

Carding solutions for revolving flat cards



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Metallic Card Clothings - General

INTRODUCTION

Wire ranges

Bekaert Carding Solutions offers a complete range of clothing for short staple applications. The range contains blow room, feed roller, cylinder, doffer and lickerin wires as well as flexible tops, fixed flats and ancillary products (e.g. cleaning fillets). The product range covers a very wide range of cards and applications used in today's textile industry. Bekaert Carding Solutions offers its help to specify card clothing depending on card and on application in order for the customer to achieve the best performance in terms of carding and spinning quality as well as lifetime of the card clothing.

Steel qualities

Bekaert Carding Solutions offers products in three different steel grades:

- Super: cylinder, doffer, grooved lickerin and interlock lickerin
- Duratech: cylinder, grooved lickerin and interlock lickerin
- Ultra: a selected range of cylinder wires and the interlock lickerin wires.

Super is a high carbon steel. It is our entry product, for low production rates (e.g. below 50 kg/h) with lifetimes of up to 600 tonnes for cylinder wires.

Duratech is a micro alloyed steel. It has a slower wear rate than Super products and is recommended for higher quality requirements in terms of consistency of carding and for higher lifetime. Resulting lifetimes are up to 800 tonnes for cylinder wires.

Ultra is our high end steel grade giving the highest wear resistance and highest lifetime, up to 1200 tonnes for cylinder wires. We recommend Ultra card clothing (cylinder and lickerin) especially for cards of the newest generation, especially if production rates are in excess of 70 kg/h.

As wear rates depend on card, throughput volumes and raw material, we are more than happy to advice our customers to make the best choice for their card clothing.

Our wires have the appropriate finish for smooth operations.

Lickerins

The lickerin is responsible for opening of the mat of fibres fed to the card. The majority of trash is removed in the lickerin area. Proper and regular opening and (pre-)cleaning of the fibres by the lickerin is crucial for card sliver and yarn quality as well as to maintain the lifetime of the cylinder and the tops.

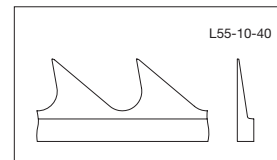
Bekaert Carding Solutions offers grooved as well as interlock lickerin wires. Grooved lickerins are mostly used on (older) slower cards. The front angle is dictated by the application. Cotton is carded with 10° front angle (carded and OE applications) or with 5° (combed cotton mostly, using long and fine cotton fibres). For synthetics, we have grooved lickerin wire with 0° front angle. Grooved lickerins are available in several rib widths to suit the groove on particular cards. Grooved lickerins can be supplied in Super or Duratech steel. Duratech is our recommendation to achieve best performance on grooved lickerins.

Modern, high-speed cards are using interlock lickerins. The specification for interlock lickerin is in most cases card specific, with the full range being offered by Bekaert Carding Solutions. Interlock lickerin wires are available in Super, Duratech and Ultra. We recommend the use of Ultra interlock lickerin wires to achieve the best carding performances.

Lickerin Wires

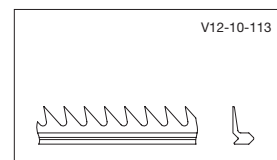
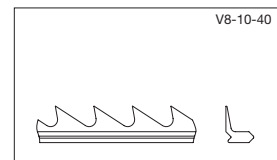
Grooved

product	height	rib	pitch	angle	ppsi
L55-10-40	5.50	variable	5.10	10	40
L55-05-40	5.50	variable	5.10	5	40
L55-05-29	5.50	variable	7.10	5	29
L55-00-42	5.50	variable	4.80	0	42
L55-00-28	5.50	variable	7.60	0	28



Interlocking

product	height	rib	pitch	angle	ppsi
V8-10-40	5.00	3.17	5.30	10	40
V8-05-40	5.00	3.17	5.30	5	40
V8-00-42	5.00	3.17	4.70	0	42
V12-20-113	5.00	2.12	2.70	20	113
V12-10-113	5.00	2.12	2.70	10	113
V12-05-113	5.00	2.12	2.70	5	113
V16-20-210	5.00	1.59	1.95	20	210
V16-10-210	5.00	1.59	1.95	10	210
V16-20-160	5.00	1.59	2.50	20	160



Cylinders

The cylinder takes over the fibres from the lickerin and is responsible for the major carding action with the flexible tops as counterpart. As such, the selection of the cylinder wire is important for optimum carding performance.

The Bekaert range of cylinders contains wire of 2.0 mm and 2.5 mm height. The 2.0 mm are mostly used in cotton carding applications, whereas the 2.5 mm mostly find application in synthetics and for cotton on old (and slow speed) cards.

We offer different front angles to suit a wide range of applications in terms of required carding power (for trash and nep elimination) taking into account the delicacy of the fibres.

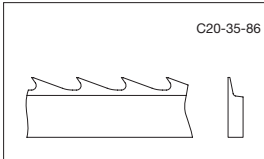
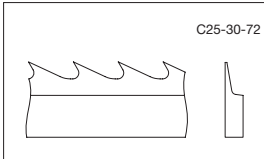
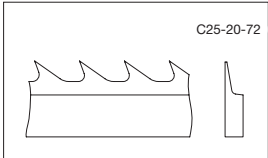
For cotton, we have cylinder wires with front angle 40°, 35° and 30°. Depending on fibre type and application, we mostly specify front angles between 10° and 30° for carding synthetic fibres.

Cylinder wires are available in a range of densities (point populations). The selection depends on fibres, card and application.

Cylinder wires are available in three different steel grades (listed in increased lifetime): Super, Duratech and Ultra.

We are more than happy to assist you in the specification of the card clothing for specific cards and applications.

Cylinder Wires

product	height	rib	pitch	angle	ppi	
C20-40-95	2.00	0.40	1.70	40	950	
C20-35-95	2.00	0.40	1.70	35	950	
C20-30-95	2.00	0.40	1.70	30	950	
C20-35-86	2.00	0.50	1.50	35	860	
C20-30-86	2.00	0.50	1.50	30	860	
C20-30-76	2.00	0.65	1.30	30	760	
C20-30-66	2.00	0.65	1.50	30	660	
C25-30-86	2.50	0.50	1.50	30	860	
C25-25-80	2.50	0.50	1.60	25	800	
C25-30-72	2.50	0.60	1.50	30	720	
C25-25-72	2.50	0.60	1.50	25	720	
C25-20-72	2.50	0.60	1.50	20	720	
C25-20-63	2.50	0.60	1.70	20	630	
C25-15-45	2.50	0.90	1.60	15	450	
C25-15-40	2.50	0.90	1.80	15	400	
C25-10-24	2.50	0.90	3.00	10	240	

Doffers

The cylinder will transfer the fibres to the doffer. Transfer ratio has to be sufficiently high and the transfer needs to be regular. The quality of the doffer wire, together with the card settings will define the correct operation of the transfer of the fibres from doffer to cylinder.

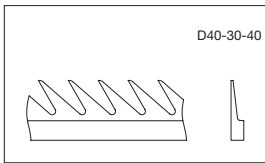
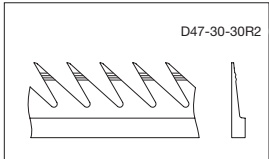
The combination of a 4.0 mm height doffer with a 30° front angle is almost the norm for most cards. We have 4.7 mm doffers available for cards where the OEM subscribes higher doffer wires.

Curved doffers are in our product offering. The special tooth shape of curved doffers is considered to be advantageous for increased fibre transfer between cylinder and doffer.

Doffers with two striations are more and more becoming standard. The striations help to give a sufficient degree of fibre adhesion, even more important for slippery synthetic fibres and at higher production speeds.

Our wires have the appropriate finish for smooth operations.

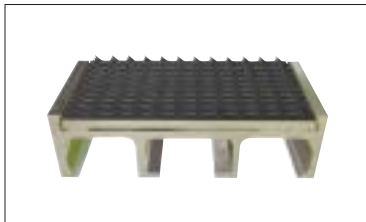
Doffer Wires

product	height	rib	pitch	angle	ppsi	
D37-30-40	3.70	0.90	1.80	30	400	
D40-30-40	4.00	0.80	2.00	30	400	
D40-30-30R2	4.00	1.00	2.20	30	300	
D47-30-30R2	4.70	1.00	2.20	30	300	
D37-30-40R5	3.70	0.90	1.80	30	400	

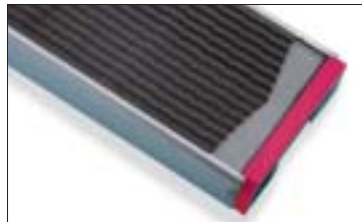
Stationary Flats

Stationary flats at the lickerin and at the rear fulfil an important role in the opening and cleaning of fibre tufts. Front fixed flats are post-carding and help to achieve proper transfer of fibres from cylinder to doffer. The Bekaert range of stationary flats is manufactured from Duratech steel as standard. Ultra steel stationary flats are available resulting in lower wear rates of the fixed flats. Ultra steel fixed flats will maintain their performance longer thanks to the better wear resistance, resulting in better opening and cleaning of fibres. Besides quality improvements, cylinder and tops are less subjected to wear when stationary flats remain longer sharp. Our offering of stationary flats contains different types and point densities, to cover a wide range of cards and applications. We use our long term experience to give our customers recommendations on the combination of stationary flats to be used in specific conditions.

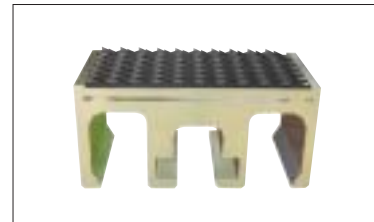
Product	Red	Brown	Blue	Yellow	Grey	Black	White	Green	Magenta	Orange
Supertech ST	ST57	ST65	ST88	ST160	ST270	ST330	ST440	ST550	-	ST660
Supertech STVT	-	-	-	-	-	-	-	-	ST560VT	-
Special Supertech XT	-	-	XT88	XT160	XT270	XT330	XT440	XT550	-	XT660
Supertech LW	-	-	LW88	LW160	LW270	LW330	LW440	LW550	-	LW660
Cliptech CT	-	CT65	CT88	CT160	CT270	CT330	CT440	CT550	-	CT660
Cliptech CTVT	-	-	-	-	-	-	-	-	CT560VT	-
Hitech HT	HT57	-	-	-	-	-	-	-	-	-
LT	-	LT65	LT88	-	-	-	-	-	-	-
DT	DT57	DT65	-	-	-	-	-	-	-	-
LTS2	-	LTS2 65	LTS2 88	-	-	-	-	-	-	-
LTC2	-	-	LTC2 88	-	-	-	-	-	-	-



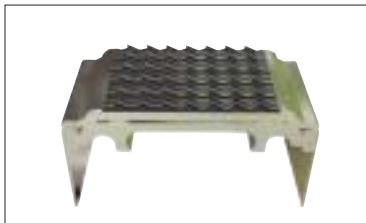
Supertech ST



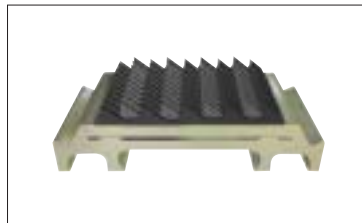
Supertech STVT



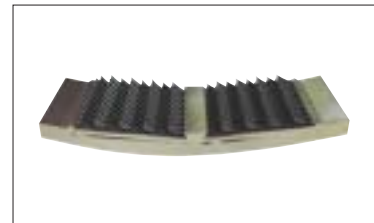
Special Supertech XT



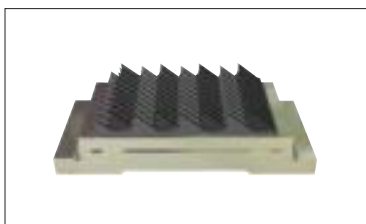
Cliptech CT



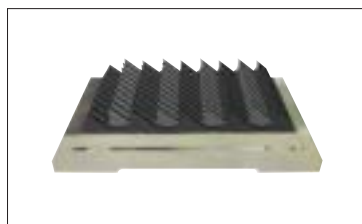
Hitech HT



LTS2



LT



DT

Revolving Tops

Combining the best available materials and operational excellence in manufacturing results in technically superior products.

Materials:

- All wire used is Bekaert high fatigue steel
- The blue coloured foundation is designed for high speed carding
- Clips are all made from galvanised steel

Manufacturing excellence:

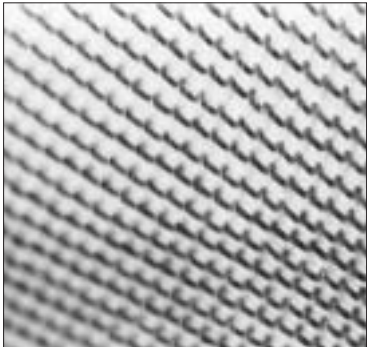
- Stable and consistent setting patterns
- Improved tooth design
- Deeper side grinding and razor sharp points
- Clean polished finish of the teeth
- Extra hardened points of 850/950 HV
- Greater hardness depth within tight tolerances
- Guaranteed height tolerance of ± 0.04 mm

Product performance:

- Closer machine setting
- Better nep removal efficiency
- Less loading
- Longer intervals between re-sharpening
- Increased total lifetime
- Better value for money

Product mix:

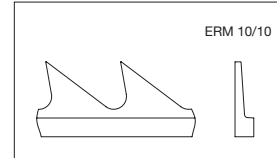
Product	height	ppi	
Single density TL types			
TL33	8.00	330	
TL40	8.00	400	
TX40	8.00	400	stronger wire
TL44	7.50	438	
TL50	7.50	500	
TL52	8.00	520	
Variable density TV types		exit density	
TV45	7.50	450	
TV53	7.50	520	
TV55	7.50	550	
Semi-rigid TP type			
TP28	8.00	280	
TP32	8.00	320	



Blowroom Wires

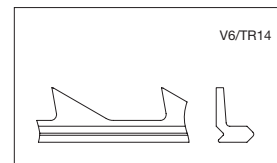
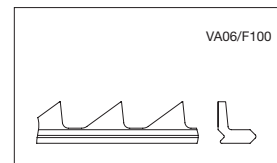
Plain rib

product	height	rib	pitch	angle	ppsi
ERM 20/0	10.00	2.50	18.20	0	14
ERM 20/10	10.00	2.50	18.20	10	14
ERM 10/0	10.00	2.50	10.00	0	26
ERM 10/10	10.00	2.50	10.00	10	26
356	10.00	2.20	12.25	-10	24
B662	5.90	1.05	26.00	25	24
B455	4.00	1.40	10.20	35	45



Interlocking

product	height	rib	pitch	angle	ppsi
V5/9.9/75	8.50	5.08	9.90	15	13
V5/9.9/70	8.50	5.08	9.90	20	13
VA06/F100	5.50	4.23	8.10	-6	19
V6/TR10 (RH)	5.50	4.23	8.50	10	18
V6/TR15 (LH)	5.50	4.23	8.50	10	18
V6/TR11	5.50	4.23	5.40	-10	28
V6/TR35	5.50	4.23	5.00	15	31
VA06/8.5/70	5.50	4.23	8.50	20	18
V6/TR2 (RH)	5.50	4.23	5.00	20	31
V6/TR3 (LH)	5.50	4.23	5.00	20	31
V6/TR50	5.50	4.23	5.00	20	31
VA06/6.5/70	5.50	4.23	6.50	30	23
V6/TR8	5.50	4.23	6.50	30	23
V6/TR6	5.50	4.23	5.50	-36	28
V6/NT1A	6.00	4.23	15.00	10	10
V6/NT2A	6.00	4.23	7.80	20	19
V6/TR13 (RH)	7.50	4.23	15.00	10	10
V6/TR14 (LH)	7.50	4.23	15.00	10	10
V6/CR1	7.50	4.23	7.50	10	20
V6/TR4	7.50	4.23	10.00	20	15
V8/TR7	5.00	3.17	14.50	20	14
VA08/6.5/70	5.50	3.17	6.50	20	31
V8/NT3A	6.00	3.17	6.30	20	32
VA10/5.5/50	4.70	2.54	5.30	40	48
V10/9020	4.20	2.54	13.60	0	20



Cleaning Fillets

Trützscher fillets

model	position	purpose	product description
DK715, DK740, DK760, DK803, DK903, TC03, TC05, TC06, TC07	TR-DS	Low Speed Top Cleaning Fillet	No. 22, 10m long, 38mm wide, 20mm high, 120 ppsi, 2 ply yellow cushion, nickel plated wire, white cloth backed
DK715, DK740, DK760, DK803, DK903, TC03	TR-DP	High Speed Top Cleaning Fillet	No. 18, 10.5m long, 25mm wide, 17mm high, 76 ppsi, 4 ply VIR, nickel plated wire, white cloth backed
DK700, DK710, DK715, DK740, DK760, DK803, DK903, TC03	TR-AP	Take-off Roller Cleaning Fillet	No. 24, 15m long, 19mm wide, 17mm high, 120 ppsi, 3 ply RR, nickel plated wire, white cloth backed
DK700, DK710		Zig-Zag Flat Cleaning Fillet	No. 22, 9m long, 38mm wide, 23mm high, 86 ppsi, 3 ply VIR

Crosrol fillets

model	position	purpose	product description
Mk4, Mk5	CT/CR	Take-off Roller Cleaning Fillet	No. 24, 16m long, 19mm wide, 10mm high, 3 ply RR, supplied in 247m rolls, red rubber backed
Mk4, Mk5	10C32	Top Cleaning Strip	No. 22, 1020mm/1016mm long, 32mm/21mm wide, 17mm high, 4 ply VIR
Mk6	CT-HS	High Speed Top Cleaning Fillet	No. 18, 12m long, 25mm wide, 17mm high, 76 ppsi, 4 ply VIR, nickel plated wire, white cloth backed
Mk6	CT-LS	Low Speed Top Cleaning Fillet	No. 22, 8m long, 38mm wide, 20mm high, 120 ppsi, 2 ply yellow cushion, nickel plated wire, white cloth backed

Rieter fillets

model	position	purpose	product description
C1/1, 1/2, 1/3 C4 - C10	CR1	Clearing Rod	No. 6, 1010mm/1006mm long, 33.5mm/ 15mm wide, 18.5mm high, 6 ply VIR
C1/1, 1/2, 1/3	DR11	Take-off Roller Cleaning Fillet (Twill)	No. 22, 11m long, 25mm wide, 18.2mm high, 5 ply VIR
C4/1, C50	DR17	Take-off Roller Cleaning Fillet (3 Rib 2 Tooth)	No. 24, 12m long, 19mm wide, 17mm high, 3 ply VIR
C4	DBZ4	Take-off Roller Cleaning Fillet (Twill)	No. 10, 7m long, 46mm/40mm wide, 8mm high, 9 ply VIR
C4, C4A, C10	DBZ8	Take-off Roller Cleaning Fillet (Twill)	No. 18, 12.5m + 3m long, 27.5mm/25mm wide, 8mm high, 5 ply VIR
C1/1, 1/2, 1/3	FB21	Front Flat Cleaning Brush (1 piece)	No. 22, 1200mm/1176mm long, 25mm/ 19mm wide, 26mm high, 3 ply RR
C4, C4A, C10, C4/1	FB14	Rear Flat Cleaning Brushes (2 pieces)	No. 18, 1032mm/1030mm long, 29mm/ 19mm wide, 26mm high, 3 ply RR
C4, C4A, C10, C4/1, C50, C51	FB24	Flat Cleaning Brushes (2 pieces)	No. 20, 1037mm/1035mm long, 48mm/ 31mm wide, 10.5mm high, 4 ply VIR
C60	40ZQ	Top Cleaning Strip	No. 30, 1539mm/1510mm long, 34mm/ 21mm wide, 26mm high, 3 ply VIR, 80 ppsi
C60	60ZQ	Top Cleaning Strip	No. 30, 1539mm/1510mm long, 34mm/ 21mm wide, 26mm high, 3 ply VIR, 120 ppsi

Marzoli fillets

model	position	purpose	product description
C41 - C601	TR-AP	Take-off Roller Cleaning Fillet	No. 24, 11m long, 19mm wide, 17mm high, 120 ppsi, 3 ply RR with white backing
C41 - C601	Eccostrip MkII	Top Cleaning Strip	No. 24, 12m long, 38mm wide, 19mm high, 108 ppsi, 3 ply yellow rubber cushion

General fillets

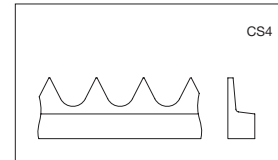
product	wire no.	foundation	height mm	width mm	ppsi	unit length m	remarks
Stripping	22	3 ply grey VIR	19.0	38.0	112	50	
Burnishing	22	3 ply grey VIR	19.0	38.0	112	50	Straight staple tooth
Zig Zag	22	3 ply grey VIR	19.0	38.0	86	50	
Cleaning (Mk I)	22	3 ply red rubber	19.0	38.0	128	50	0.7mm rubber face
Cleaning (Mk II)	24	3 ply yellow cushion	19.0	38.0	108	50	0.9mm rubber face
Strip cum Stripping	20	4 ply grey VIR	25.0/28.0	25.4	84	50	'Hi-Lo' fillet
Arc Bend Stripping	16	4 ply grey VIR	16.5	38.0	94	50	Arc bend EHP

Ancillary Wires

Stripping and redirecting

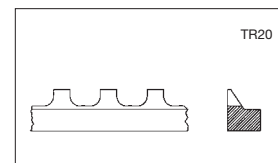
product	height	rib	pitch	angle	ppsi
R2	3.50	1.00	3.17	-15/30	203
CS4	4.06	1.80	3.15	-27	114

Stripping wires are standard supplied with a smooth finish for easy fibre release.



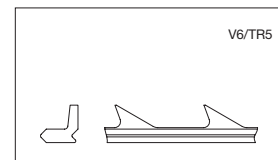
Feed roller - Plain rib

product	height	rib	pitch	angle	ppsi
TR20	2.50	2.00	2.83	0	114
TR21	4.50	3.00	4.50	-42	48
FR90	3.00	3.00	3.80	0	57
FR130	3.00	3.00	3.80	-40	57

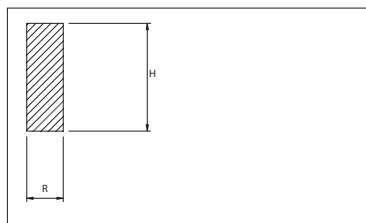


Feed roller - Interlocking

product	height	rib	pitch	angle	ppsi
V6/TR5	5.00	4.23	11.90	20	13
V6/RA2	5.00	4.23	6.60	17	23

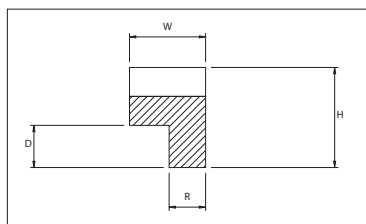


Border wires



type	H (mm)	R (mm)	W (mm)	D (mm)
------	--------	--------	--------	--------

3.5 x 1.00	3.50	1.00	-	-
4.0 x 1.00	4.00	1.00	-	-
4.0 x 1.13	4.00	1.13	-	-
4.0 x 1.60	4.00	1.60	-	-
4.5 x 1.50	4.50	1.50	-	-
6.5 x 1.50	6.50	1.50	-	-

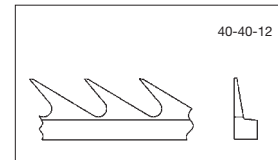


1201	2.70	1.20	2.50	1.50
1501	3.20	1.20	2.50	1.50
1504	6.50	1.50	4.00	1.80

Special Application Wires

Plain rib

product	height	rib	pitch	angle	ppsi
32-10-40	3.18	0.90	1.80	10	400
32-20-22	3.18	0.90	3.20	20	224
32-20-40	3.18	0.90	1.80	20	390
40-30-19	4.00	0.95	3.60	30	189
40-30-27	4.00	0.95	2.50	30	272
40-30-32	4.00	0.95	2.10	30	323
40-35-27	4.00	0.95	2.50	35	272
40-40-27	4.00	0.95	2.50	40	272
50-40-18	5.00	1.00	3.60	40	179
40-20-22	4.00	1.20	2.50	20	215
40-40-12	4.00	1.50	3.60	40	119
40-10-11	4.00	1.80	3.20	10	112



Guidelines for Metallic, for Fixed Flats, and for Tops

Bekaert has a full range of card clothing to suit all applications. We specify card clothing according to card model, raw material (in terms of type, staple length, fineness, trash content, ...), processing speed and application. The following schedules are meant as a general guideline only.

production		cotton			man made fibres (MMF)			blends	regenerated
		OE yarn	Carded	Combed	< 1.0 dtex	1.5-3.0 dtex	> 3.0 dtex	Co & MMF	
< 40 kgs/hr	Cylinder	C20-30-66	C20-30-86	C20-30-86	C25-20-63	C25-20-63	C25-20-63	C20-30-86	C25-25-72
		C20-35-86	C20-35-86	C20-35-86	C25-20-72	C25-20-72	-	-	C20-30-66
		-	-	C20-30-95	-	-	-	-	-
	Doffer	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2
		D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2
	Tops	TL40	TL50	TL52	TL40	TL40	TP32	TL44	TL40
		TL44	TL52	TV53	TL44	TL44	TL33	TL50	TL44
		TV45	TV53	TV55	TV45	-	-	TV45	TV45
		-	-	-	-	-	-	TV53	-
> 40 kgs/hr	Cylinder	C20-35-86	C20-35-86	C20-35-86	C25-20-63	C25-20-63	C25-20-63	C20-30-86	C20-30-66
		C20-35-95	C20-35-95	C20-30-95	C25-20-72	C25-20-72	-	C20-35-86	C20-30-86
		C20-40-95	C20-40-95	C20-35-95	C20-30-86	-	-	-	-
	Doffer	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2	D40-30-30R2
		D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2	D47-30-30R2
	Tops	TL44	TL50	TL52	TL40	TL40	TP32	TL44	TL40
		TV45	TL52	TV53	TL44	TL44	TL33	TL50	TL44
		-	TV53	TV55	TV45	-	-	TV45	TV45
		-	-	-	-	-	-	TV53	-
Stationary Flats Lickerin		57/65/88	57/65/88	57/65/88	57/65/88	57/65/88	57/65/88	57/65/88	
LT-DT-HT-ST-XF-LTS2-LTC2									
Stationary Flats Rear		88/160/270	160/270/330	270/330/440	88/160/270	88/160/270	88/160	160/270	
CT-ST-XF-LW									
Stationary Flats Front		330/550	550/660	550/660	440/550	330/440	270/330	440/550	
ST-XF-CT-LW									

Maintenance of card clothing

The essential rule for consistent quality of sliver and yarn is to maintain the quality of the lickerin, fixed flats, cylinder, doffer and tops. The material being processed is the main source of wear and this can vary from mill to mill, and from season to season.

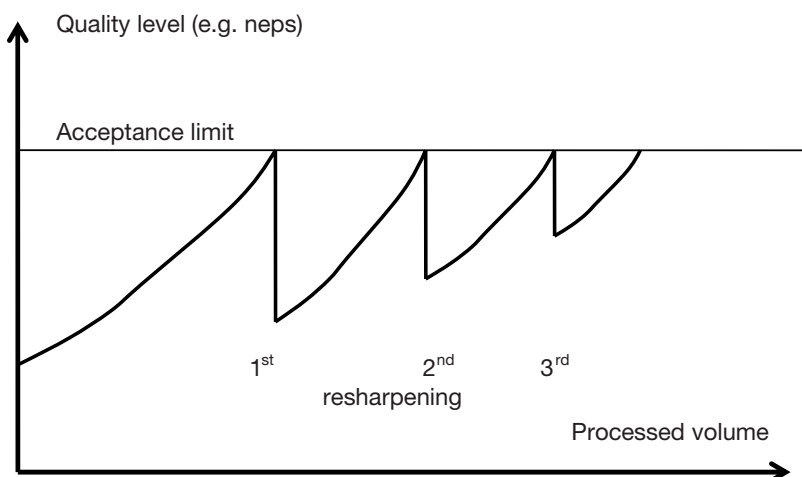
Due to their nature, lickerin wire and fixed flats cannot be resharpened and we recommend timely replacement. This way lickerin and fixed flats are performing their opening and cleaning job in a good and consistent way, also protecting cylinder and tops from accelerated wear.

Cylinder and tops have to be resharpened in order to counter their normal wear. We encounter different ways of maintenance schedules in spinning mills:

- Volume based: the maintenance periods are defined according to throughput volumes
- Quality based: quality of sliver is measured (mostly neps) and corrective maintenance is performed if acceptable quality levels are no longer achieved.

In reality, we notice a lot of combinations of “volume based” and “quality based” maintenance schedules.

Upon request, we provide our customers with specific maintenance schedules according to card clothing and application.



Example of a maintenance schedule for cylinder and tops based on sliver quality

Stationary Flat Systems

The use of an extensive number of stationary flats is state of the art on modern cards. The fixed flats at the lickerin and at the back of the card are opening and cleaning the fibres. They reduce the workload of cylinder and tops and improve quality of card sliver and yarn. The front fixed flats are post-carding the fibres and help to ensure proper transfer between cylinder and doffer. The system XL range of stationary flat upgrades was first introduced to the market in 1982, and has since led the world in stationary flat technology for short staple carding. Bekaert Carding Solutions offers a full range of stationary flats systems to upgrade cards.

1. System XLSA for the lickerin position

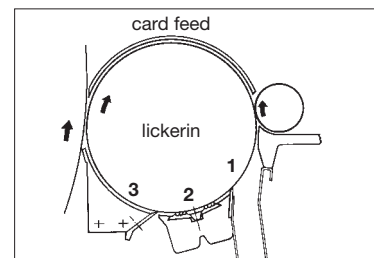
The XLSA system is mounted under the lickerin. The system consists out of two stationary flats, knives and a fixation system. Its function is to subject the fibre tufts to intensive pre-opening and cleaning, whilst keeping the loss of good fibres in the waste to a strict minimum.

Features:

- Anodised wear resistant card segments.
- Easy access to and replacement of the DT-type fixed flats once the lickerin is removed.
- Independent adjustment for cleaning knives by simple turnscrews.

Benefits:

- Improves the opening of fibres and the removal of trash.
- Reduces good fibre loss under the lickerin.



2. Systems for the back of the card

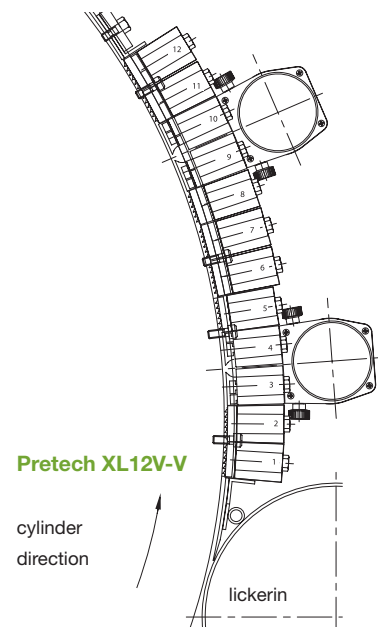
Bekaert offers the XLR (Top Saver), Pretech XL and Pretech XLV Ventech stationary flat systems for installation at the back of the card. These systems provide a gentle, gradual pre-opening and pre-carding of the fibre tufts coming from the lickerin. Consequently, a well opened and uniform fibre web is presented to the revolving flats for the main carding action. The principle of the Pretech lies in its graduated, two dimensional, funnelling of fibres between the lickerin and the revolving flats, resulting from a combination of progressively finer populations on the stationary flats and closer settings from the lickerin to the entry of the revolving flats. One or more Ventech trash extraction units (via suction) can be added to the Pretech systems for extra trash removal.

Features:

- The number of fixed flats can vary from 2 to 22 depending upon the card model.
- The systems are simple and easy to fit.
- The Pretech XL systems are applied to traditional cards by first converting the flat chain from 106 to 84 revolving flats and repositioning the flat support brackets to create the required space over the main cylinder between lickerin and revolving flats.
- On other card models, there is already sufficient space between lickerin and revolving flats without having to reduce the number of revolving flats.
- Micro-adjusters on each flat bar allow highly accurate settings to the cylinder.
- Supertech and Special Supertech stationary flats are easy to exchange.

Benefits:

- The extra pre-opening of fibres and the additional trash removal act as barrier to protect the revolving tops; resulting in increased life expectancy of the tops.
- Closer settings are possible between cylinder and revolving tops.
- Better fibre parallelism.
- Yarn imperfections are significantly reduced; reduction in Classimat faults.
- Potential for increased card production.



3. Systems for the front of the card

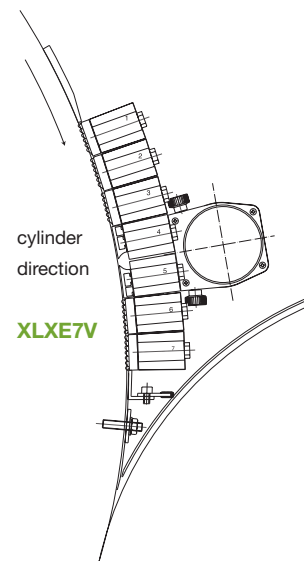
The XLX and XLXE systems are designed to fit easily in place of the stripping door, above the doffer. Depending on the card model, three up to seven stationary flats can be mounted. Furthermore, a Ventech suction unit (denoted by V in the system's name) can be added to further improve the carding efficiency. It consists out of a trash deflector flat bar and a control flat bar, set to regulate the amount of peppertrash and micro-dust to be removed. The extracted impurities are deflected into the suction duct linked to the card cleaning system by a hose.

Features:

- The units can be fitted to a large range of card models.
- Simple and easy to fit.
- Micro-adjusters on each flat bar allow highly accurate settings to the cylinder.
- The stationary flats are easy to exchange.
- Extraction rate of the Ventech is controlled by micro-adjustment.
- Low suction power requirement of 2.5 m³/min for the Ventech.

Benefits:

- Card cleaning efficiency is increased.
- Higher cylinder to doffer transfer efficiency.
- Less fibre hooks in the card web and better fibre parallelism.
- Fewer neps and fewer imperfections in the yarn.
- Better trash and dust extraction at the open-end spinning machine.
- Waste at the comber is reduced.



More solutions for an ever better performance

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Duratech: micro alloyed steel for long life

Ultra: high-end steel grade for longest lifetime

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Our specialists are at your side to advise you...

The reliable partner

Looking for the best carding solutions for your specific short staple, non-woven, woollen and worsted application? Bekaert might be just the reliable partner you are looking for.

Through partnerships with textile machine builders and customers world wide Bekaert strives to be the independent and recognized leader in the card clothing business. By enabling our customers to benefit from our know-how, technological strengths and operational excellence, we believe that we can deliver you carding solutions that are truly unique. Bekaert employs over 23 000 people world wide, serving customers in 120 countries.

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