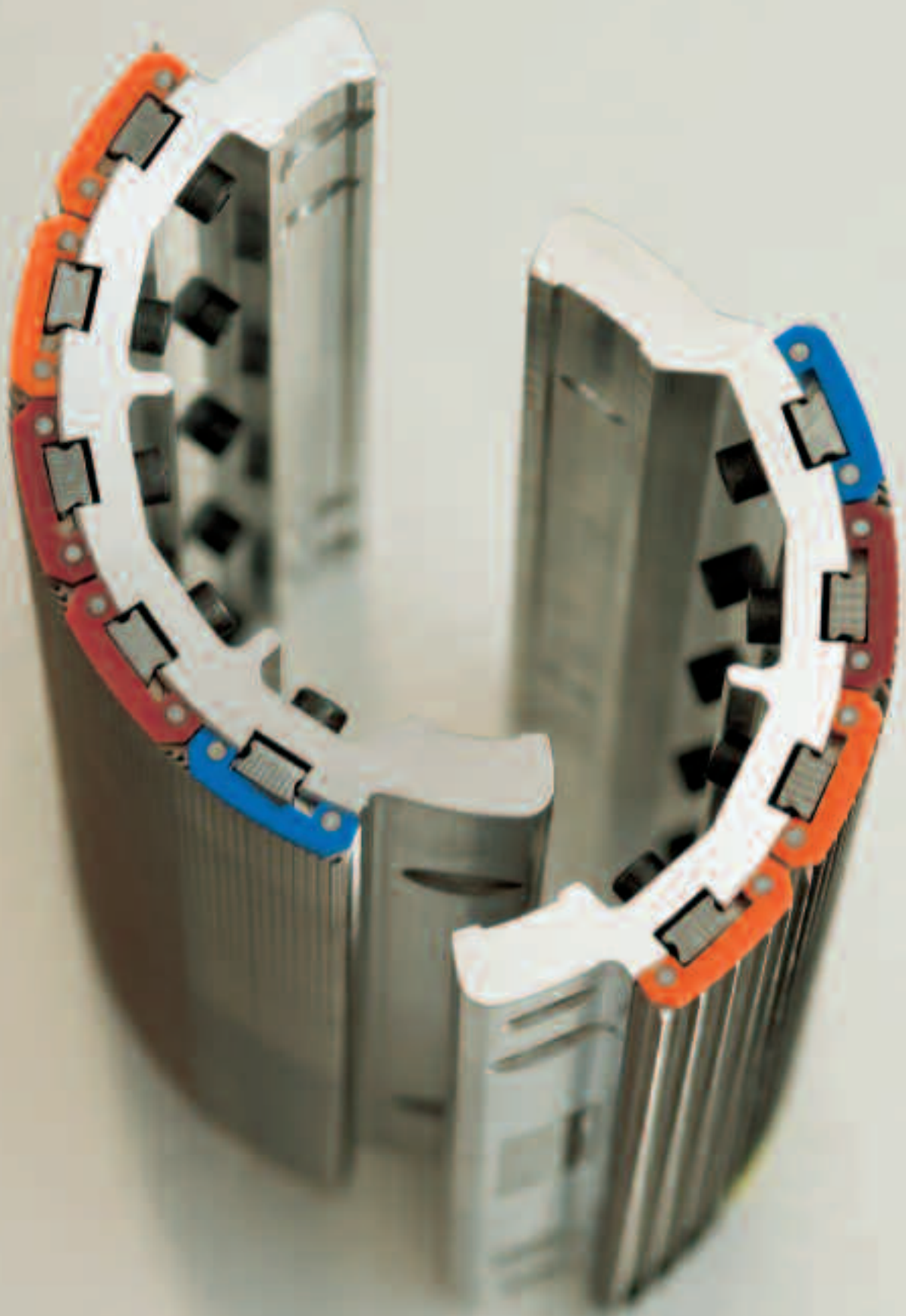




- **VARIO-Comb®**
- **VARIOTOP-System**
Top Comb standard
VARIOTOPplus
VARIOTOP FX
VARIOTOP XL

VARIO-Comb®
for cotton combing
machines



Maximum Combing Quality and Economy

Based on experience lasting for decades in the field of combing cotton, we present our **VARIO** Comb and Top Combs for cotton combing machines.

Our **VARIO** Comb is adaptable to any combing machine without problem.

The **VARIO** Comb consists of a basic body, which is equipped with replaceable VARIO bars.

For obtaining optimum combing results and consequently highest quality yarns with our **VARIO** Comb we offer a wide range of different VARIO-bars. These VARIO-bars differ not only in their pinning density but also in their penetration angle as well as in their number of teeth in axial direction.

Such a fine tuning of VARIO-bars permits an optimum combing of the cotton fibres with a minimum percentage of noil for each specific application.

In accordance to customer's technical requirements as to fibre type, staple length and diameter of the fibres as well as of course the combing machine type, we work out an optimised combination of VARIO bars for each specific application.

The VARIO bars used for the STAEDTLER+UHL **VARIO** Comb consist of a combination of forged teeth plates made of wear-resistant high duty steel with a tempering of up to 61 HRC.

This ensures an extra-ordinary long lifetime of the **VARIO** Comb.

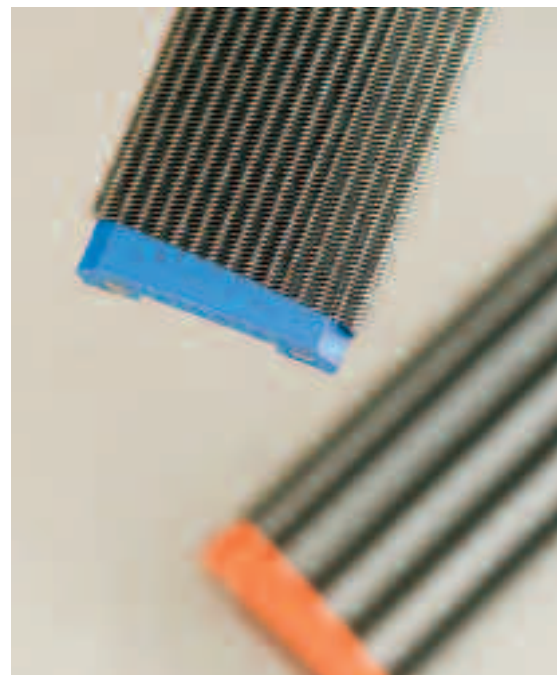
The VARIO-bars are connected to the segment basic body by means of a profile bar with dovetail guide and thus they can be easily changed.

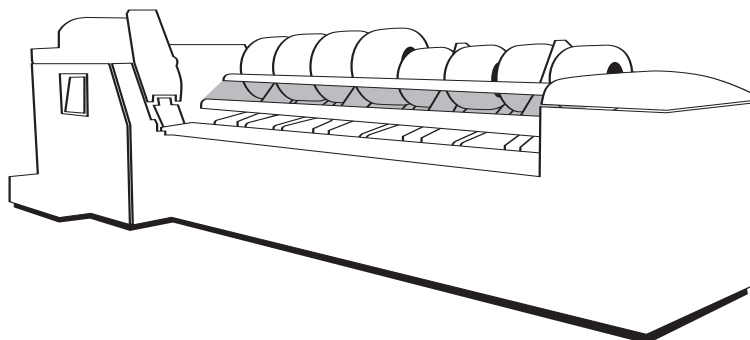
The change of our VARIO bars is easily and quickly done. You need to only loosen the fixation screws of the clamping bar, replace the VARIO bar and tighten the fixation screws with 0.5 Nm.

Because of the constant height of the VARIO bars and the constant radius of the segment, a variation in the combing radius is not possible and therefore no verification is necessary.

If the **VARIO** Comb is partially damaged, for example through a machine accident or overloading of cotton fibres, replacement of the whole segment is not necessary – as it is the case with traditional systems – but only the damaged VARIO bars have to be replaced by new bars. Since the undamaged VARIO bars can continue working in the machine, maximum economy is guaranteed. In any case the basic body remains in the machine having a virtually unlimited lifetime and ensuring economics even for future complete replacements of VARIO Bars.

For better identification of the different teeth densities the VARIO bars are marked with end pieces of different colours.





Order number for VARIO-Bars / Colour designation

Order-Nr.	Designation of bars	Color:		Number of teeth rows	Number of teeth per cm ²	Number of teeth per inch ²
5060	WE-SC	white	black	5	17	110
5045	GU-SC	grey	black	5	20	129
5035	GE-SC	yellow	black	5	22	142
5030	GR-SC	green	black	5	24	155
5025	OR-SC	orange	black	5	25	161
7045	GU-WE	grey	white	7	33	213
7035	GE-WE	yellow	white	7	37	239
7030	GR-WE	green	white	7	40	258
7025	OR-WE	orange	white	7	43	277
7020	RO-WE	red	white	7	46	297
8730	GR-RS	green	pink	8/7	33	215
8725	OR-RS	orange	pink	8/7	35	227
8045	GU-GU	grey	grey	8	38	245
8035	GE-GE	yellow	yellow	8	43	277
8030	GR-GR	green	green	8	46	297
8025	OR-OR	orange	orange	8	50	323
8020	RO-RO	red	red	8	54	348
8015	BL-BL	blue	blue	8	59	381
8010	SC-SC	black	black	8	64	413
1030	GR-GE	green	yellow	10	58	374
1025	OR-GE	orange	yellow	10	62	400
1020	RO-GE	red	yellow	10	67	432
1015	BL-GE	blue	yellow	10	73	471
1225	OR-BR	orange	brown	12	88	568
1220	RO-BR	red	brown	12	97	626
1215	BL-BR	blue	brown	12	107	690
1520	RO-BE	red	beige	15	125	806
1515	BL-BE	blue	beige	15	139	897

Type of machines

Rieter	E 7/4, E 7/5, E 7/5A, E 7/6, E 60, E 60H, E 70, E 62, E 72, E 65, E 75, E 66, E 76
Marzoli	P 1, P 2, PX 1, PX 2, PX 80, CM 600
Vouk	CM 400, CM 500
Hara	VC 250, VC 300, VC 300A, VC 3, VC 5, VC 5A
HOWA	CARTORY-K, KZ, KZ-N, HZ
Toyoda	CM 8, CM 10, CM 100, CM 110, CM 110A
Lakshmi	LR 7/4, LK 250, LK 54, LK 64
Trützschler	TCO 1
Tokyu	
OKK	
Textima (CSM)	1531, 1532, 1533, 1534, 1535
Saco Lowell	140, CA
Whitin	J 7B
Platt-Nasmith	
Platt-Hartford	
Platt-Century	
Jingwei	FA 261, FA 266, FA 269, F 1268, F 1268A, F 1272
STM	A 201, PX 2, CJ 40, CJ 60
Kaigong	JSFA 286, JSFA 288
Hongyuan	HY 68, HY 68A

Top Comb Standard

As primary supplier for numerous combing machine manufacturers we can rely on decades of experience in producing and developing Top Comb Pin Strips for cotton combing machines. Of course we also produce and deliver Top Comb Pin Strips for all other machine types on the market, especially also for machines of older make.

Our Top Comb Pin Strips are produced according to the latest manufacturing methods.

Highest quality demands as to combing results and durability of the Top Comb Pin Strips are met with our special »gentle« glueing procedure of the top comb pins into the pin strips, contrary to the formerly used pin soldering method.

Thanks to the glueing of the pins into the pin strip, no corrosion problems occur which can be caused by the traditional soldering of the pins.

Narrowest tolerances of the top comb pins ensure an exact distance between the points and thus the consistency of the combing results.

In order to perfectly adapt the Top Comb Pin Strip to the fibres or fibre mixtures we offer various pinning densities which are listed below:

Pinning densities

21 pins per cm - 53 pins per inch
23 pins per cm - 58 pins per inch
26 pins per cm - 66 pins per inch
28 pins per cm - 71 pins per inch
30 pins per cm - 76 pins per inch
32 pins per cm - 81 pins per inch

VARIOTOPplus – Self-cleaning Top Comb



Pinning densities

26 pins per cm
29 pins per cm
32 pins per cm
35 pins per cm

Type of machines

Rieter	E 7/4, E 7/5, E 7/5A, E 7/6, E 60, E 60H, E 70, E 62, E 72, E 65, E 75, E 66, E 76
Vouk	CM 400
Lakshmi	LR 7/4, LK 250, LK 54, LK 64
Jingwei	FA 266, FA 269, F 1268A
Hara	VC 250, VC 300, VC 300A
Toyoda	CM 100
Kaigong	JSFA286, JSFA 288
Hongyuan	HY 68, HY 68A

VARIOTOPplus – the original!

The pins of the self-cleaning top comb VARIOTOPplus are being produced with a special manufacturing method. During this process the pins receive a special surface treatment and polish which prevents damage to the cotton fibre and enables a gentle combing process. In addition the scientifically proven and field-tested special design offers an optimized cleanliness. For this reason the wear resistant and special hardened pin with enforced base leads also to an increased lifetime.

Besides this special pin also the new bent shape of the sheet of the self-cleaning top comb Variotopplus contributes to a quality improvement.

The surface as well as the supporting geometry lead to a substantial improvement of the performance and to a better combing quality during a longer period.

The proven glueing technique provides an increased stability and guarantees a secure fixation of the pins in the pin strip. No twisting or deflecting will occur, excess load is mechanically compensated.

VARIOTOP – Top Comb Plates



VARIOTOP FX

As a system supplier for the textile industry, Top Comb Plates for numerous machine types are also offered by us. Combined with our Top Comb Pin Strips we are also able to offer completely pinned Top Comb Plates.

Maximum precision with narrowest tolerances ensuring an optimum combing result is guaranteed by the use of our complete Top Comb System.

The Top Comb Plates are made of a high quality aluminium alloy, which ensures maximum stability and rigidity of the Top Comb Plate in the combing machine.

A special cobalt coloured surface coat makes the Top Comb Plate enormously resistive ensuring a long life time in the combing machine.

VARIOTOP XL – extra life

The life time of the Top Comb Plate with traditional surface coat is limited being subject to high strain in the combing machine.

Especially the contact area of the brackets at the end of the Top Comb Plates is subject to enormous wear which finally makes it necessary to change the Top Comb Plates already after a relatively short running period.

We have now developed a special type of Top Comb Plates: Besides of a cobalt coloured standard surface coat these problem areas at the end of the plates were reinforced by a highly wear resistant synthetic material.

This new kind of Top Comb Plate (patent pending) permits a multiple longer life time compared with traditional Top Comb Plates.

Type of machines

Rieter	E 7/4, E 7/5, E 7/5A, E 7/6, E 60, E 60H, E 70, E 62, E 72, E 65, E 75, E 66, E 76
Vouk	CM 400
Lakshmi	LR 7/4, LK 250
Marzoli	PX 1
Jingwei	FA 266, FA 269, F 1268A
Hara	VC 250, VC 300, VC 300A
Toyoda	CM 100
Kaigong	JSFA286, JSFA 288
Hongyuan	HY 68, HY 68A

Type of machines

Rieter	E 7/4, E 7/5, E 7/5A, E 7/6, E 60, E 60H, E 70, E 62, E 72, E 65, E 75, E 66, E 76
Vouk	CM 400
Lakshmi	LR 7/4, LK 250, LK 54, LK 64
Jingwei	FA 266, FA 269, F 1268A
Kaigong	JSFA286, JSFA 288
Hongyuan	HY 68, HY 68A

For more than 200 years we have been producing pins and pinned systems for the textile industry. Our products are used when processing different natural fibres as for example wool, cotton and linen and also for synthetic fibres. Further focuses are pins and pin plates for textile finishing and temple pins.

VARIO Comb[®]

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