



winding  
system technology



your needs **our innovations**



# your needs **our innovations**

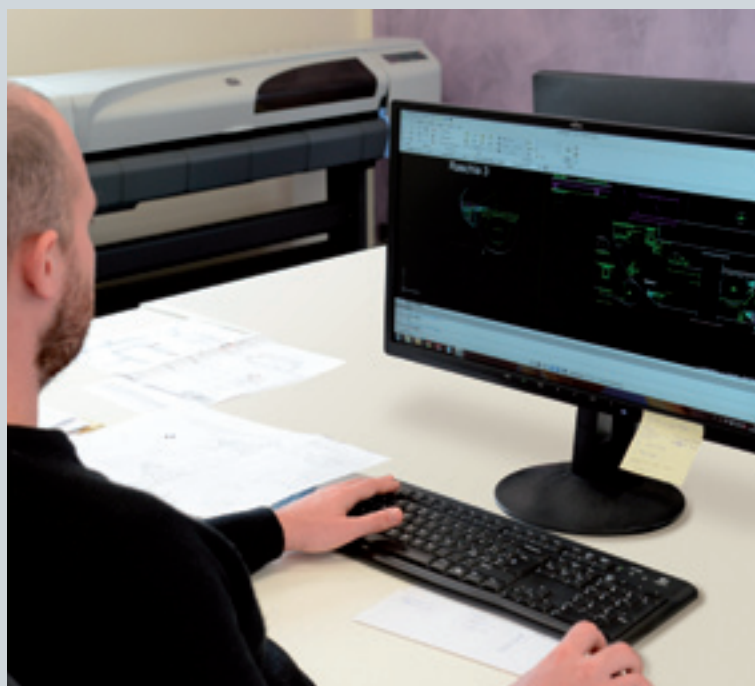
**Tecno Paper Srl** is mainly focused on winding systems technology. The core business of the company is the production of brand new and the rebuilding of winders for Tissue, Kraft, Coreboard and special applications, as well as pope reels, calanders and paper machine parts.

The competitive advantage of the company, making it one of the most dynamic in the paper industry, is the flexibility and optimization of its products and solutions.

**Tecno Paper** is more than a manufacturer of Winders, pope reels and paper machine parts: it's a company that has a customer oriented philosophy, in terms of always delivering tailored solutions, according to each customer's specific production requirements.

**Tecno Paper's** ability to deliver customized projects and innovative winding technology products, is a result of ongoing R&D, design and study of solutions, combined with the attitude of approaching the customer in a way to understand his product particularity and real needs.

The highly skilled and vastly experienced technical staff of **Tecno Paper** can undertake the responsibility to offer to its customers, a unique product and a complete range of after sale service.



**tissue**  
slitter winder

**kraft**  
slitter winder

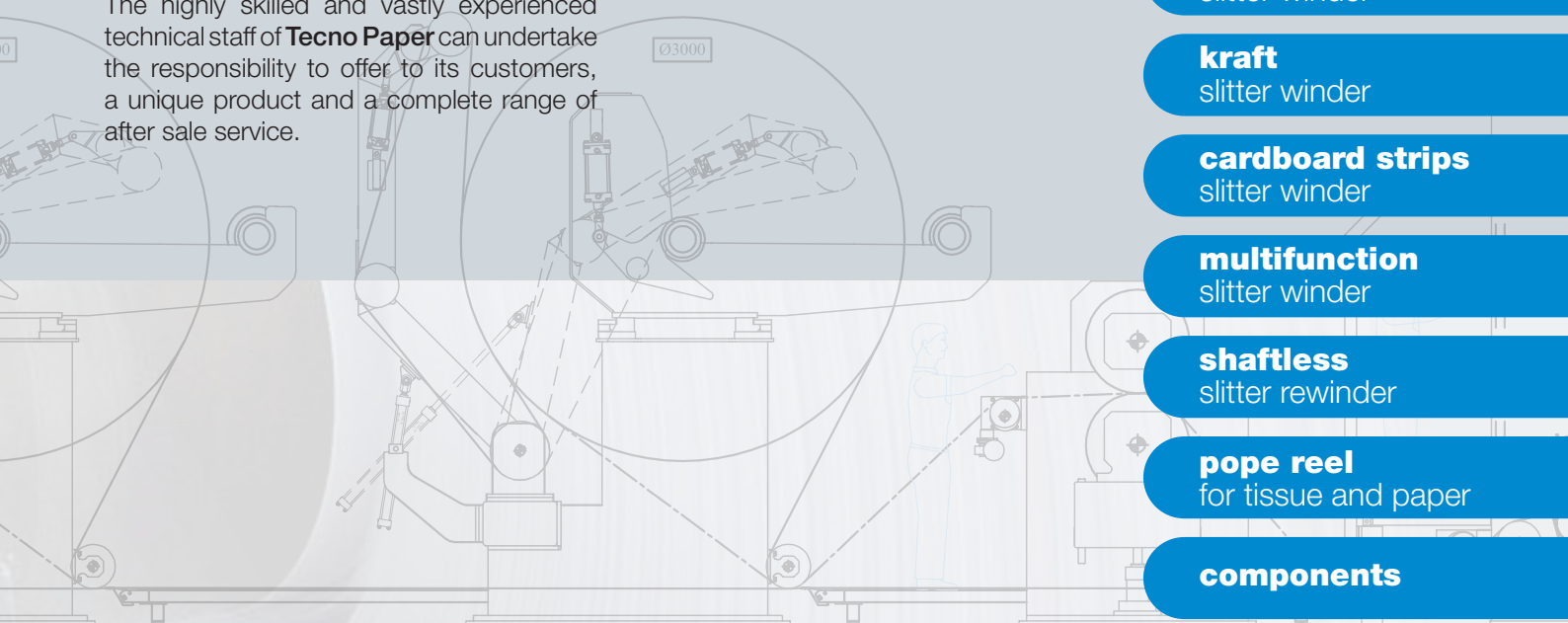
**cardboard strips**  
slitter winder

**multifunction**  
slitter winder

**shaftless**  
slitter rewinder

**pope reel**  
for tissue and paper

**components**

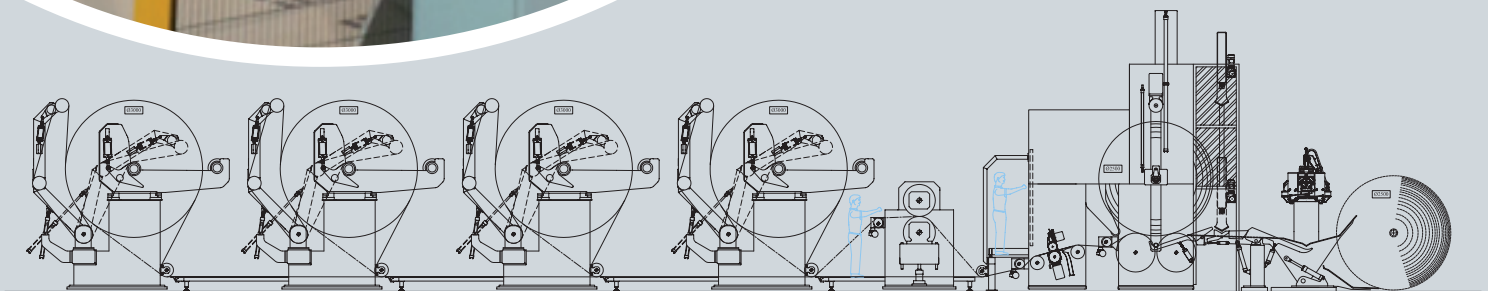




## tissue slitter winder



**Tecno Paper** has 4 divisions of winder models: **Basic** Performance, **Standard** Performance, **High** Performance (two model) and **Plus** Performance. Solid and well balanced machines, easy to operate, each version is equipped with the highest technology.



your needs



## standard equipment

- Modular unwind stands, peripheral belt type, with reel centering
- Automatic empty spool removal
- Winding on cores with expanding shafts
- Automatic winding shafts loading system
- Set web length or reel diameter control
- Automatic finished reel changes
- Unloading table for finished reels
- Shaft puller and winding shaft handling system
- Hydraulic and pneumatic on board plants
- Tangential slitting system (wrap on grooved roll on basic models)
- Manual slitters positioning
- Translating walkway in front of slitting group
- Safety protections
- Wound reel density control
- Accurate relieving system for chucks and rider roll.
- Trim removal system
- Operator friendly control system
- Easy access for maintenance



## options

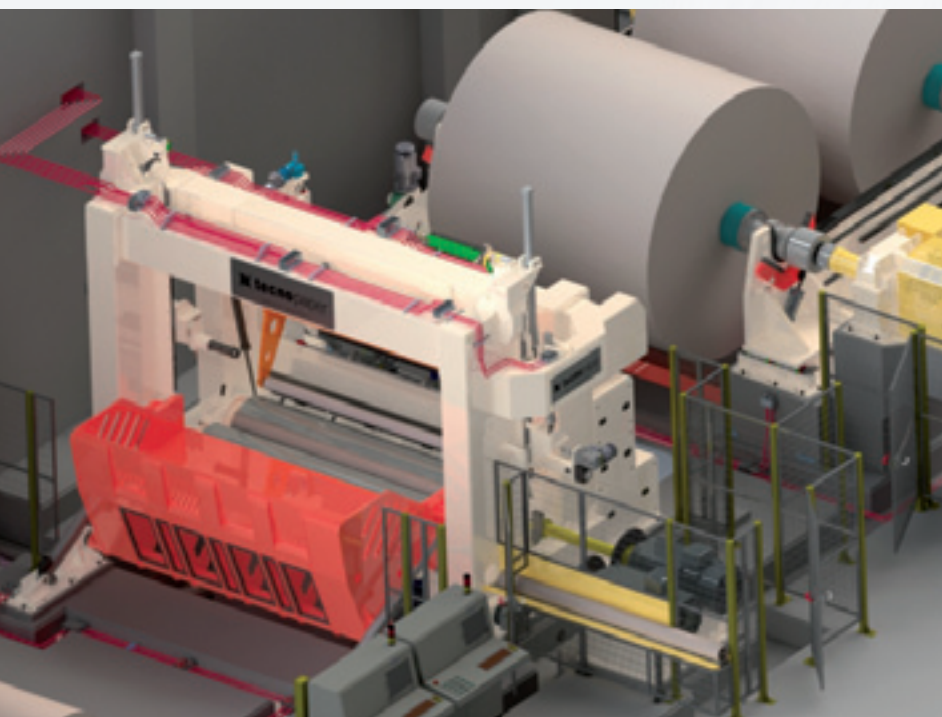
- Automatic slitter positioning
- Visualization of slitter position (when manual positioning)
- Dust removal system
- Calender
- Finished reel wrapping and handling

	TP - BWIND	TP - SWIND	TP - HWIND	TP - HWIND E	TP - PWIND	TP - PWIND E
Basis weight	12:40 gsm	12:40 gsm	12:40 gsm	12:40 gsm	12:40 gsm	12:40 gsm
Speed up to	800 m/min	1.000 m/min	1.500 m/min	1.600 m/min	2.000 m/min	2.000 m/min
Finished reel diam. up to	1.300 mm	1.500 mm	1.800 mm	2.000 mm	2.200 mm	2.500 mm
Trim width up to	2.800 mm	2.800 mm	3.800 mm	3.800 mm	5.600 mm	5.600 mm
Carrying drum	400 mm	500 mm	605 mm	650 mm	750 mm	850 mm
Relieving system	Pneumatic	Pneumatic	Hydraulic	ElectroMechanical	Hydraulic	ElectroMechanical
NIP control system	Curves set in control system, changeable by the operator	Curves set in control system, changeable by the operator	Curves set in control system, changeable by the operator	Automatic	Curves set in control system, changeable by the operator	Automatic
Spool handling	Manual, with special trolley	Manual, with special trolley	Manual, with special trolley or Automatic	Automatic	Automatic	Automatic
Special version <b>ST</b> <sup>(1)</sup>	N	N	N	Y	N	Y
Shaftless version <b>S-L</b> <sup>(2)</sup>	N	N	Y	N	Y	N

<sup>(1)</sup> **ST** version is "Soft Touch" for very Soft Tissue - <sup>(2)</sup> Max. working speed for "S-L" version is 1000 m/min

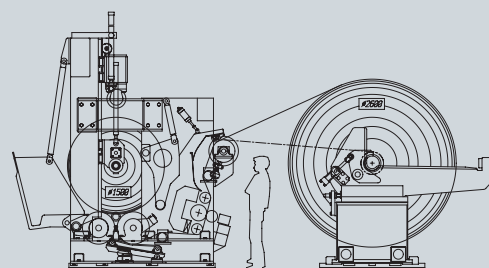
# kraft slitter winder

**Designed to process all grades of uncoated paper, Kraft, Packaging paper and corrugated products or board.**  
Produces high quality paper reels with perfect consistency and diameter according to customer specifications.



## standard equipment

- Axial adjustment of parent reel
- Automatic empty spool removal
- Empty spool parking
- Automatic tension control
- Set web length or reel diameter control
- Automatic finished reel change
- Unloading table for finished reels
- Tangential slitting system (wrap on grooved roll for some application)
- Manual slitters positioning
- Rider roll pressure control
- Hydraulic and pneumatic on board plants
- Safety protections
- Trim removal system
- Operator friendly control system
- Easy access for maintenance



## options

- Automatic slitters positioning
- Visualization of slitters positioning (when manual positioning)
- Dust removal system
- Drive on chucks
- Drive on rider roll
- Automatic core feeding
- Automatic gluing on cores
- Automatic gluing on tail for reel sealing

	TP - KRB 15	TP - KRS 20	TP - KRH 22	TP - KRP 24
Basis weight	80 ÷ 240 gsm	80 ÷ 240 gsm	80 ÷ 240 gsm	80 ÷ 240 gsm
Speed up to	1.500 m/min	2.000 m/min	2.200 m/min	2.400 m/min
Finished reel diam. up to	1.300 mm	1.500 mm	1.800 mm	1.800 mm
Trim width up to	2.800 mm	3.200 mm	4.200 mm	5.200 mm
Carrying drum	500 mm	650 mm	750 mm	850 mm
Relieving system	Hydraulic	Hydraulic	Hydraulic	Hydraulic



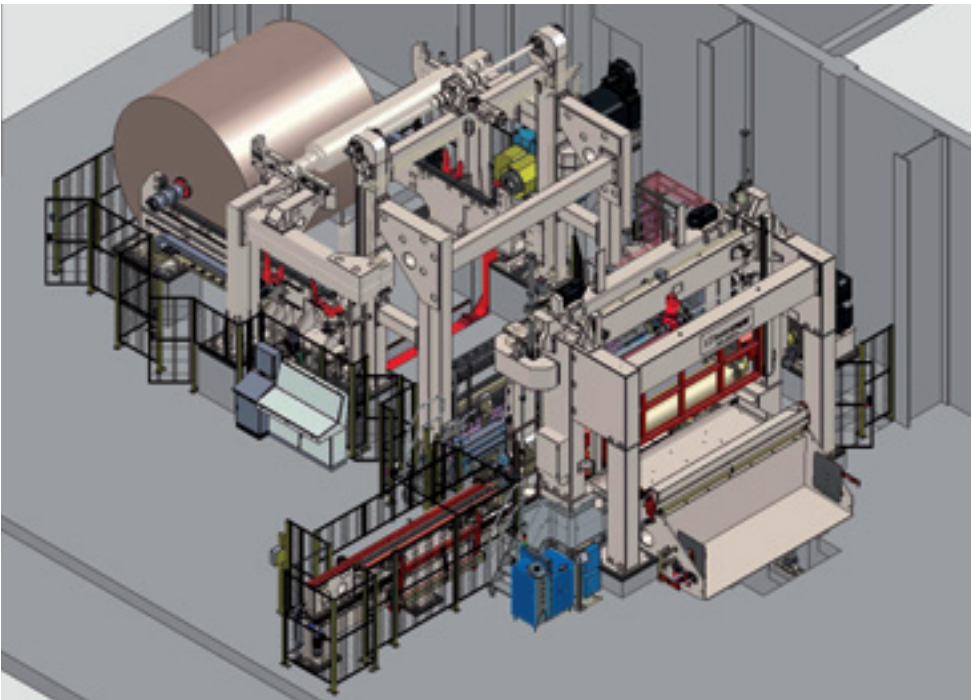


# cardboard strips slitter winder

Dedicated paper passage designed for the production of coreboard strips, where it is essential to minimize the distance between cutting and winding area.

- Gluing system for cores and finished reels, with automatic positioning based on the strip widths
- Reduced times for all automated processing cycles
- Web threading system from unwinder to winder
- Chucks with automatic positioning system
- Core introducer device with automatic positioning system
- Cutting unit with automatic positioning and integrated dust suction system
- Web cross cutting system
- Automatic spool expelling system on unwinder, with spool's storage
- Scalink supervisor system

RAW MATERIAL	GRAMMAGE	WEB WIDTH
Card Board	200 ÷ 1.000 gr/m <sup>2</sup>	2.000 ÷ 5.400 mm



## **multifunction** slitter winder



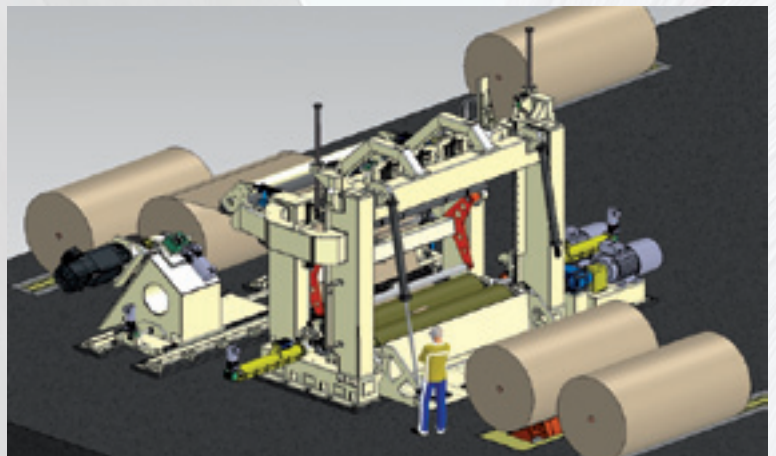
**A unique special winder for Tissue and MG / light weight Kraft**

- Design speed 1.800 m/min
- Special devices to work with different jumbo reel widths
- Two different and dedicated paper passage systems
- Two different and dedicated drives on the first unwinder
- Double control system: web lightening / web tension
- Double NIP control system for rider roll and chucks
- Automatic paper cross cutting system with movable barrier for fast start up
- Automatic shaft extractor system and shaft re-introduction

## **shaftless** slitter rewinder

**Rewinder for offset paper, copy paper, kraft, cardboard, MG paper, naturals paper**

- Max Speed 1800 m/min
- Width production range from 200 mm to 2.800 mm
- Unwinding station including roll's pick-up
- Automatic web edge guiding system







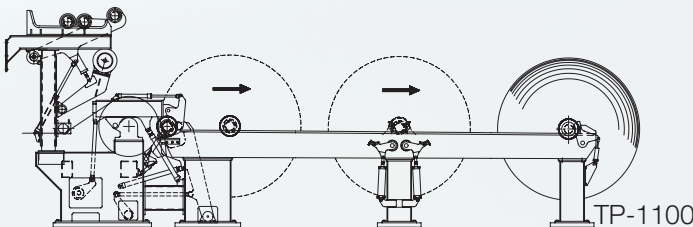
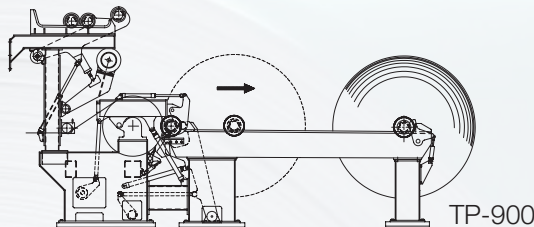
# pope reel for tissue and paper

The Pope reel is an extremely sturdy and reliable machine. Designed for easy operation and maintenance. Operation flexibility to wind with constant or variable nip on both hydraulic and pneumatic versions.

The **Pope reels for Paper** can be fitted with parking station and automatic reel transfer to the unwind stand of the rewinder.

The **Pope reels for Tissue** can be fitted with automatic reel spool extraction and handling system. All the models can be fitted with weighing systems.

The **Pope reel for Tissue** can be supplied also in a special version with load cells, arms sliding horizontally of ball recirculating screws and dedicated software in order to have the automatic nip control at any instant of the winding process.



## standard equipment

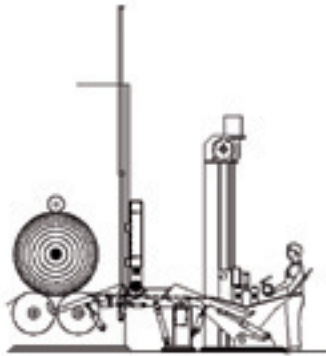
- Hydraulic control the arms with NIP control
- Shaft launch with pneumatic movement
- Safety protections
- Hydraulic plant
- Braking group system at the end of winding end finished reel weighing
- Winding shaft
- Control desk with PLC and touch screen panel
- Oscillating Doctor Blade



	TP - 900	TP - 1100
Mechanical speed up to	1.200 m/min.	1.800 m/min.
Final product useful dimension	ø 3.000 x 5.900 mm	ø 3.000 x 5.900 mm
Drive roll diameter	ø 900 mm	1.500 mm

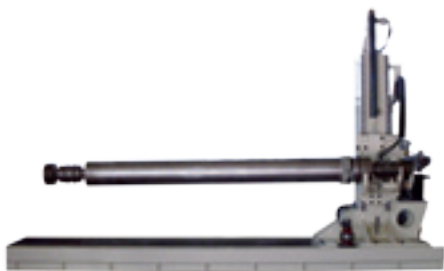
## components

### TP - SEMI-AUTOMATIC SHAFT HANDLING SYSTEM FOR TISSUE WINDERS



- Bigger safety conditions for operator with help of semiautomatic change
- Death time reduction for machine stops due to shaft changes
- For finished reels up to 5.600mm
- Moveable arms with hydraulic drive to controls shaft position
- Semi-automatic loader that places shaft with carton core between the bearing rolls
- Automatic paper cross cutting by blade installed under the protection barriers
- A blower system, placed after the cutting group, puts the paper tail on the shaft previously loaded in the bearing rolls
- Automatic shaft extraction from expelled paper reel
- Unloading table discharges the finished paper reel on floor

### SHAFT EXTRACTOR



SHAFT EXTRACTOR	
Total shaft width	max. 3.600 mm
Diameter shaft	max. ø 600mm
Motor power	N° 1 A.C. 3 kW 50/60 Hz
Hydraulic unit	with tank 20 Liter

- Control panel extraction cycle
- Electrical system on the machine
- Horizontal and vertical movement of the head extraction
- Hydraulic unit for hydraulic system
- Automatic self alignment with shaft head
- Easy to assemble, use and placement

### REEL TILTER 90°



REEL TILTER 90°	
Total shaft width	max. 3.600 mm
Diameter shaft	max. ø 3.000 mm
Motor power	N° 1 A.C. 7 kW 4 poles 400 V 50/60 Hz
Hydraulic unit	with tank 55 Liter

- Control panel extraction cycle
- Electrical system on the machine
- Hydraulic tilting movement
- Easy to assemble, use and placement

### CARTON CORE AUTOMATIC LOADING SYSTEM

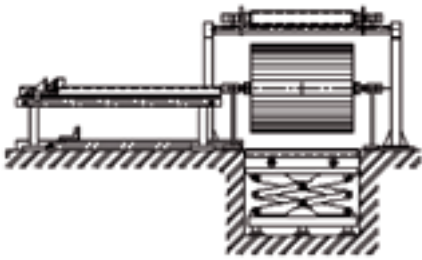


CARTON CORE AUTOMATIC LOADING SYSTEM	
Total length carton cores	max. 3.600 mm
Core internal ø	to be required
Drives	pneumatic cylinders
Capacity	on request the customer

- Control panel
- Electrical system on the machine
- Cam to distribute a carton cores at once
- Easy to assemble, use and placement

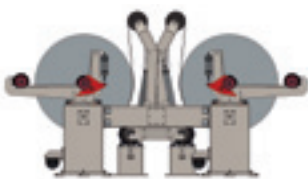


## TP - AUTOMATIC SHAFT HANDLING SYSTEM FOR POPE REEL



- Can be installed on different Pope reel size
- Changes shafts automatically during the complete cycle
- Total safety for operator
- Non more machine stops for shaft changing
- No needs bridge cranes or auxiliary equipments on line
- Movement arms with hydraulic drive to control shaft position
- Automatic loading of carton cores into the expansible shafts
- Expansion and contraction of expansible shafts is effected by pneumatic cylinder
- Shafts with carton core are loaded automatically from reel shaft storage in the first reel loading arms
- Shaft puller/insertor device is adaptable to different kind of shafts
- A tilter discharges the finished paper reels on floor

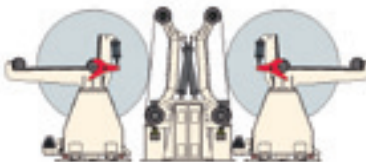
## UNWIND STANDS



Tissue BASIC and STANDARD performance	
N. of belts	1
Max Reel Diam.	2.200 mm
Trim Width up to	2.850 mm
Speed up to	1.000 m/min



Multifunction	
N. of belts	2 or 4
Max Reel Diam.	3.000 mm
Trim Width up to	5.600 mm
Speed up to	1.800 m/min



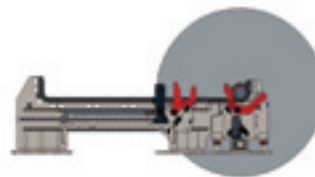
Tissue HIGH performance	
N. of belts	2
Max Reel Diam.	2.500 mm
Trim Width up to	3.750 mm
Speed up to	1.600 m/min



Shaftless	
Max Reel Diam.	1.500 mm
Trim Width up to	3.200 mm
Speed up to	1.800 m/min

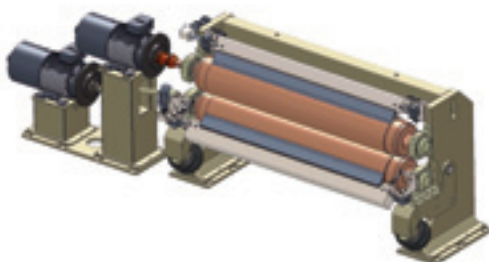


Tissue HIGH and PLUS performance	
N. of belts	2 or 4
Max Reel Diam.	3.000 mm
Trim Width up to	5.600 mm
Speed up to	2.000 m/min



Kraft & Cardboard	
Max Reel Diam.	3.600 mm
Trim Width up to	5.400 mm
Speed up to	2.400 m/min

## CALENDER



TYPE	Rolls diam. (mm)	Trim width (mm)	Speed (m/min)	Nip Value (Kg/cm)	Operation
SKEWING	400	up to 3.600	max. 1.500	up to 20	Pneumatic
	750	up to 5.600	max. 2.000	up to 20	Hydraulic
CROWN CONTROL	600	up to 5.600	max. 2.000	up to 20	Hydraulic



Carrara white marble sculpture of Lorenzo Vignoli



the art of **ideas**

 **tecnopaper**

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