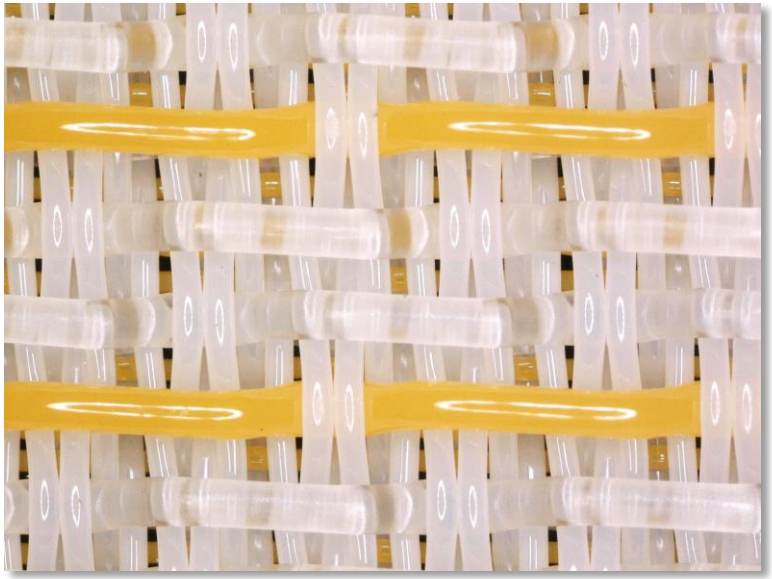
- PET based yarn material which greatly simplifies fabric cleaning

Reduce costs
with less downtime
and chemical cleaning

DURATEC

For increased fabric life

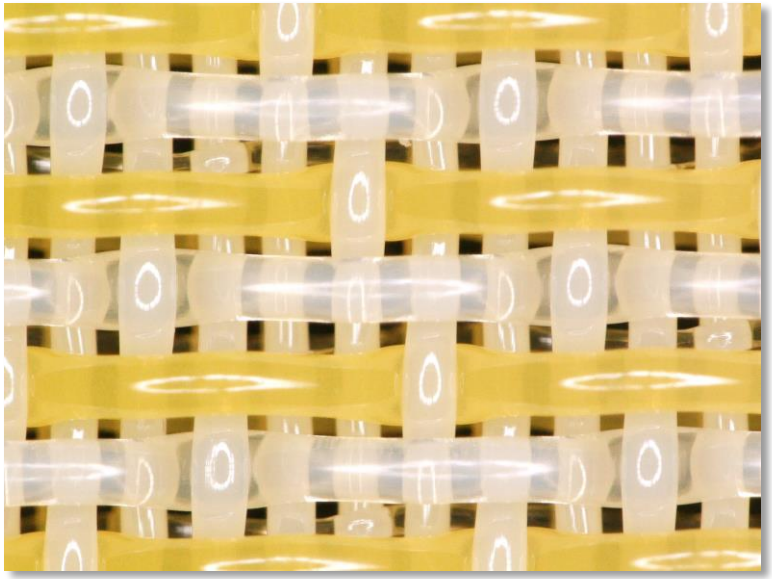
- Machine side modified for long fabric life
- Specially modified PA yarns guarantee longest life times
- PET yarns ensure dimensional stability
- Reduce machine downtime with increased life potential of the fabric



eRun

For reduced power consumption

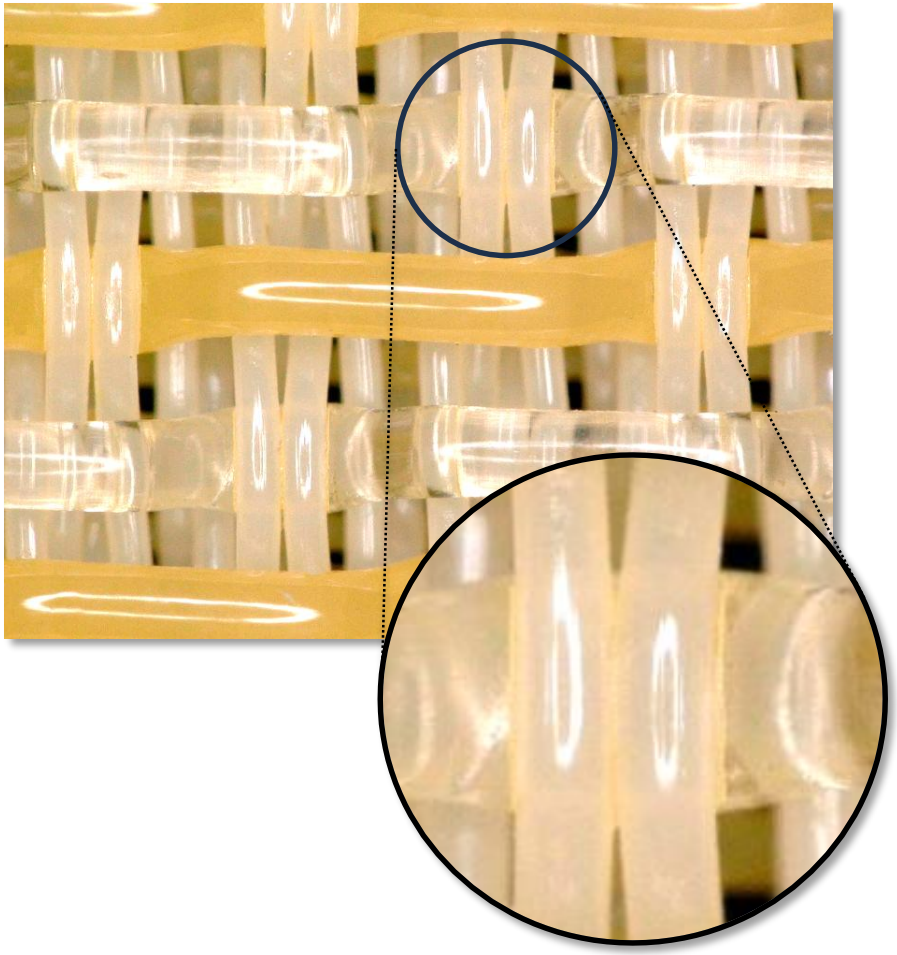
- Newly developed yarn material
- Low coefficient of friction results in reduced drive power
- High dimensional stability
- Forms monoplane running side together with the alternating PET yarns
- Favours flat lying fabric – no more edge curl



TOPAZ©NT

For a cleaner fabric and increased fabric stability

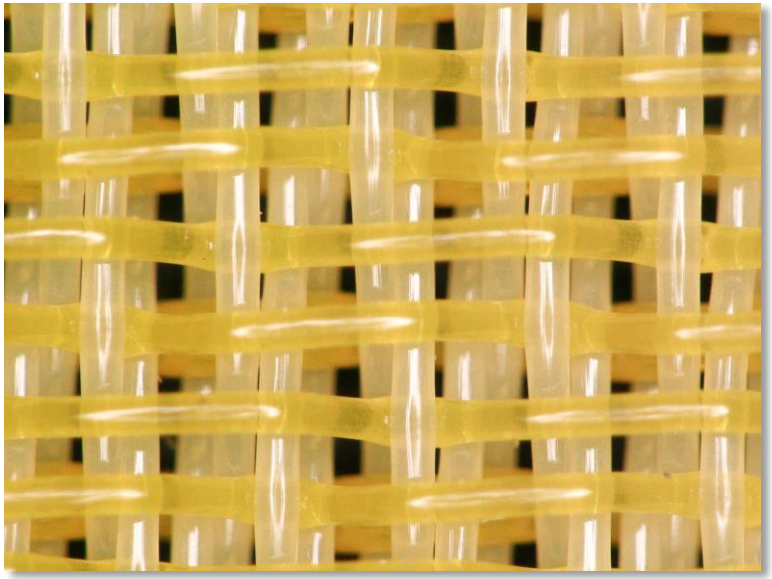
- Covers the yarns and strengthens the cross-over points
- Increased dimensional stability by approximately 30 % in both machine and cross machine direction
- Easy fabric cleaning – prevents contaminants or fibres from becoming wedged in the gaps of fabric
- Reduces internal friction and abrasion
- Permanent 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**



pro papier

Villforth Siebtechnik GmbH
Herrn Thomas Villforth
Betzenriedstraße 10
72764 Reutlingen

22.02.2018

Dear Mr. Villforth,

I just wanted to thank you again for the results we make with your forming fabrics!
We are running Villforth forming fabrics on our Valmet twin gap former machine at Burg/Germany on all 4 positions since 2005.
Our machine conditions are not easy, 100% waste paper and a closed water circuit.
The machine speed is 1200 m/min at 135 gsm.

Villforth forming fabrics are giving us an excellent run ability, no fiber carry back and much less brakes coming from the wire section. The fabric lifetime is at least 10% better than from any other competitor including Huyck.

We are happy to have you as a main supplier on our machine!

Best regards,

Propapier PM2 GmbH

Peter Resvanis
Site Manager PM2

HIGHLIGHT
SMURFIT KAPPA, HOYA

TriplexTop

Top Supplier Rating!

We are pleased to announce that **Smurfit Kappa, Hoya Papier und Karton GmbH**, Germany has rated Villforth Siebtechnik GmbH as Top Supplier 2019!

The supplier evaluation was based on deliveries and performance in 2019 and included the following areas:

Product / Service / Innovation
Price
Adherence to delivery dates
Complaint Management
Communication / Service
Job Safety & Environmental Requirements

We achieved an outstanding result In the overall assessment.

Smurfit Kappa congratulated us on the excellent results achieved in the clothing category.

HIGHLIGHT
DS SMITH, ASCHAFFENBURG

TriplexTop

Successful test run!

We were able to successfully test a new set at **DS Smith Aschaffenburg**.

With a width of 8,190 mm, our fabrics showed excellent running characteristics.

The customer also confirmed the following properties:

Very dry former, leading to minimal fibre and water carrying

Very good dry content of 23-24%

Stable high retention

After the desired runtime the fabrics were taken out of the machine as planned, there was still significant potential left

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.