



Tissue Converting Solutions
GENIUM REWINDER

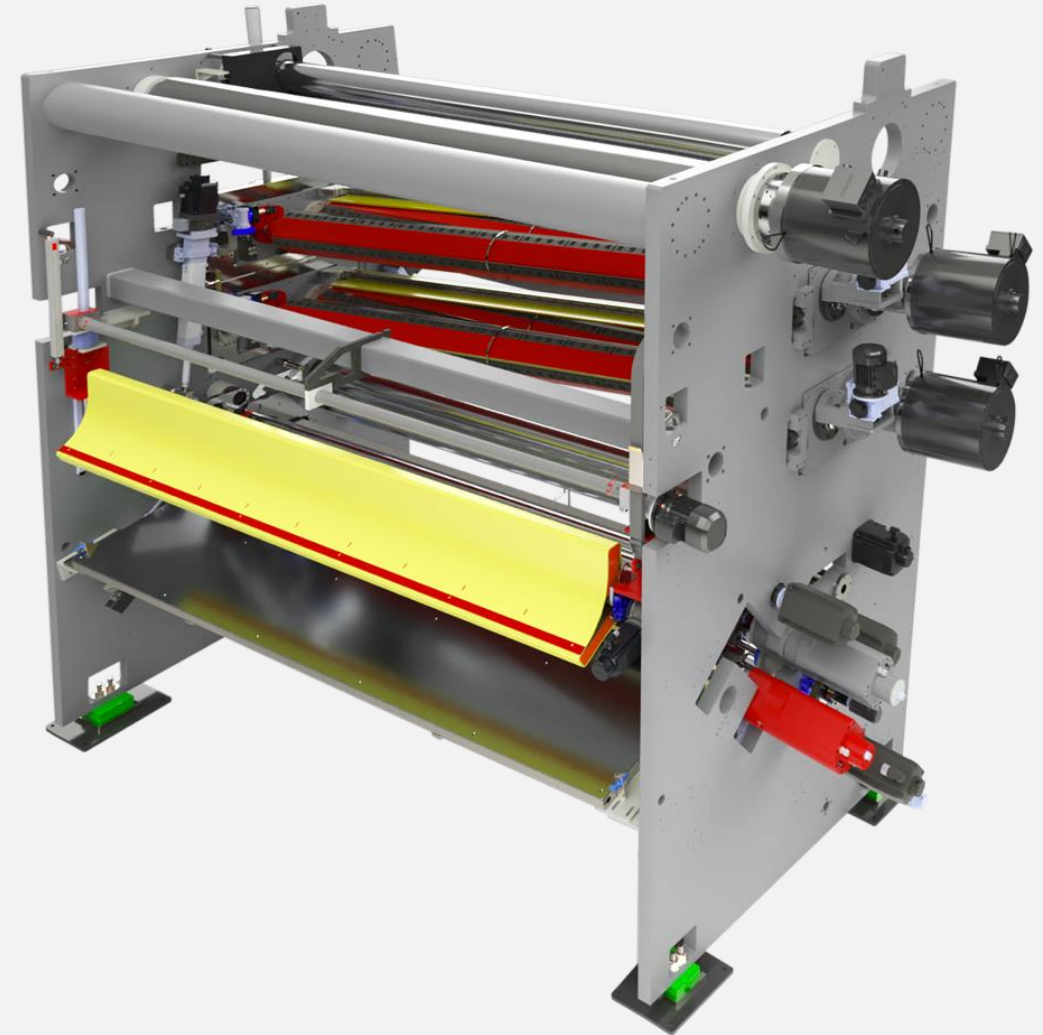
GENIUM
LINE



GENIUM REWINDER

MAIN FEATURES

WORKING SPEED	700 m/min
CYCLES RATE	60 cycles/min
PERFORATION LENGTH RANGE 6 BLADES	90-180 mm
CORE DIAMETER RANGE	20-80 mm
ROLL DIAMETER RANGE	90-350 mm
PAPER WIDTH MIN-MAX	2750-3650 mm
POWER CONSUMPTION AT 600 m/min	13 kW



GENIUM REWINDER

TECHNICAL CHARACTERISTICS



Min-Max paper width	2750-3650 mm	Pick up glue application	On Fly during transfer by means of applicator
Design Speed	700 m/min	Upper winding roll motorization	Torque Motor with regenerative drive
Production speed	Up to 600 m/min *	Lower winding roll motorization	Torque Motor with regenerative drive
Cycles rates	Up to 40 logs/min	Perforation rolls motorization	Ind. Torque Motor with regenerative drive
Min-Max log diameter	90-350 mm	Play-bonding unit	Torque Motor with regenerative drive
Min-Max external core diameter	30-80 mm	Rider rolls motorization	Independent Servomotor
Core diameter changeover	From HMI	Installed power	60kW
Double perforation system	Included		
N° 2 Revolving Perforation rolls	6 blades each		
N° 2 Fixed Perforation rolls	4 blades each with axial movement		
Perforation length range	90 - 180 mm with 6 blades		
	180 - 360 mm with 3 blades		
	270 - 540 mm with 2 blades		
Perforation length changeover	From HMI		
Sheet count changeover	From HMI		
Log diameter changeover	From HMI		



GENIUM REWINDER

THE UNIT FEATURES:

HIGH EFFICIENCY UNIT THANK TO OUR TORQUE MOTOR TECHNOLOGY

Core Bin Accumulation capacity	Up to 500 cores w/dia. 47 mm
Cores unloading speed	45 cores/min
Min/max-external core diameter	30 – 80 mm
Cores unloading speed	45 cores/min
Air consumption	4 m ³ /h at 6 bar
Installed power	4 Kw (5.3 HP)

Web break detectors

Web tension control with load cells

Diameter control with servomotor

Adjustment of core diameter from HMI

Winding and draw rolls covered with tungsten carbide

Web tension from HMI

Automatic perforation rolls inclination

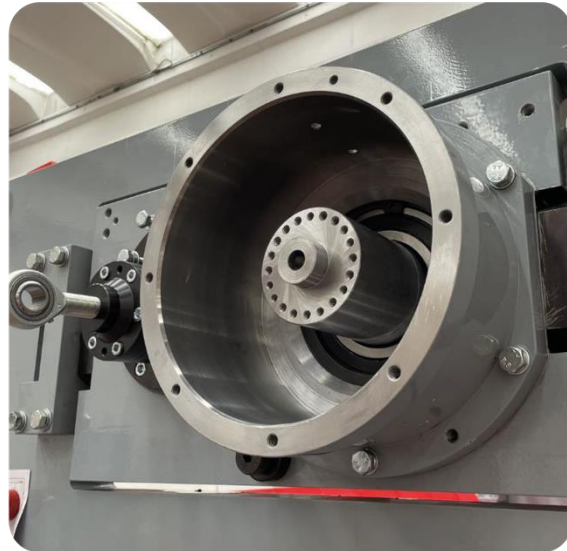
Tools less Perforation Blades interference adjustment (from HMI)

Automatic web thread with belts



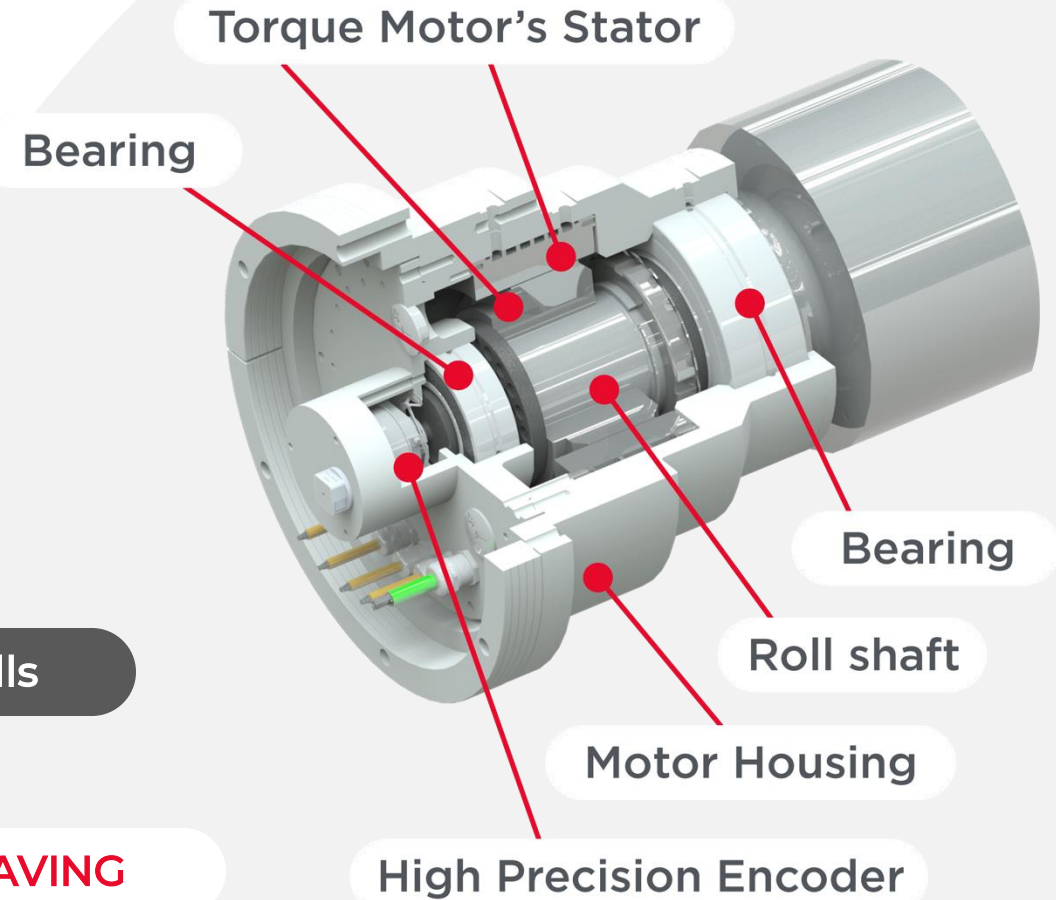
GENIUM REWINDER

Torque Motors



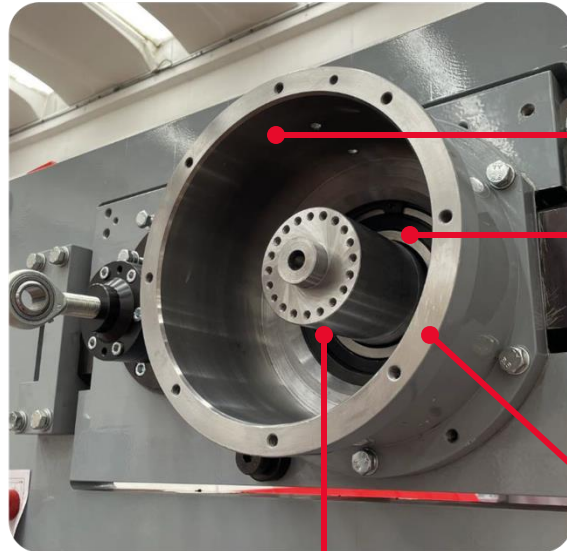
Large use of Torque Motors directly mounted on the rolls

More precise control and higher efficiency = **ENERGY SAVING**



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Torque Motors

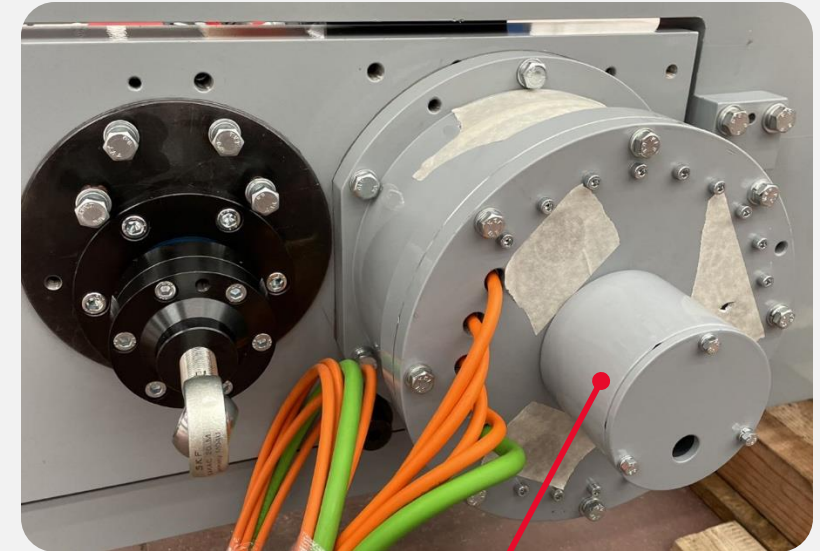


TORQUE MOTOR HOUSING

BEARING

FLANGE (STATOR HOUSING)

ROLL SHAFT (ROTOR SHAFT)

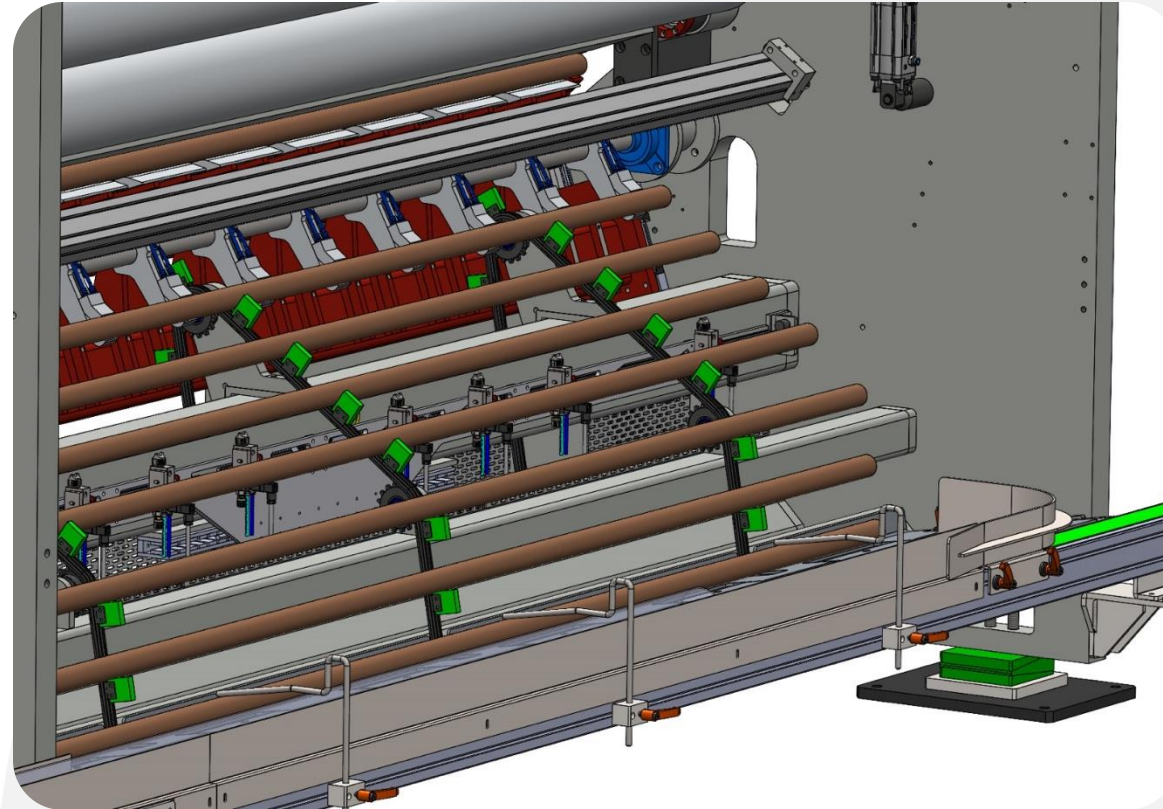
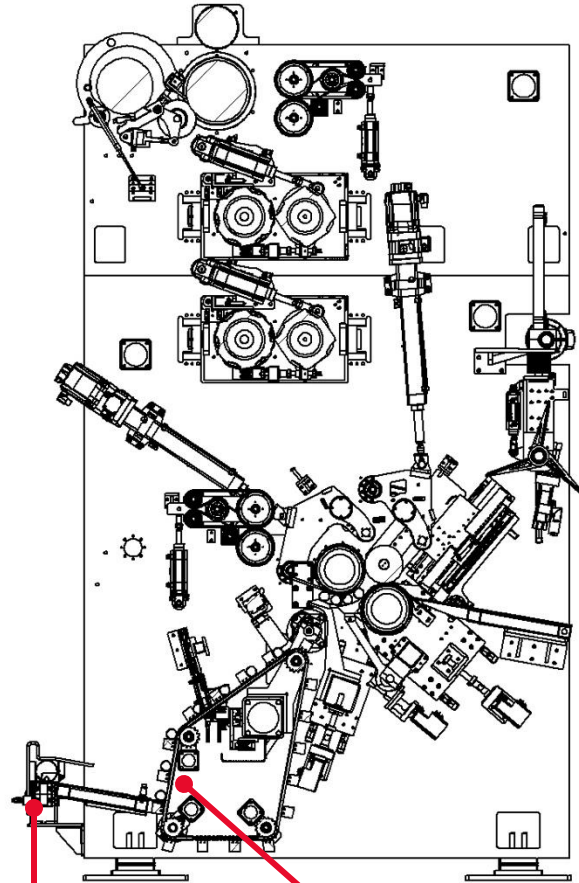


ENCODER HOUSING



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Cores Loading from the bottom



CORES CONVEYOR BELT

CORES LOADING CHAINS



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Pick-up glue application

NEW Pick-up Glue Application System **PATENTED**

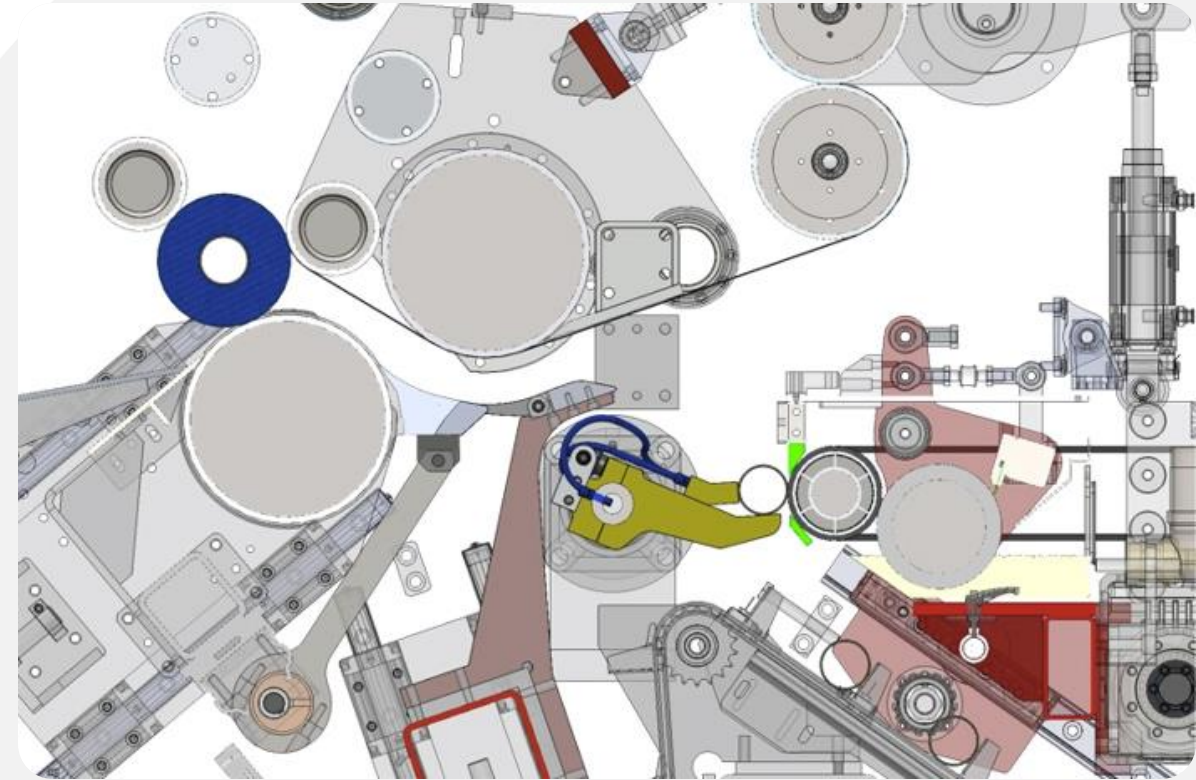
How does it work

- Pick-up glue applied during core insertion (transfer)
- Finger pick up the core from the chain
- During introduction rotation the core goes in touch with a glueing device, that will apply a very thin line of glue on the core
- The glued core is introduced into the cradles area

Reduced amount of glue applied

Quantity of glue always constant independently from speed

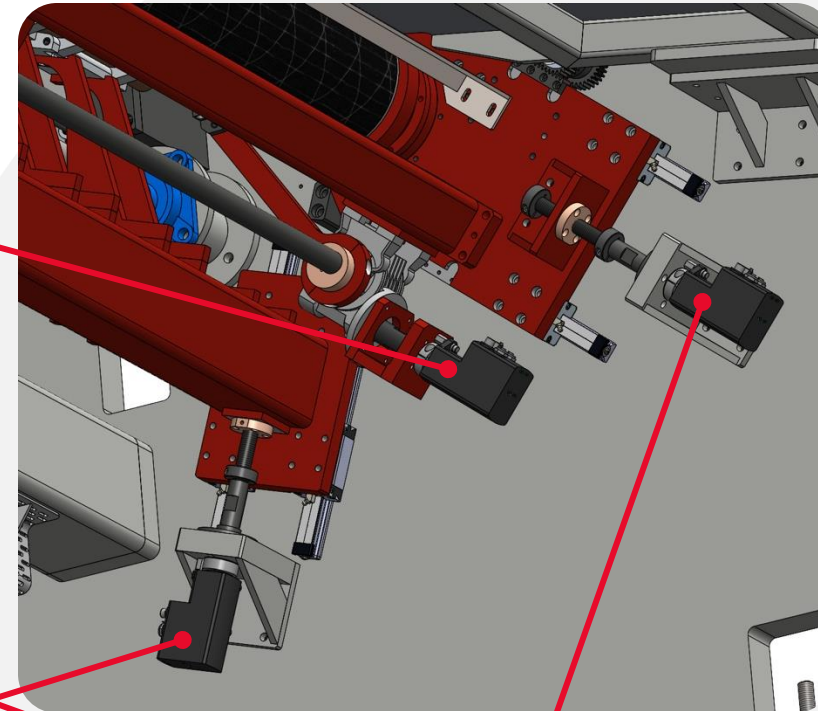
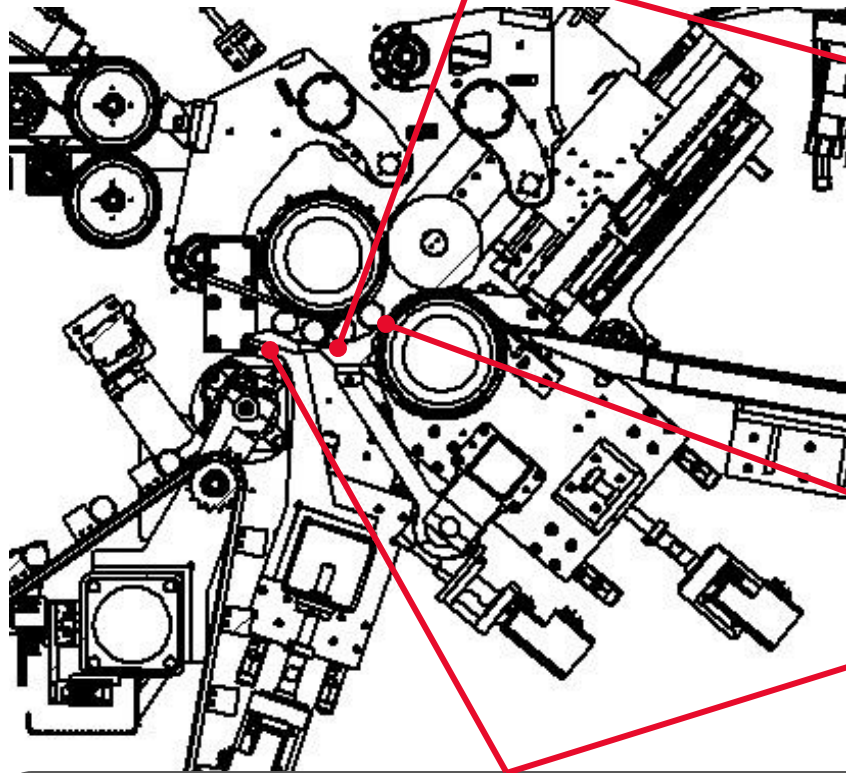
No need to remove cores after stop



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Cradles Adjustment

MIDDLE PART ADJUSTMENT



CORE INSERTION INTERFERENCE ADJUSTMENT

UPPER SND LOWER ROLLS DISTANCE ADJUSTMENT



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Cradles Adjustment



State: Aborted **Log/min:** 0

300096	Rewinder	Infeed Door Not Locked
300040	Rewinder	Servo Axis Not Calibrated OK
300097	Rewinder	Outfeed Door Not Locked

SET: 30 m/min **24/01/2024 15:23:56**

0 m/min **Glotta**

Infeed

AV OPS **43.34** mm
AV DRV **43.30** mm

RAISE LOWER

Outfeed

AV **46.89** mm

RAISE LOWER

Lower Roll

AV OPS **41.65** mm
AV DRV **41.55** mm

RAISE LOWER

SP +/- **0.0** mm

SP +/- **0.0** mm

SP +/- **0.0** mm

Paper Break

EXIT



GENIUM REWINDER

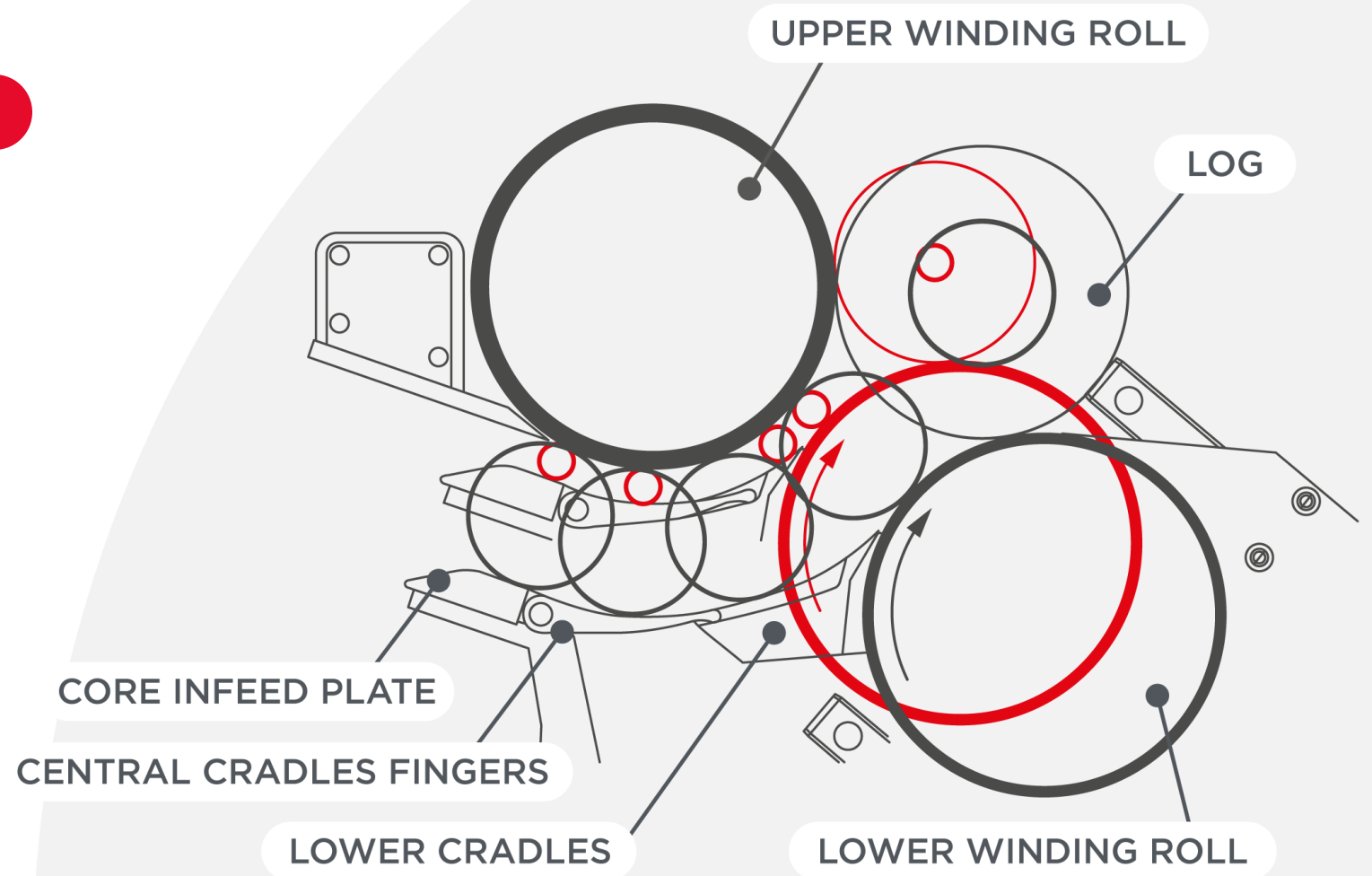
Core introduction

NEW Cradles adjustable by HMI PATENTED

Cradles are designed for wide core range:
from 20 to 80 mm

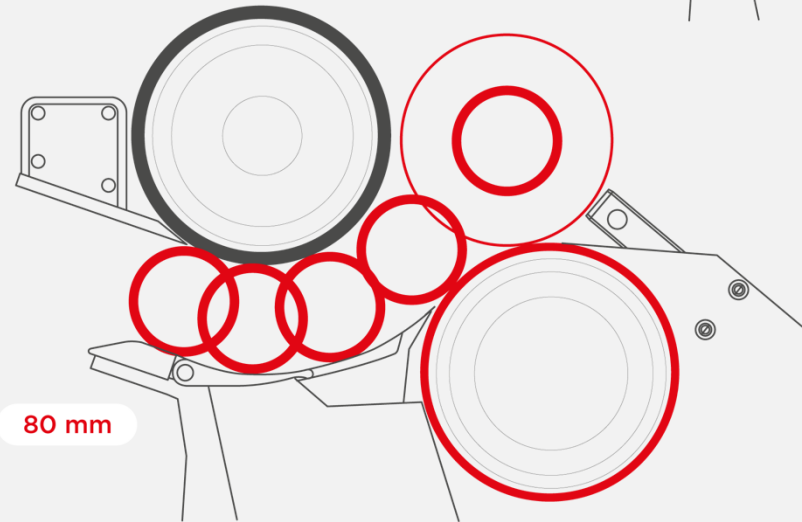
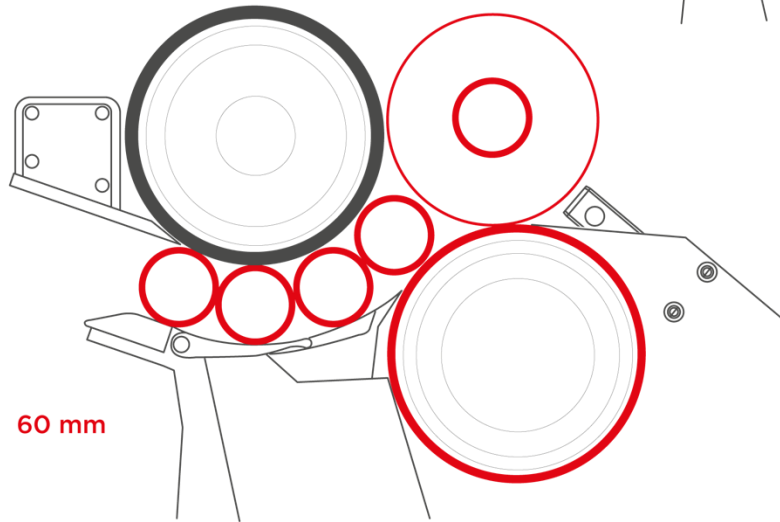
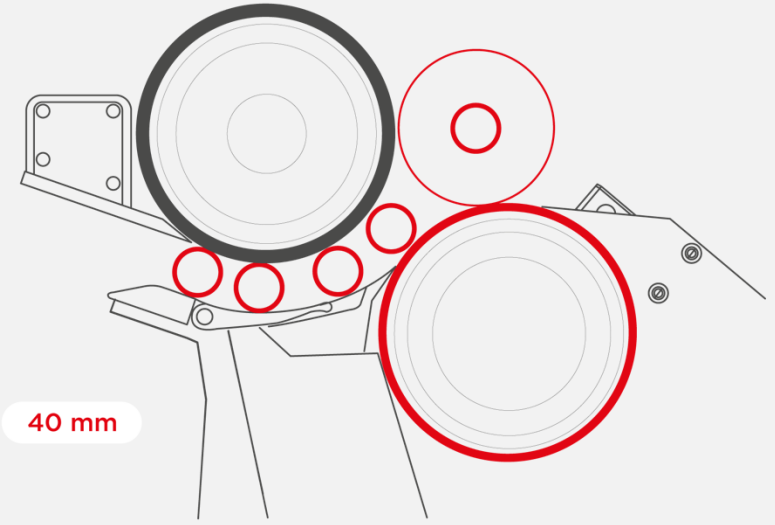
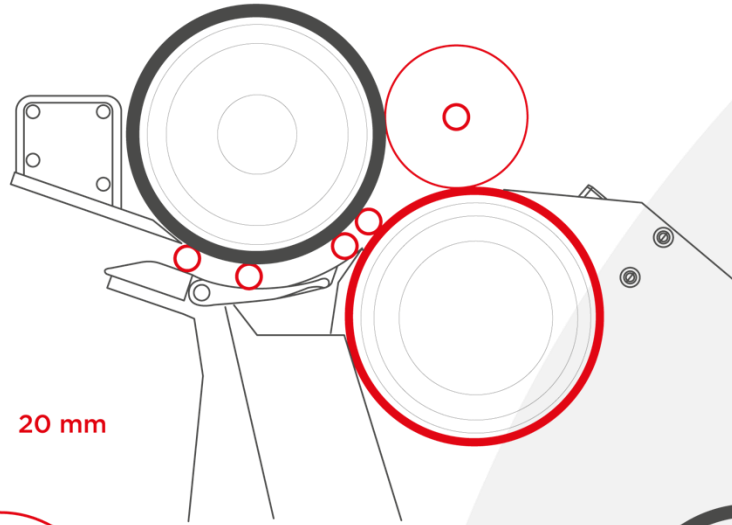
The system is **PATENTED**

Easy and quick core change



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Core introduction



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Rider rolls System

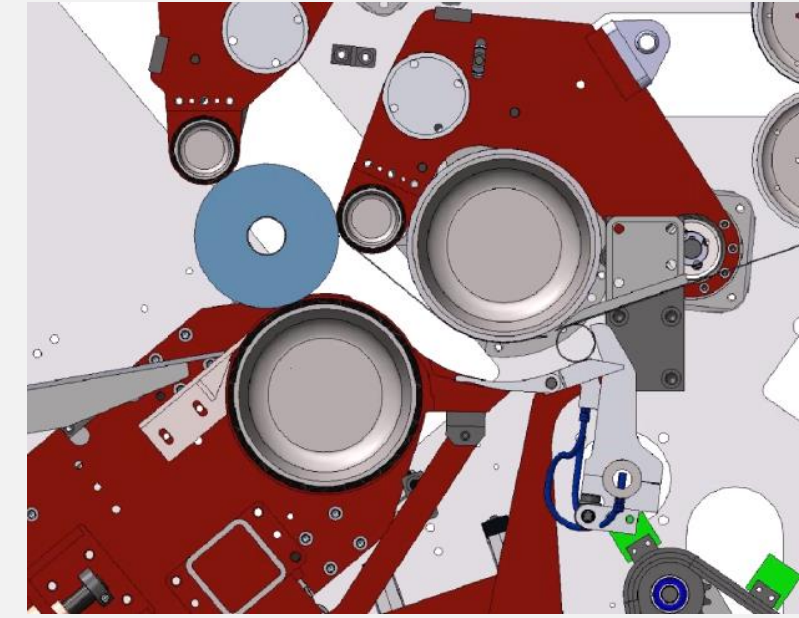
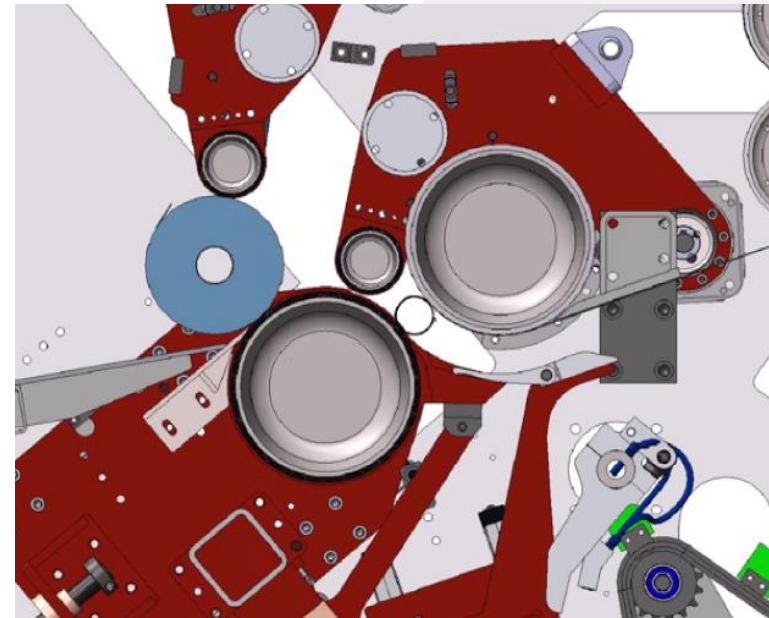
NEW Double rider roll **PATENTED**

Double rider rolls winding system

Rider rolls movements are actuated by means of servo cylinders

The system is **PATENTED**

First rider rolls is very close to transfer thus guarantee a smooth operation

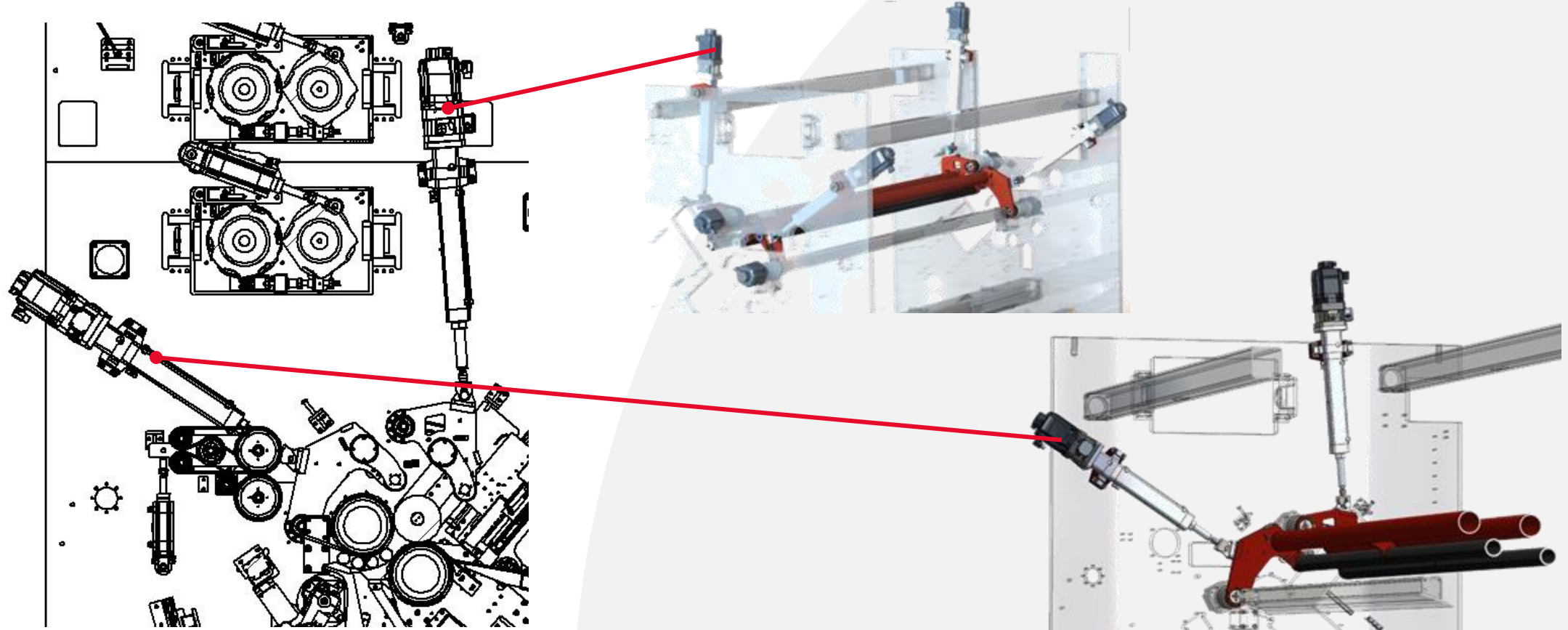


Second rider roll manages the formation of the log and help to control it till the end on 3 rolls winding



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Rider rolls System



RIDER ROLLS MOVEMENTS ACTUATED BY MEANS OF SERVO CYLINDERS

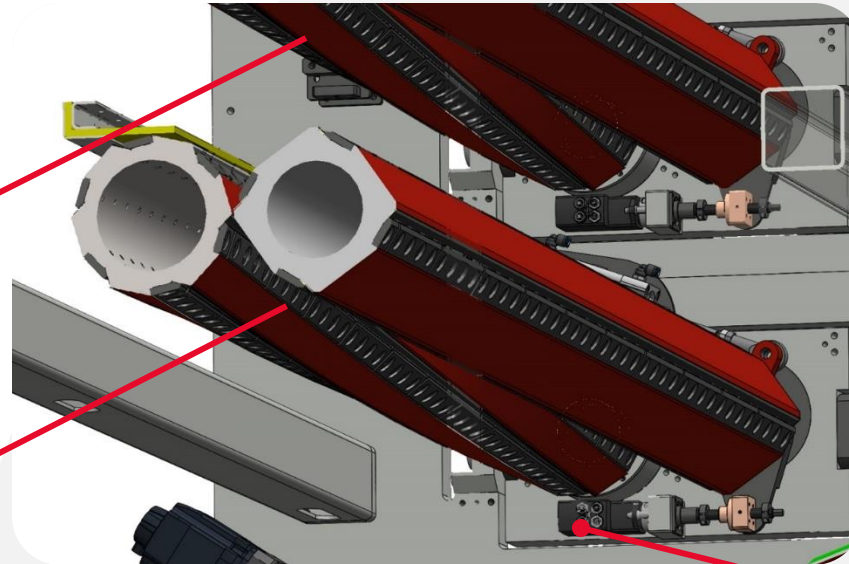
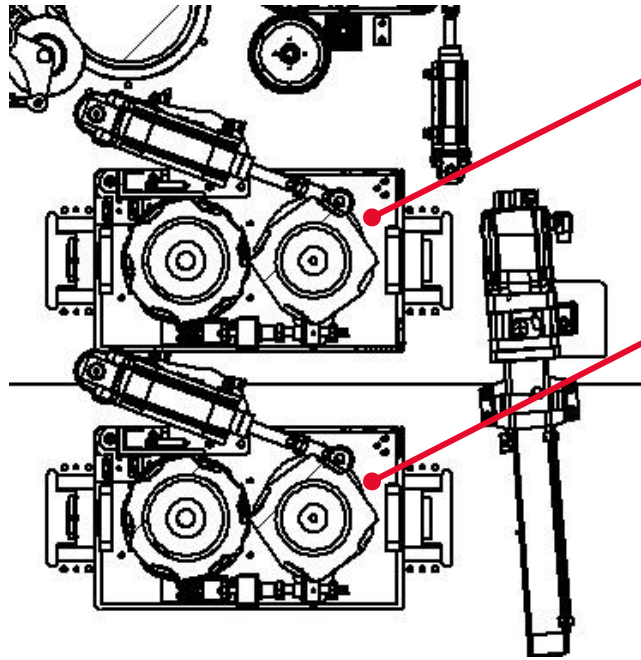


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Double Perforation Rolls

SIX BLADES ROTATING ROLL

FOUR BLADES FIX ROLL



BLADES GAP ADJUSTABLE BY TOUCH PANEL



GENIUM REWINDER



GiOTTO TECHNOLOGIES
State: **Aborted** 0 Log/min

500096	Rewinder	Infeed Door Not Locked
500049	Rewinder	Servo Axis Not Calibrated CI
500097	Rewinder	Outfeed Door Not Locked

SET 30 m/min 24/01/2024 15:21:48
0 m/min Giotto

Percent Engage Perfs: **40.00 %**

SP 160.0 mm
PV 160.0 mm
SP 150.0 mm
Nr 250
SP 0.0 kg

Aknnowledgment

Clear Out

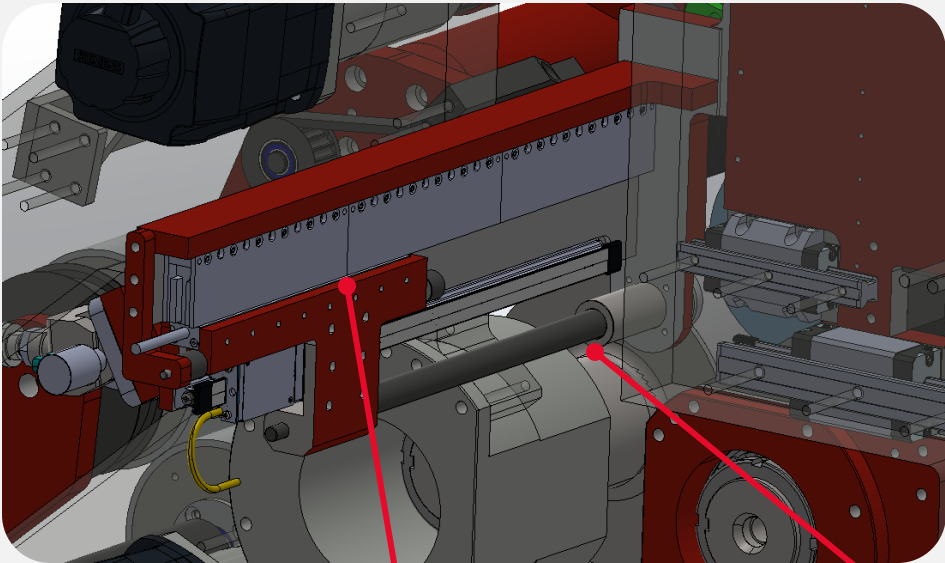
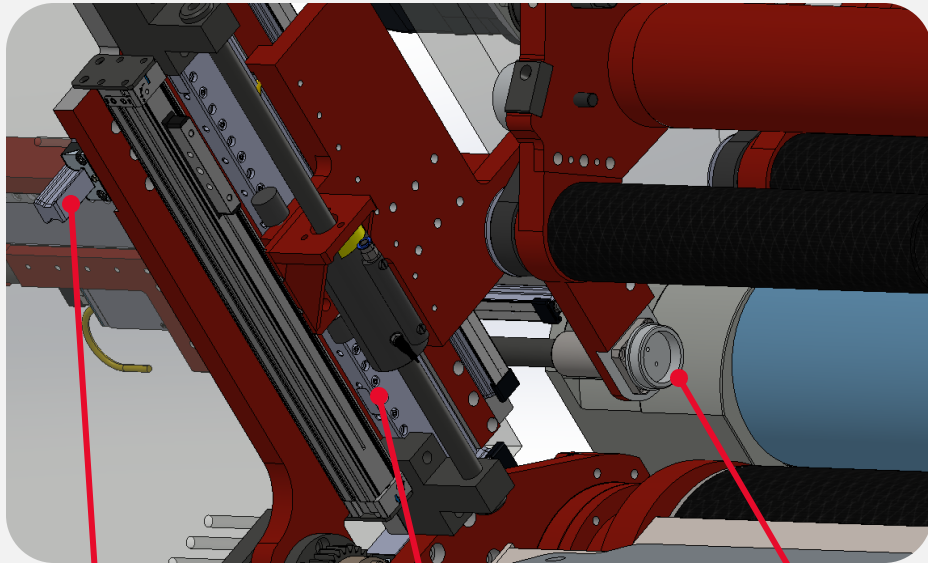
Home, Settings, Stethoscope, Stop, Warning, Wrench, and other control icons are visible at the bottom of the interface.



GENIUM REWINDER

Working range adjustable from touch panel

PUNZONCINI



LEFT AND RIGHT GUIDES

UP AND DOWN GUIDES

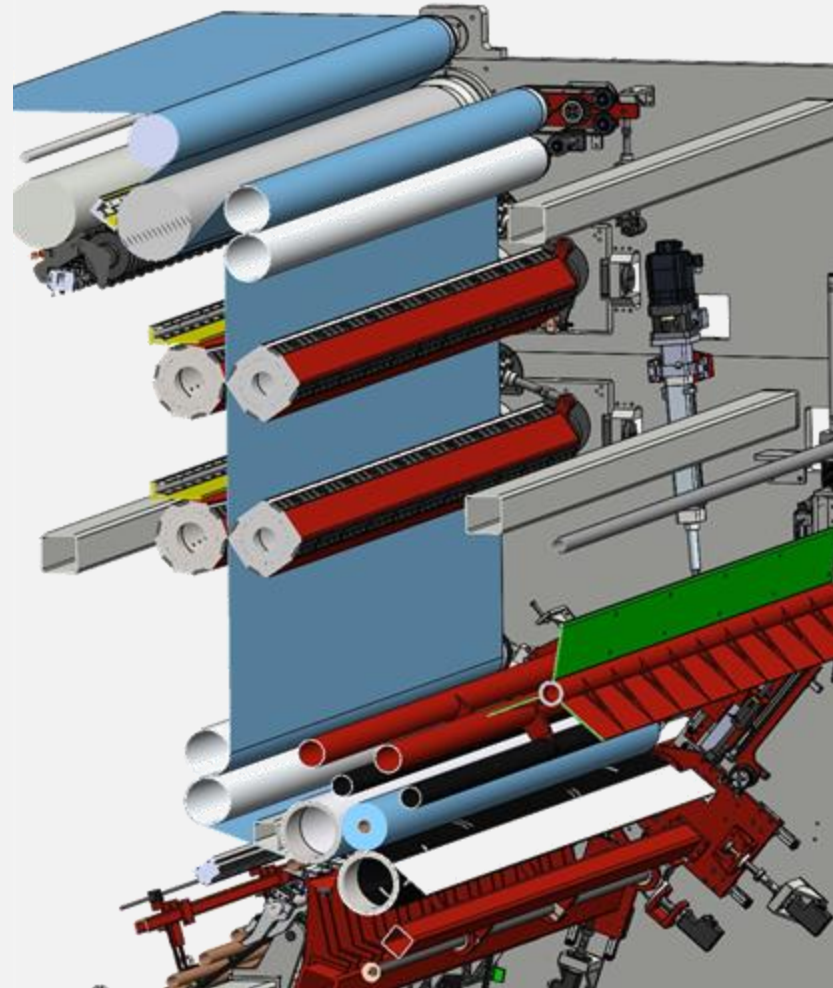
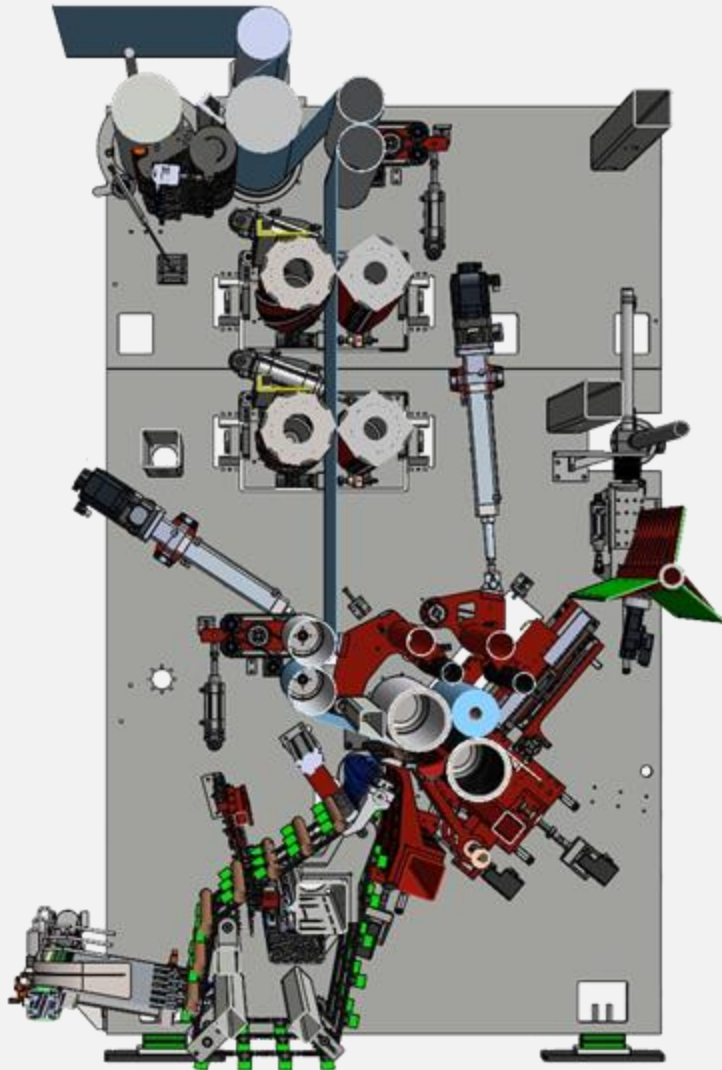
ROTATION FREE ADAPTERS

ENGAGING AND DESINGAGING BY MEANS OF LINEAR MOTOR FOR FAST AND PRECISE CLOSING OPENING

ADAPTER SHAFT



GENIUM REWINDER



GENIUM REWINDER

High Quality

Samples and Short pick-up fold

The system is **PATENTED**



GENIUM REWINDER



State: Alerted

Log/min: 0

500036	Rewinder	Infeed Door Not Locked
500040	Rewinder	Servo Jaws Not Calibrated: C1
500037	Rewinder	Outfeed Door Not Locked

SET

↺

30 m/min

0 m/min

24/01/2024 15:23:02

Giotto

SP 0.30 kg

PV 0.00 kg

SP 0.10 %

PV 0.10 %

SP -0.60 %

PV -0.60 %

Upper Roll Draw Modulation

Ramp_Up Duration

200.00 200.00 mm

Draw Modulation

3.20 3.20 %

Dwell Duration

1500.00 1500.00 mm

Ramp_Down Duration

1000.00 1000.00 mm

SP 1.30 %

PV 1.30 %

Paper Break



GENIUM REWINDER

The screenshot displays the control interface for the GENIUM REWINDER. At the top, there is a status bar with the GiOTTO logo, a 'Log/min' indicator, and a red error banner listing three issues: 'Rewinder Infeed Door Not Locked', 'Rewinder Servo Axis Not Calibrated CI', and 'Rewinder Outfeed Door Not Locked'. The speed is set to 30 m/min, and the date/time is 24/01/2024 15:22:33. The user is identified as 'Giotto'.

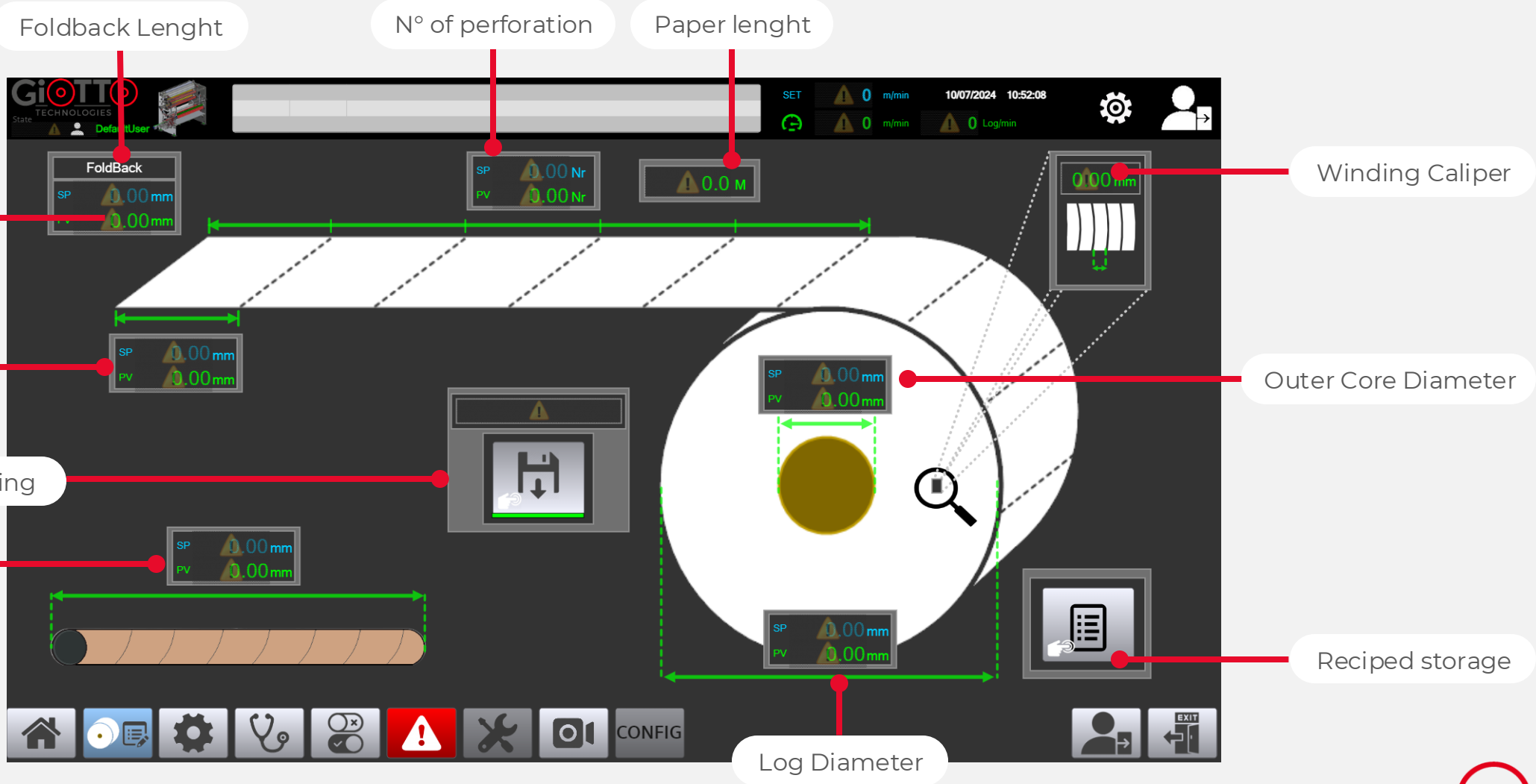
A	160.0 mm	160.0 mm
B	0.0 mm	0.5 mm
C	47.0 mm	47.0 mm
D	150.0 mm	150.0 mm
E	250 Nr	250 Nr
D x E	37.5 M	37.5 M
F	2680 mm	2680 mm
G	-40.00 mm	-40.0 mm

The diagram shows a roll of material with dimensions A through F. A 'Cams OK' button is highlighted in green. The bottom navigation bar includes icons for Home, Settings, Health, Safety, and other functions.



GENIUM REWINDER

HMI with symbols



Perforation Length

Recipe Parameters saving

Paper Width

Log Diameter

Winding Caliper

Outer Core Diameter

Reciped storage





THANK YOU

