COICO COICO Spinning









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Trützschler Group SE

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Metallic Wires hard to the point



High quality wires

Made for working on modern cards at a top performance level.



Up to 260 kg/h

Extraordinary speed rates boost your production output.



Hard to get soft

Optimal hardness of the teeth avoids wear and guarantees the flexibility of the base to avoid breakages.



Extremely long lifetime

Significantly higher added value due to much longer operating time.



Broad range for a wide variety of fibers and applications.

Trützschler Card Clothing looks back on more than 75 years of experience in wire production. This, together with our specially selected materials and close cooperation within the Trützschler Group enable us to produce high quality and durable wires for the spinning industry. Our product range offers the suitable wire for every application.

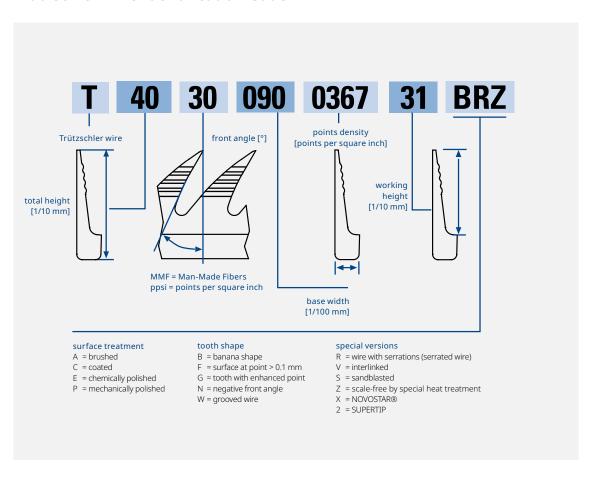


Spinning wires by TCC

The right geometry for any application

Spinning wires are characterized by their geometry. The most important factors that determine a spinning wire include its height, angles, and points per square inch (PPSI). The T-Code shows the most important data of TCC wires.

Trützschler Wire Identification Code



Notes

By clicking on the different rollers and elements, you will be taken directly to the relevant chapter with further information and specifications for the corresponding wires. The different icons make it easier to identify the appropriate materials.



Man-Made Fibers:

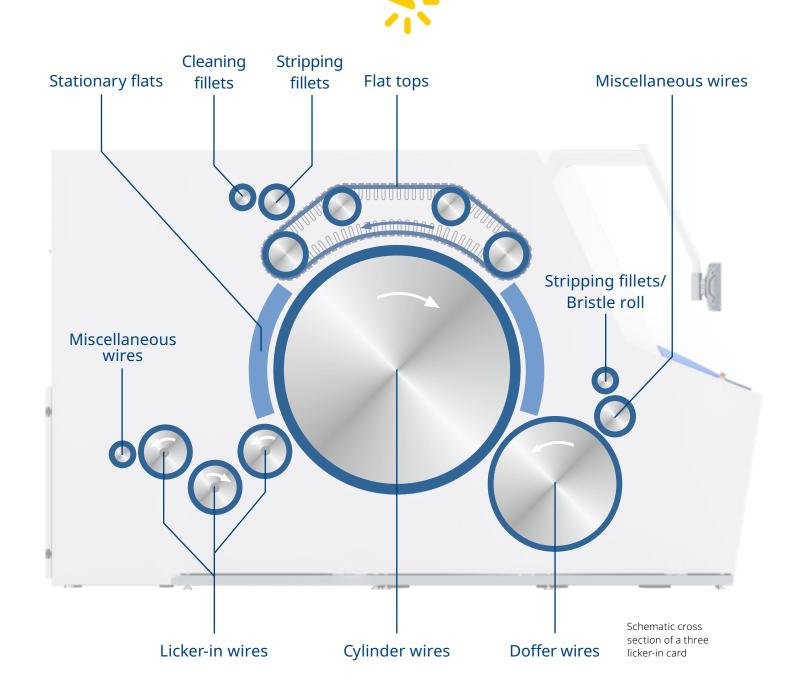


Blends:



Recycled material:

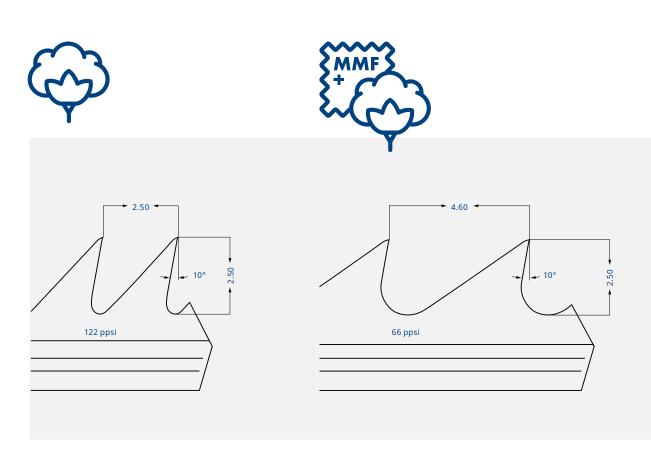




Licker-in wires

Fiber pre-opening and cleaning in the right way

With a large working height of usually 5 mm and angles from 0 to 20 degrees, licker-in wires ensure the opening of the fiber lumps for further processing of the fibers in the card. Wires are available for cards with one and with three licker-in rollers. Since the licker-in wires have to do the toughest work in the opening process, usually wires with an interlinked profile are used.



Single or 1st licker-in

Cotton: Angle 10°, PPSI 122 Example: T50.10.210.0122.34/VX2

Single or 1st licker-in

MMF + Blends: Angle 10°, PPSI 66 Example: T50.10.210.0066.35/VX2

Details

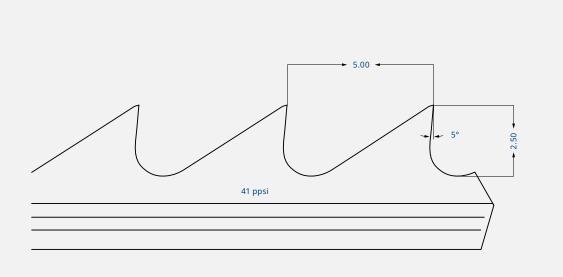
Depending on the raw material and the application, the working angle of the first or single licker-in varies. Small angles of usually 5 degrees and a low density of around 42 points per square inch protect the fibers and treat them smoothly. Wires with higher PPSI values are available for materials that require better opening.

For the 2nd and 3rd licker-in a standard wire specification is usually used.

Grooved wires for older card models are also available.







3 licker-in rollers:

1st licker-in (height 5 mm, angle 0-10°, PPSI 34 - 122)

2nd licker-in (height 5 mm, angle 20°, 164 PPSI)

3rd licker-in (height 5 mm, angle 20°, 210 PPSI)

Single or 1st licker-in

MMF: Angle 5°, PPSI 41

Example: T50.05.315.0041.34/VX2

Licker-in wires

Product range

Trützschler Wire Identification Code	Base width	Angle	PPSI
T50.00.315.0034.34/VX2	3.15 mm	0°	34
T50.05.315.0041.34/VX2	3.15 mm	5°	41
T50.10.315.0044.34/VX2	3.15 mm	10°	44
T50.10.210.0066.35/VX2	2.10 mm	10°	66
T55.05.110.0093.42/W	1.10 mm	5°	93
T55.10.110.0115.42/W	1.10 mm	10°	115
T50.10.210.0122.34/VX2	2.10 mm	10°	122
T50.20.210.0122.34/V	2.10 mm	20°	122
T50.05.180.0131.34/V	1.80 mm	5°	131
T50.20.160.0164.35/V	1.60 mm	20°	164
T50.10.160.0203.35/V	1.60 mm	10°	203
T50.20.160.0210.35/VB	1.60 mm	20°	210
T55.00.110.0081.42/W	1.10 mm	0°	81



		~~~~		
Type of Licker-in	( <del>\o</del>	£ AMAF		Ġ\$
Single or 1 st Licker-in	•		•	•
Single or 1st Licker-in	•	•		
Single Licker-in	•			
Single or 1 st Licker-in	•		•	
Grooved Licker-in	•	•	•	
Grooved Licker-in	•			
Single or 1 st Licker-in	•			
2 nd Licker-in	•	•	•	
Single Licker-in	•	•	•	•
2 nd Licker-in	•	•	•	
Single Licker-in	•	•	•	
3 rd Licker-in	•	•	•	
Grooved Licker-in		•		•

More information:



or click here: <u>Licker-in</u>

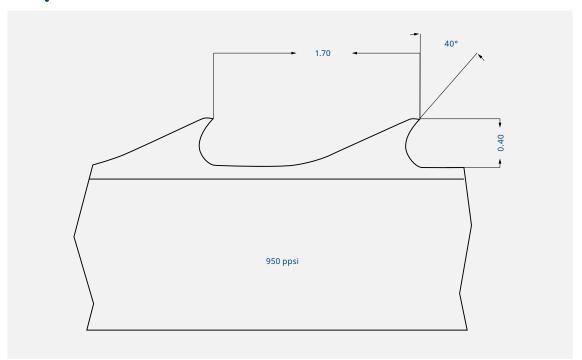
# Cylinder wires

# Durable and efficient cylinder wires for maximum productivity and quality

TCC cylinder wires combine it all: High production performance up to 260 kg/h, efficient nep reduction, smooth treatment of your fibers and an extraordinarily long lifespan.

Choosing the right TCC cylinder wire for processed materials will give you both high quality production and long working time.





Wire geometry according to raw material and applications.

#### **Details**

Find the right wires for your application and raw materials. The front angle, the working height, the base width and the PPSI are decisive factors for choosing the right wire.

For cotton yarns we usually suggest a low working height and relatively aggressive angles of up to 40 degrees.













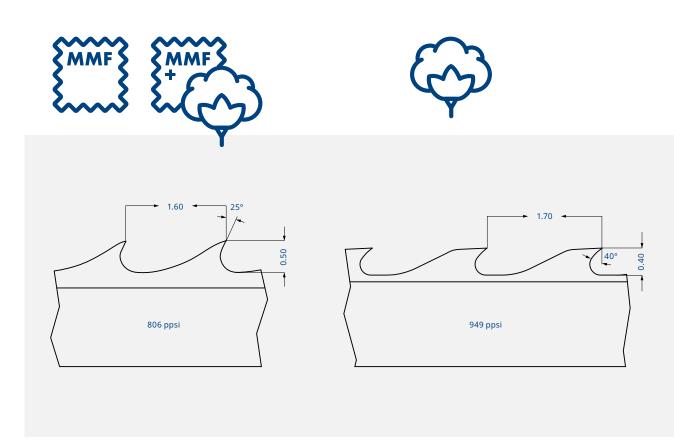
Cylinder	Cotton	Man-Made Fibers	Viscose	Recycling	Blends
Height [mm]	1,7	2,5	2,0	1,7-2,5	1,7 - 2,5
Front angle	35° - 40°	20°	25°	20° - 30°	25° - 30°
Base width [mm]	0,4 - 0,5	0,6 - 0,8	0,5	0,5 -0,7	0,5 - 0,6
PPSi	860 – 950	556 - 742	806	636 - 860	727- 860
Working height [mm]	0,5	1,2	0,7	0,5 - 1,3	0,5 -1,3

High quality clothings for high yarn quality

# High performance cylinder wires

# Benefit from a highly productive and smooth treatment of the fibers

Different materials and applications require different geometries of the cylinder wire. In the extensive TCC product range you will find, among many others, the following cylinder wire types:

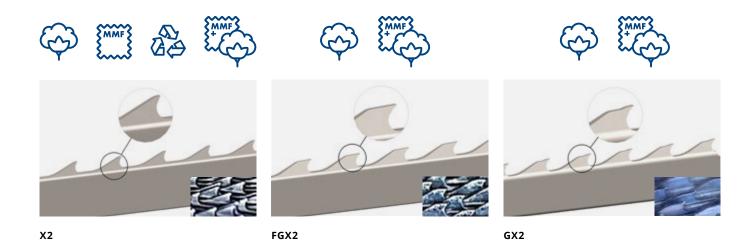


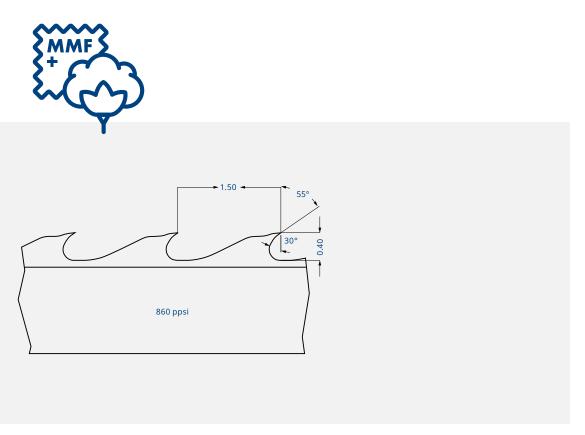
#### X:

X geometry is a universal geometry, used as a standard. There is a large variety of X wires and they are always grindable. X2 wires are produced in Supertip quality.

#### FGX:

FGX wires have teeth with a long back and are mainly used for cotton and blends. The long back increases both the stability of the teeth and the carding area. Therefore FGX wires allow to increase the carding area due to their geometry and to reach even higher quality in the card sliver. FGX wires are maintenance-free, so there is no need to be grinded.





#### GX:

GX wires are also used for cotton and blends and combine the advantages of FGX wires (maintanance-free).

# Cylinder wires

#### **Product range**

Trützschler Wire Identification Code	Base Width	Angle	PPSI
T33.15.090.0220.24/FX2Z	0.90 mm	15°	220
T25.15.080.0448.12/X2	0.80 mm	15°	448
T20.20.060.0717.07/X2	0.60 mm	20°	717
T17.40.050.0860.05/X2	0.50 mm	40°	860
T17.30.040.0950.05/X2	0.40 mm	30°	950
T17.35.040.0950.05/X2	0.40 mm	35°	950
T17.40.040.0950.05/X2	0.40 mm	40°	950
T25.20.080.0556.12/X2	0.80 mm	20°	556
T25.20.070.0636.12/X2	0.70 mm	20°	636
T25.20.060.0742.12/X2	0.60 mm	20°	742
T20.25.050.0806.07/X2	0.50 mm	25°	806
T25.25.060.0727.13/X2	0.60 mm	25°	727
T17.30.050.0860.05/X2	0.50 mm	30°	860



Details I	Details ll	(\$\oplus \)	£MMF}	E A	82	also available as
Bleached Cotton Heavy Weight		•				
Bleached Cotton		•				
OE-Rotor	Recycled	•		•	•	
OE-Rotor		•				FGX2
Ring	Carded	•				GX2
Ring, Airjet	Carded, combed	•				GX2
Ring, OE-Rotor, Airjet	Carded, combed	•				GX2 and FGX2
> 2.2 dtex			•			
1.3 - 2.2 dtex			•	•	•	
< 1.7 dtex			•			
100% Viscose, 1.3 - 1.7 dtex			•	•	•	
1.3 - 1.7 dtex				•	•	
1.3 - 1.7 dtex, recycled, flex cards				•	•	GX2

More information:



or click here:

<u>Cylinder</u>

# Doffer wires

# NOVODOFF or B(R)Z – Choose the right shape and treatment for your doffer wire

The doffer wire ensures continuous and uniform take-off of fibers from the cylinder wire with an optimum transfer ratio.

The typical doffer wire is characterized by a relatively large height and an angle of usually 30 degrees. To ensure that the fibers do not get stuck, a smooth surface is essential. Serrations help ensure the takeover of synthetic fibers.

By choosing the right TCC doffer wire for each application, a perfect take-over of the fibers from the cylinder is guaranteed. This can avoid unnecessary accidents and idle times and ensures the formation of a uniform web.

#### **Product range**

Trützschler Wire Identification Code	Base Width	Angle	PPSI
T40.30.100.0280.28/BZ2	1.00 mm	30°	280
T40.30.100.0295.28/FGRZ2	1.00 mm	30°	295
T46.30.100.0304.37/RZ2	1.00 mm	30°	304
T50.30.100.0304.37/RZ2	1.00 mm	30°	304
T50.30.090.0327.37/FGR2	0.90 mm	30°	327
T40.30.090.0367.31/BRZ2	0.90 mm	30°	367
NOVODOFF 32			

B: Banana Shape | R: Wire with serrations | Z: Scale-free by special heat treatment

#### **Details**

For different fibers, TCC offers various doffer wire geometries and surface treatments, such as banana-shaped teeth or scale-free wires, which ensure a particularly smooth surface of the wire.

For synthetic fibers such as Polyester or Viscose, TCC has developed its NOVODOFF wires.

In addition to the standard height of 4 mm, TCC also offers doffer wires with a height that meet the requirements of the various card models.

#### Scale free

Specially treated wires with a smooth surface are available for specific applications.





<b>©</b>	£ AMME		80
•			
•			
•	•	•	
•	•	•	
•	•	•	
•		•	•
	•		

More information:



or click here: **Doffer** 

### **SUPERTIP**

#### High performance at a new level

SUPERTIP stands for card clothing with enormous durability, great variety and highest precision.

The sliver quality is of utmost importance as it directly affects the quality of the produced yarn. With an excellent sliver quality, high quality yarn can be continuously produced in a consistent quality. Investing in SUPERTIP with its extremely long lifetime and significantly reduced maintenance requirements will positively impact the overall success of your production.



# Surfaces

#### Customized surface treatments for optimal performance

Different surface treatments give each wire the right characteristics.

The standard surface with scale is used for fast rotating rollers such as the cylinder. Slow rotating rollers require a smoother surface to ensure good and reliable fiber transfer.



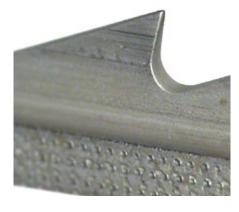
#### Standard

Standard surface with scale for fast rotating rollers.



#### Scale free

Scale-free surface for smooth fiber transfer, used for rollers with lower surface speeds. In carding, it is mostly used for doffer wires.



#### Chemically polished

Chemically polished for extra smooth surfaces. In carding, it is mostly used for the take-off rollers on the doffer side.

More information:



or click here:
Surface

# Flat tops

#### Different generations for different machines

The main carding work is done between the cylinder and the flat top. Selecting the right flat top is one of the keys to high production and quality.

Flat tops are mainly characterized by their PPSI value. For highquality cotton fibers, we recommend our highest PPSI values, e.g. Precisetop 52* and 58*. For open-end cotton yarns and synthetics, lower PPSI values (e.g. Precisetop 40* and 45*) should be used.

*also available as NOVOTOP and MAGNOTOP



#### The best generations of TCC flat tops

Reach a better quality with any type of carding machines thanks to our various flat top generations.



#### **PRECISETOP**

The latest generation of a flat top for the intelligent cards.



#### **MAGNOTOP**

Revolutionary innovation of flat tops with magnetic strips.



#### **NOVOTOP**

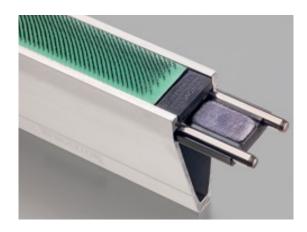
The classic version of TCC flat tops.



#### **PRECISETOP**

The flat top generation designed specifically for the TC 19ⁱ guarantees an ideal and precise carding gap that automatically and continuously adjusts to the production rate, the cylinder speed and the processed material properties. PRECISETOP ensures high, constant carding performance with high stability and a long

service life. PRECISETOP communicates directly with intelligent cards from Trützschler via the T-GO system: The carding gap is set automatically and more precise than ever before. The innovative mounting system enables a quick change of flat tops without using any tool.



#### **MAGNOTOP**

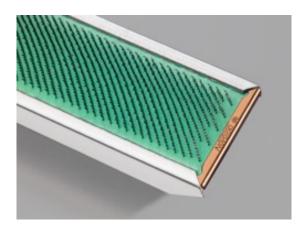
The innovative MAGNOTOP mounting system enables a quick change of flat tops without any tools. The flat bars have neodymium magnets in strip form while the matching flexible metal strips are located on the backside of the clothing strips. This is how the clothing strips are securely and precisely fixed to the flat bars. As the magnetic forces exceed the carding forces

that occur several times, the fastening of the MAGNOTOP strips is absolutely reliable. On the other hand the clothing strips can be "peeled" off the flat bar with little effort once the service cycle is reached. MAGNOTOPs are standard for 51" card machines – but can also be retrofitted for certain 40" card types.

#### **Product range**

Туре	Color Code	max. PPSI	Raw Material
Precisetop 30®		290	Coarse, recycled hard waste, blends < 50 % Co
Precisetop 40®		410	Coarse, recycled soft waste, recycled hard waste, blends, < 1,0 dtex Viscose
Precisetop 45®		450	Medium, coarse, blends, recycled soft waste
Precisetop 52®		510	Medium, blends
Magnotop 55®		510	Medium
Precisetop 58®		520	Extra long, long, medium
Precisetop 33S®		395	> 2,2 dtex MMF, bleached cotton
Precisetop 40S®		410	1,3 - 1,7 dtex MMF, blends

 $Regardless\ of\ the\ versions\ described\ above,\ you\ can\ find\ the\ right\ geometry\ for\ your\ application.$ 





#### **NOVOTOP**

NOVOTOP is our standard model for flat tops and is available for all common card types and brands in the market.

A multitude of setting patterns allows an optimum adaptation to different applications. The fibers are pre-oriented in the front area and smoothly parallelized in the finer area, where they are also cleaned and the neps are separated.

Application	<b>©</b>	₩MF}	MART CONTRACTOR OF THE PARTY OF	8	also available as NT / MT
OE	•		•	•	NT / MT
Carded, OE	•	•	•	•	NT / MT
Carded, Airjet, OE	•		•	•	NT / MT
Carded, Combed, Airjet, OE	•		•		NT / MT
Carded, Combed, Airjet	•				NT
Carded, Combed, Airjet	•				NT / MT
OE Hygiene		•	•		NT / MT
Carded, OE		•	•		NT / MT

More information:



or click here:

Flat tops

# Stationary flats

#### Improve your carding

Stationary flats contribute to a better carding process in the main carding area. Opening the fibers before the main carding process prevent overloading and damages in the flat top area. Stationary flats above the doffer have more PPSI and further parallelize the opened fibers before they are taken off by the doffer.

Regular replacement of the stationary flats extends the lifetime of cylinder wire and flat tops.

#### **Product range**

Туре	Area	PPSI
TS.089	Pre-carding	90
TS.135 (0°)	Pre-carding	140
TS.141	Pre-carding	140
TS.235 (0°)	Pre-carding	240
TS.241	Pre-carding	240
TS.305 (0°)	Pre-carding	320
TS.321	Pre-carding	320
TS.405 (0°)	Post-carding	420
TS.421	Post-carding	420
TS.550	Post-carding	550
TS.640	Post-carding	640

All stationary flats are available for all carding machine types in different lenghts (40"- 60") and with different PPSI-values (points per square inch).

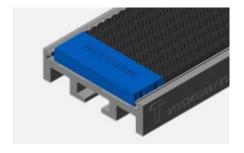
#### **Notes**

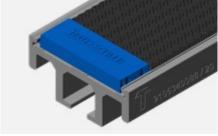
There are different profiles to install the stationary flats – most modern cards use the R-profile. But all other profiles are still common.

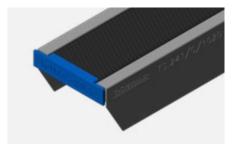
Especially for under licker-in stationaries the profile might be different. It is also important to choose the correct length of the stationary flats.



# Stationary flats front side (above doffer) and back side (above licker-in)

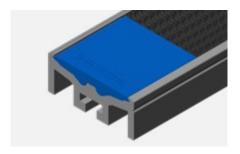


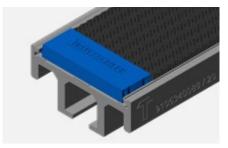


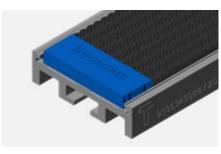


R-Profile T-Profile C-Profile

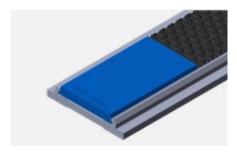
#### Stationary flats under licker-in







B-Profile T-Profile R-Profile



I-Profile

More information:



or click here: **Stationary flats** 

Once you re-order, please indicate:

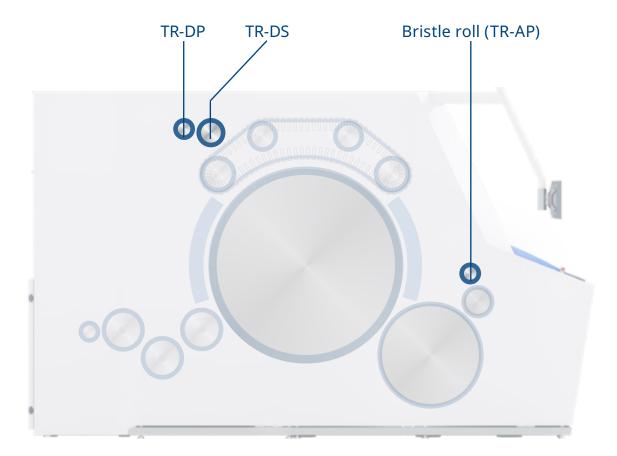
Profile + exact length in mm

# **Fillets**

#### Full utilization of service life with fillets

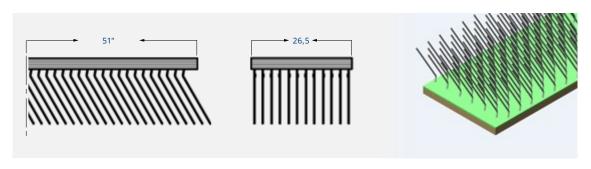
Fillets are used to clean the rollers and contribute significantly to extend their service life.

TCC's fillets and cleaning rolls allow optimal cleaning of the clothing and simplify the removal of the flat strip from the flat top. The fillets and rollers are available for all kinds of cards and brands – of course in the usual high TCC quality.

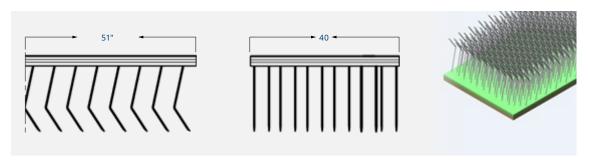


Schematic cross section of a three licker-in card



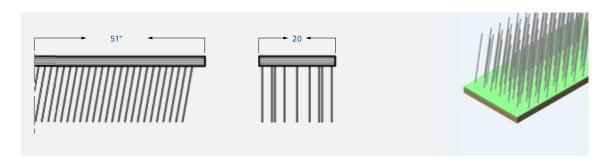


**TR-DP cleaning fillet for flats** TF170.30.30/30.070.275/RL



#### TR-DS stripping fillet for flats

TF200.33.32/32.120.393/RL



TR-AP stripping fillet for doffer

TF170.10.33/33.120.190/RL



#### **NEW: Bristle roll**

TC 15 and newer cards have a bristle roll in place of TR-AP stripping fillet.

More information:

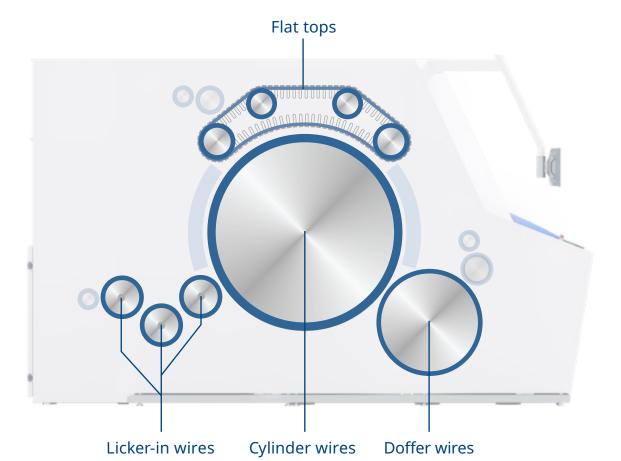


or click here: **Fillets** 

# Examples for typical wire specifications

	Cotton				
	Ring carded	Ring combed	OE		
Licker-in	T50.10.210.0122.34/VX2	T50.10.210.0122.34/VX2	T50.10.210.0122.34/VX2		
Main Cylinder	T17.40.040.0950.05/X2	T17.40.040.0950.05/X2	T17.40.040.0950.05/X2		
	T17.40.040.0949.05/GX2	T17.35.040.0950.05/X2	T17.40.050.0860.05/X2		
	T17.35.040.0950.05/X2	T17.35.040.0949.05/GX2	T17.40.040.0949.05/GX2		
	T17.35.040.0949.05/GX2	T17.40.040.0949.05/GX2			
Doffer	T40.30.090.0367.31/BZ2	T40.30.090.0367.31/BZ2	T40.30.090.0367.31/BZ2		
Flat Tops	NT/ MT/ PT 52	NT/ MT/ PT 58	NT/ MT/ PT 40		
	NT/ MT/ PT 45	NT/ MT/ PT 52	NT/ MT/ PT 45		
	NT/ MT/ PT 58		NT/ MT/ PT 52		

V: Interlinked | X: NOVOSTAR | 2: SUPERTIP | B: Banana shape | Z: Scale-free | G: Tooth with enhanced point



Schematic cross section of a three licker-in card



Viscose	Synt	& Recycling	
Rayon	PES	Blends	Hard waste blends
T50.10.210.0066.35/VX2	T50.10.210.0066.35/VX2	T50.10.210.0066.35/VX2	T50.10.210.0066.35/VX2
T20.25.050.0806.07/X2	T25.20.060.0742.12/X2	T25.25.060.0727.13/X2	T20.20.060.0717.07/X2
	T25.20.070.0636.12/X2	T20.25.050.0806.07/X2	T25.20.070.0636.12/X2
		T17.30.050.0860.05/X2	
Novodoff 32	Novodoff 32	T40.30.090.0367.31/BRZ2	T40.30.090.0367.31/BRZ2
NT/ MT/ PT 40	NT/ MT/ PT 40 S	NT/ MT/ PT 40	NT/ MT/ PT 45R
NT/ MT/ PT 40S		NT/ MT/ PT 45	NT/ MT/ PT 40

More information:



or click here:
Spinning Guide

# Miscellaneous wires

# ecure the complete transfer of raw material on the card with further wires

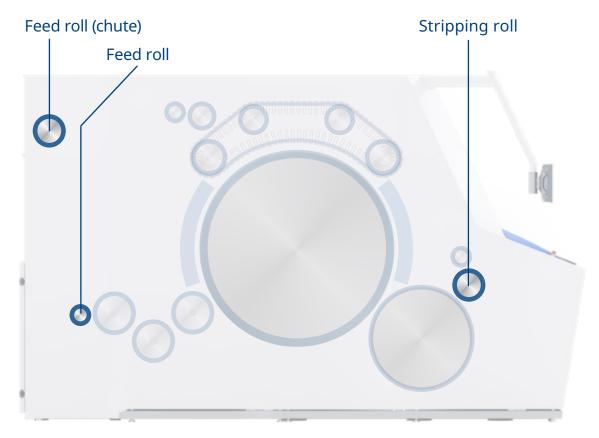
In addition to the already mentioned clothings, TCC also offers clothings for all other rollers of the card. Elements that do not involve carding also play an important role in the card. TCC wires guarantee the best results with a long service life.



Stripping roll: Usually, stripping wires have a negative working angle. Chemically polished wires are highly recommended at this position.

Feed roll (chute)	Feed roll	Stripping roll
T35.00.300.0056.18/F	T25.00.200.0122.08/F	T40.30.180.0110.28/AESN
T55.10.420.0028.33/VN	T50.15.150.0034.30	T40.30.180.0110.28/ASN
		T40.30.180.0110.28/N
		T35.18.110.0184.22/N

Feed roll: Spacer wire also available



Schematic cross section of a three licker-in card

# Blow room wires

#### Optimize your blow room performance

TCC also offers the best clothings for your blowroom machines. Whether clothings and stationary flats, e.g. for the feed rollers of cleaners used in cotton production, or openers if you work with synthetic fibers.

Trützschler Wire Identification Code	Base Width	Angle	PPSI
T100.40.640.0008.75/VN	6.40 mm	-40°	8
T75.10.420.0010.53/V	4.20 mm	10°	10
T100.00.250.0014.82/W	2.50 mm	0°	14
T100.10.250.0014.82/W	2.50 mm	10°	14
T60.20.420.0020.38/FV	4.20 mm	20°	20
T55.10.420.0028.33/VN	4.20 mm	-10°	28
T60.20.315.0031.38/FV	3.15 mm	20°	31



More information:



or click here:
Blow room



# The seamless access to your digital world of Trützschler



With our innovative digital solutions and unparalleled service, you are ready to take your production processes to the next level. Our single sign-on feature gives you complete access to all of our services without the hassle of multiple logins. Our apps work together to make your life easier and more efficient. Try our platform and experience the convenience of having everything you need in one place!

#### My Mill

Save time and costs with quick data collection and background monitoring that enables you to focus on things that really need your attention. Transparent data analysis and internal benchmarking improve performance and reduce maintenance needs. Make data-based decisions and optimize your processes!

#### Training

Speed up troubleshooting of machine down-times with our new online training platform. It enhances your skills quickly from anywhere, anytime to unlock the full potential of your machines.

#### My Wires

Don't get your wires crossed: Digitize your clothing management in just a few minutes, from clothing condition to service and maintenance. Best of all: It's free of charge! Automatically track your wire wearing, no matter which manufacturer you bought it from. Plan your maintenance efficiently and organize repeat orders with ease.

More information:





Fiber preparation installations: Tearing line · Bale openers · Mixers

Cleaners / Openers · Foreign part separators · Dust separators · Tuft blenders

Waste cleaners | Cards | Draw frames | Combing machines |

Digital Solutions

# TRÜTZSCHLER

Bale openers/mixers | Card feeders | Cards/crosslappers Wet-laying lines | Hydroentangling, needle-punching, thermo- and chemical bonding lines | Finishing, drying, winding machinery | Digital Solutions

#### TRÜTZSCHLER

Carpet yarn systems (BCF) · Industrial yarn systems | Digital Solutions

# TRÜTZSCHLER

Metallic wires: Cards · Cards long staple · Cards Nonwovens Rotor spinning | Flat tops | Fillets | Carding segments Service machines | Digital Solutions | Service 24/7