

Roll covers for tissue industry

ABOUT US

Tecno Caucho Rolls & Covers is the Spanish company with the largest production capabilities for rolls and sleeves, covered with rubber, polyurethane, composites, HVOF thermal spraying and plasma spraying APS.

Nowadays, our eagerness to constantly improve stand out us through our strong R&D investment, which is why our rolls, presses and technical component offer encompasses all the industrial materials. That gives us the ability to be able to offer high efficiency and high-quality solutions to improve the productivity and functioning of the machinery and manufacturing processes of our customers.

Kouvola · Finland • • St. Petersburg · Russia •Warszawa · Poland Le Mazis · France Mainleus · Germany Nordhouse · France Bergamo · Italy Guipuzkoa · Spain • Paco d'Arcos · Portugal Valencia · Spain Modiin · Israel FACTOR) Giza · Egypt Dhaka · Bangladesh Ciudad de Guatemala · Guatemala • San Salvador · El Salvador San José Panamá · Panamá TNIVERSA

FIND COVERS FOR EVERY POSITION





8 Anilox 9 Glue applicator 10 Embosser 11 Marriage



FORMING p4-5

1 Former roll 2 Guide roll 3 Drive roll

PRESS p6-7

4 Blind press 5 Suction press

WINDING & REELING DB-9

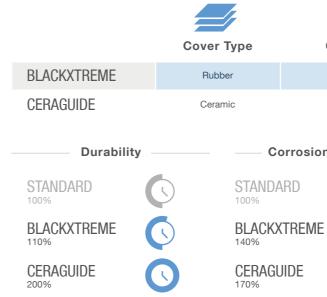
6 Reel drum 7 Reel spool

CONVERTING p10-12

FORMING

2 Guide roll

Guide rolls have the function of directing the paper line between the different sections of the manufacturing process. They must provide stability to the process to avoid at all costs any alteration in the direction of the paper line. Anti-corrosion properties are also important as at this point the pulp still lacks consistency as it is still soaked, so it is necessary to have qualities in the covers of these rolls that prevent the formation of stickies on the paper line, as well as dirt and other external agents.



3 Drive roll

Drive rolls are those that drive the movement of the production line and set the speed of the paper line. Their most outstanding characteristic is the traction capacity that their covers must have to be able to withstand such an effort.

1 Former roll

Former rolls are responsible for collecting the pulp to start the manufacturing process. They are constantly in contact with aqueous solutions, so it is important that they have the capacity to resist corrosion and its effects for a long period of time. In addition, these solutions are usually partly composed of some chemical agents that can increase the corrosive effect on the cover and must be considered if the durability of the covers wants to be maximized.

	Cover	Туре	Color	Hardness F	Range	⊖ → ← Cover Thickness
BLACKXTREM	Rubl	Rubber		88 ShD		5 - 15 mm
NANOROCK	NANOROCK Composite		Blue	90 ShD		10 -15 mm
	Durability —			Corrosi	on resis	stance
C	C	C		STANDARD	0	
STANDARD	BLACKXTREME	NANOROCK		BLACKXTREME	0	
				NANOROCK	6	

	Cover Type	Color	Hardness Rang	⊖ e Cover Thickness
DRIVEXTREME	Rubber	Black	5 - 40 P&J	15 - 25 mm
Du	rability		Traction C	apacity
STANDARD 100%	DRIVEXTREME		STANDARD 100% DRIVEXTREME ← 150%	$\div \bigcirc \longrightarrow$

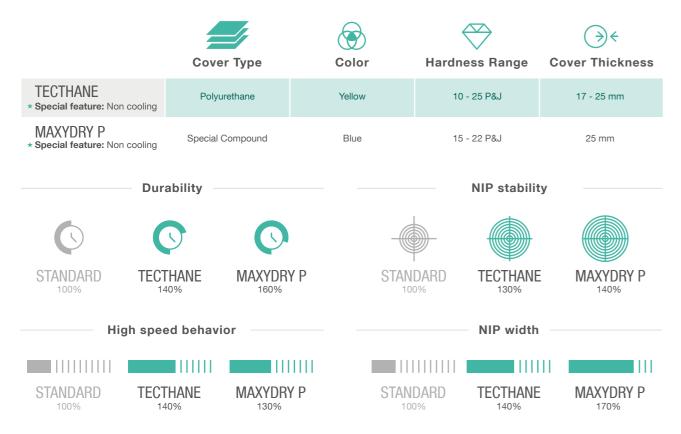
$\overline{}$	\bigotimes	∢
Color	Hardness Range	Cover Thickness
Black	88 ShD	5 - 15 mm
Black	1300 HV	500 - 1000 μm
on resistance	Releas	e/Anti-stickies
	STANDARD	
5	BLACKXTREI	ME •
6	CERAGUIDE	

5



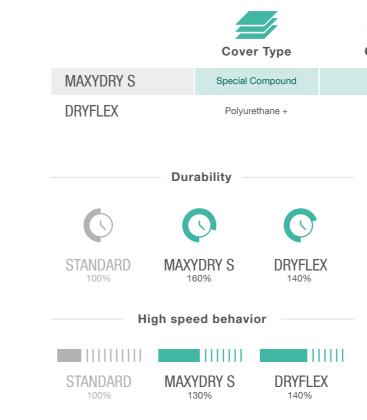
4 Blind press

The main function of blind presses is to give the paper greater consistency by means of pressure. For this purpose, it is very important that the covers used maintain constant dimensional stability along the entire surface of the roll to press the paper uniformly along the entire paper line. Other factors such as the behavior of the cover at high speeds are also important.



5 Suction press

Suction presses in concrete are intended to absorb water from the paper line during pressing, so their covers have a drilled or grooved finish which greatly influences their suction capacity among other factors. The dimensional stability of the roll cover is also important to suck water uniformly throughout the paper line and avoid areas with higher humidity, as well as its behavior at high speeds.





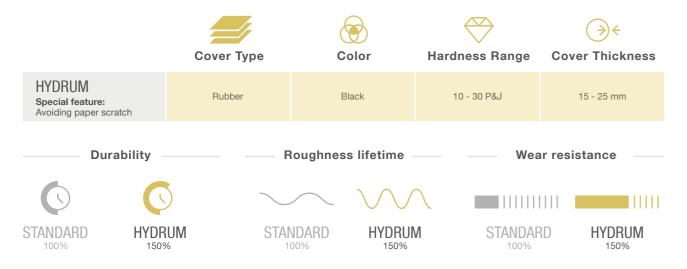
Color		Hardn	ess Range	⊖ ← Cover Thickness			
Blue		22	- 30 P&J		25 mm		
Violet		20	- 35 P&J	20 - 25 mm			
			NIP stabilit	У			
	-@						
	STAN 100		MAXYDRY S	G [DRYFLEX 130%		
			NIP width				
l							
		STANDARD MAXYDRY 100% 170%			DRYFLEX 140%		



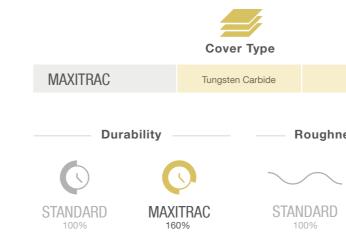
Reel drum 6

These rolls are responsible for collecting the paper once the manufacturing process has been completed and supplying it correctly to the reel spool to form a roll of one layer of tissue. For this purpose, they must have a certain roughness in their covers that allows them to grip the paper well, avoiding possible breaks in the paper line. They must also offer good resistance to wear and tear.

6.a Tissue reel drum



6.b Board reel drum



7 Reel spool

In tissue, the cover used in this position mainly serves to protect the metal reel on which the tissue paper layer will be wound once it has been manufactured. For this purpose, it must be cut-resistant and offer good dimensional stability, in addition to allowing traction.

Color **Cover Type TECTHANE M** Orange Polyurethane Durability **Cutting resistance** STANDARD **TECTHANE M** STANDARD **TECTHANE M** 140% 140%

Color	Hardness Range	⊖) ← Cover Thickness
Grey	1300 HV	100 - 250 μm
iess lifetime	Wea	r resistance ——
\sim		
MAXITRA 150%	C STANDAF	ND MAXITRAC



STANDARD 100%

Dimension stability

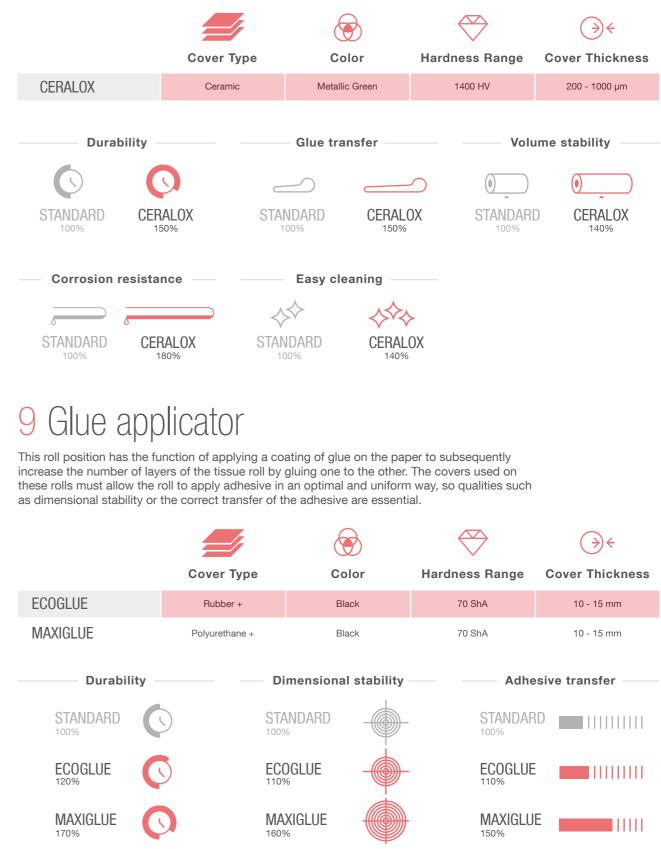
TECTHANE M 140%

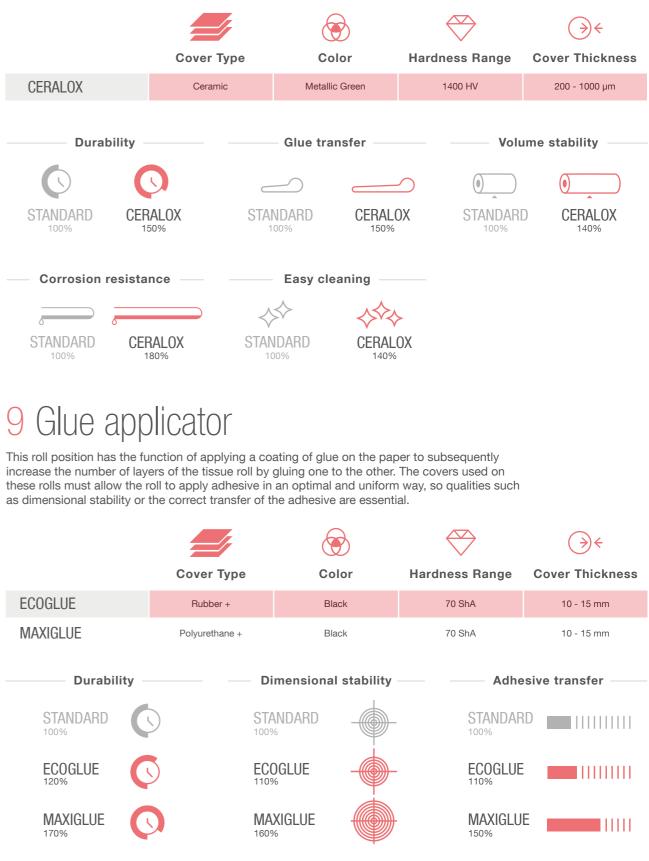
9

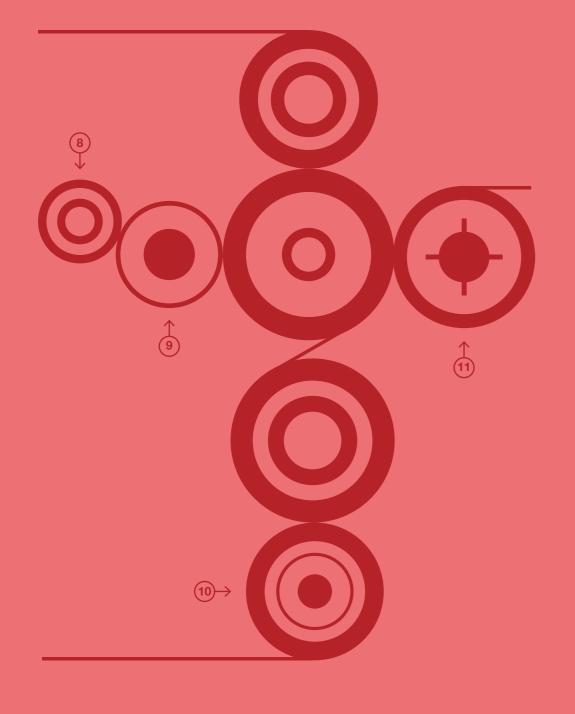
CONVERTING

8 Anilox

Anilox rolls are used to supply the right amount of adhesive to the applicator rolls so that they can later apply it to the tissue paper layers. Their covers must be corrosion-resistant and easy to clean, as well as have good adhesive transfer properties and good volume stability.







10 Embosser

This roll position must withstand the high loads exerted by embossing rolls when applying the stencil to the tissue by means of pressure. In addition, they must withstand the high temperatures in which the process is carried out, as well as offering good resistance to abrasion and adaptability to the different patterns that can be embossed on the tissue.

	Cover		Color	Hardness Ra	nae	⊖ → ← Cover Thickness
EMBOHEAT		Compound	Orange	55 - 65 ShA	.90	12 - 20 mm
EMBOFLEX	Polyur	rethane	Yellow	65 ShA		12 - 20 mm
MAXIFLEX	Rul	bber	Violet	55 ShA		12 - 20 mm
MAXIFLEX DUA	AL Rub	ber +	Violet	55 ShA		12 - 20 mm
MAXIFLEX 6	Ruk	ober	Violet	60 ShA		12 - 20 mm
Durab	oility	— Temp	erature resistan	ce — —	Abrasio	on resistance ——
STANDARD	C	STANDAR			ARD	
EMBOHEAT	\mathbf{O}	EMB0HE/	λT <u></u>	EMB0	HEAT	~~~~~
170% EMBOFLEX 180%	Q	180% EMBOFLE 120%	Х 💽	EMBO 180%	FLEX	
MAXIFLEX	C	MAXIFLE>	(D MAXIF	LEX	
MAXIFLEX DUAL	\bigcirc	MAXIFLEX	(DUAL	MAXIF 150%	LEX DU	AL
MAXIFLEX 6	\bigcirc	MAXIFLEX	(6	MAXIF 130%	LEX 6	·····
—— Pattern ada	aptability ——		High load			
STANDARD		STANDAR 100%				
EMBOHEAT		EMBOHEA	AT			
EMBOFLEX		EMBOFLE		_		
110%		160%	1	•		
MAXIFLEX 140%		MAXIFLEX				
MAXIFLEX DUAL		MAXIFLEX	(DUAL			
MAXIFLEX 6		MAXIFLEX	6			

The function of the marring rolls is to bind the different tissue layers together to obtain a final roll of paper that maintains the thickness between the different layers of paper. To achieve this, the covers used on these rolls must offer low specific pressure and marking resistance, as well as good dimensional stability and easy cleaning to obtain quality tissue rolls.

11 Marriage

Color	Hardness Range	⊖ ← Cover Thickness
Black	90 ShA	12 - 15 mm
Red	98 ShA	12 - 15 mm
Black	97 ShA	12 - 15 mm

Low specific pressure

STANDARD

MARRYFLEX 150%

MARRYTOP

MARRYCHARGE

Dimension stability

STANDARD

MARRYFLEX

MARRYTOP

MARRYCHARGE





13

WHY CHOOSE US?

At Tecno Caucho Rolls & Covers we offer a **complete and safe service** thanks to our extensive **knowledge of the sector**. We **manage the complete process** by taking care of the transport, covering, finishing and maintenance services required for each roll.

In addition, our **60 years of experience** allow us to provide **specific advice for each roll** in order to **solve problems** and avoid possible future inconveniences in the durability and rolls operation.

Thanks to this, we offer **customized solutions** for each roll that allow us to **decrease TCO**, **avoiding unexpected shutdowns** and assuring **quality and fast delivery times**.

RANGE OF SERVICES

• Roll covering

·Rubber.

- ·Polyurethane.
- ·Composites.
- ·HVOF thermal spraying.
- ·Plasma thermal spraying (APS).

Surface finishing

- •Turning.
- •Drilling.
- •Grooving.
- ·Super Finish.
- ·3D Grinding.
- ·Laser Engraving.

Construction of complete rolls

Maintenance

·Roll repair.

- ·Recharging and adjustment of shafts.
- •Non-destructive testing with magnetic particles, dye penetrant liquids, ultrasound and thermography.
- ·Maintenance of suction presses.
- ·Maintenance of Crown Control Rolls (CCR).
- ·Dynamic balancing.
- ·Vibration analysis.

Advicing and optimization

- ·Press sections.
- ·Calender and multicalender.
- ·Troubleshooting and production efficiency.

TC ROLLS & COVERS

(+34) 96 154 74 50
✓ tecno@tecnocaucho.com
✓ www.tecnocaucho.com

 C/ Industria, 5
 Pol. Ind. Barrio del Cristo 46930 Quart de Poblet
 Valencia (España)