



lantier

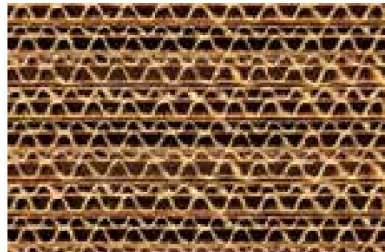
Solutions inside

INTRODUCTION TO LANTIER SOLUTIONS

Pulp



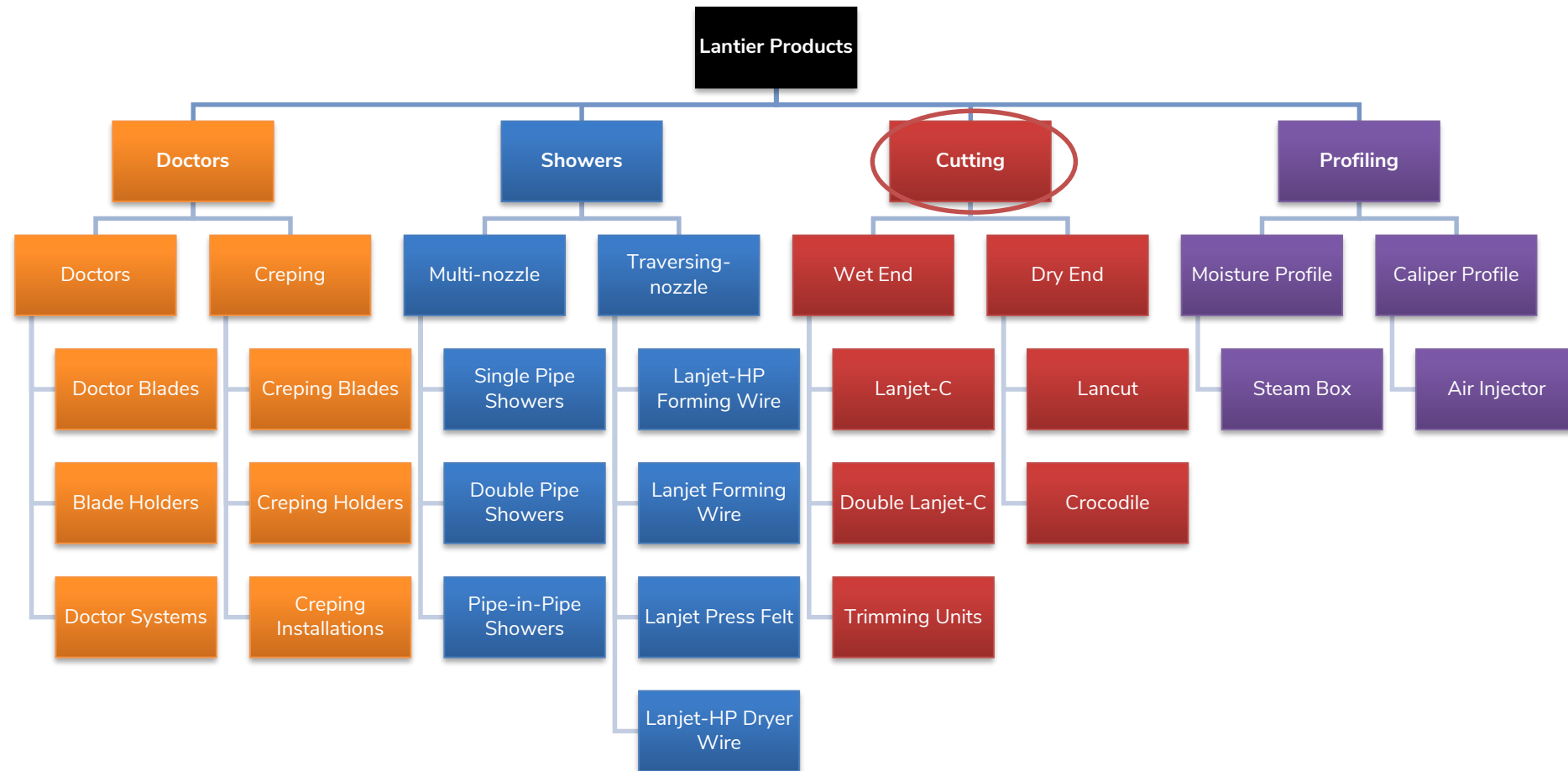
Paper

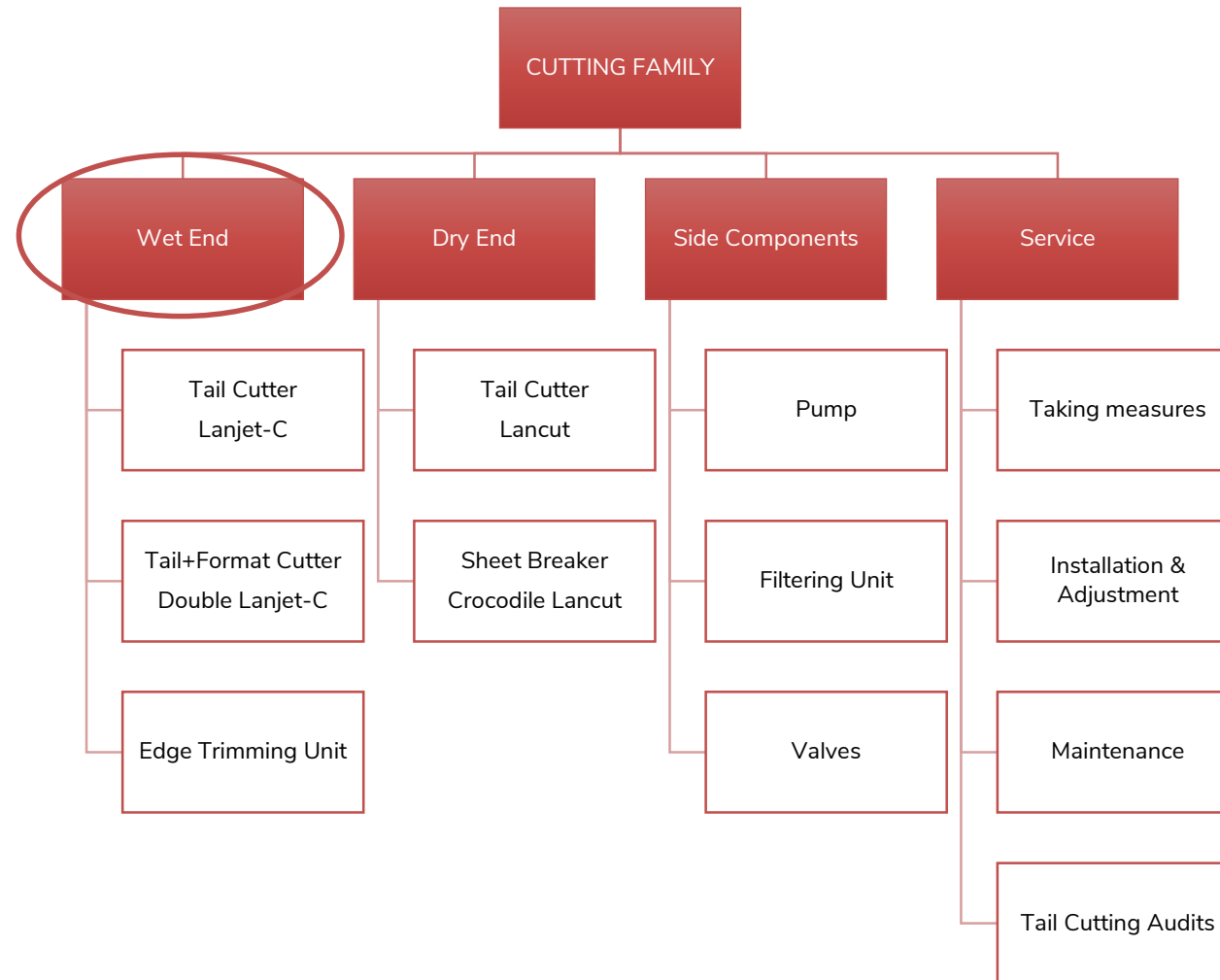


Board

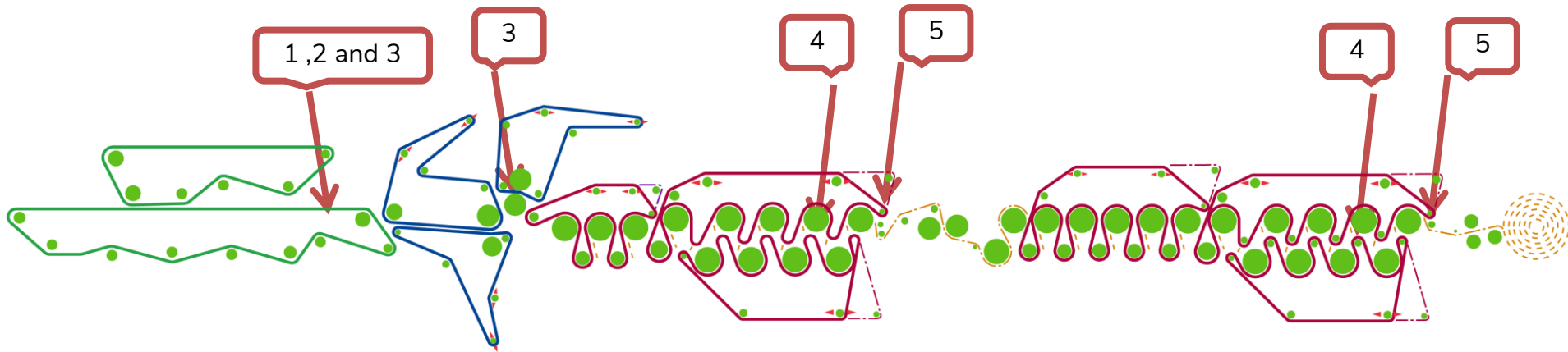


Tissue

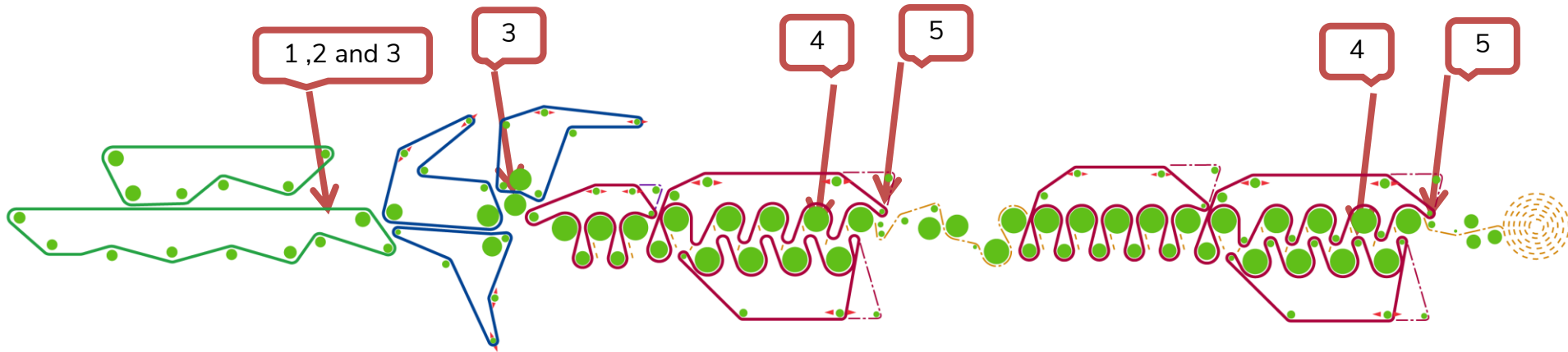




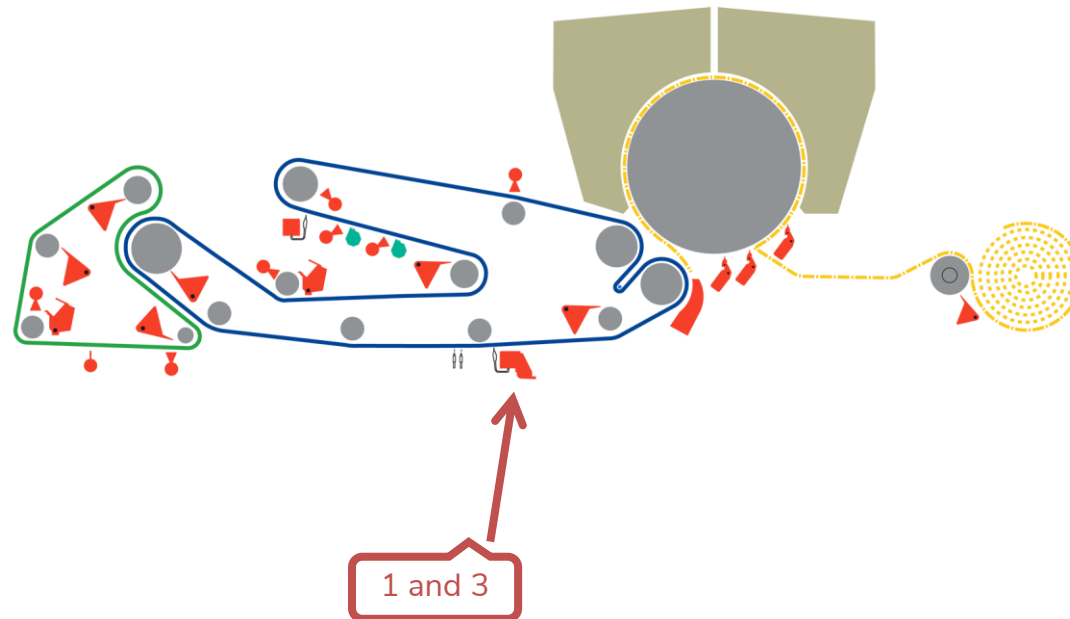
Lantier cutters in the paper machine



Lantier cutters in the paper machine



Lantier Cutters in the tissue machine

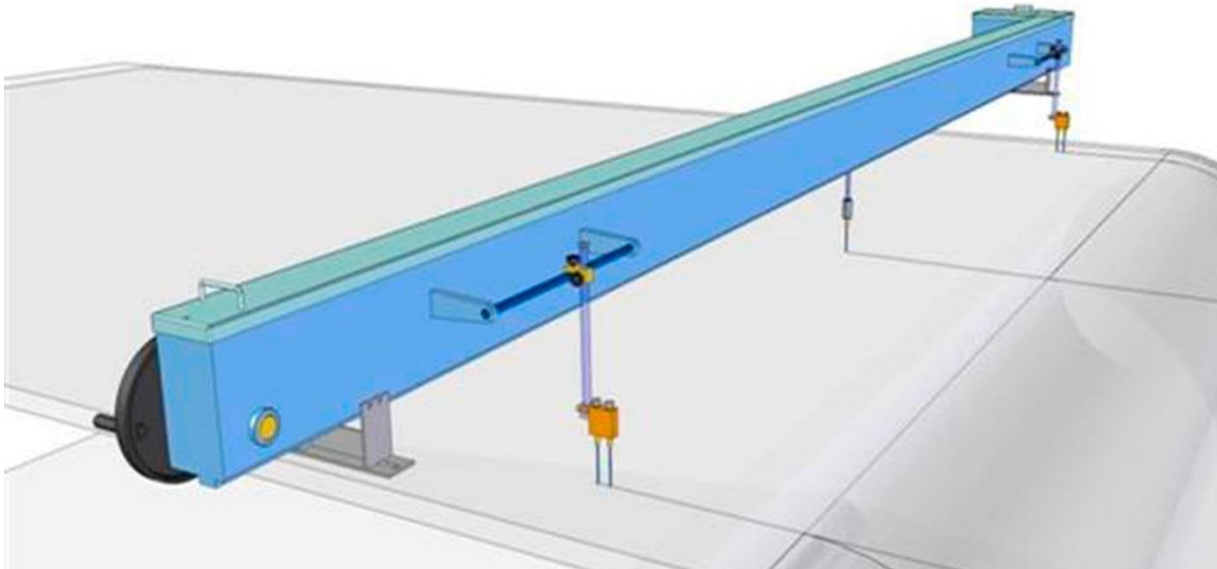


Lantier Cutters

- 1) Lanjet-C Tail Cutter
- 2) Double Lanjet-C Tail and Format Cutter
- 3) Edge Trimmers
- 4) Lancut Sheet Cutter
- 5) Cocrodile Lancut Sheet Cutter

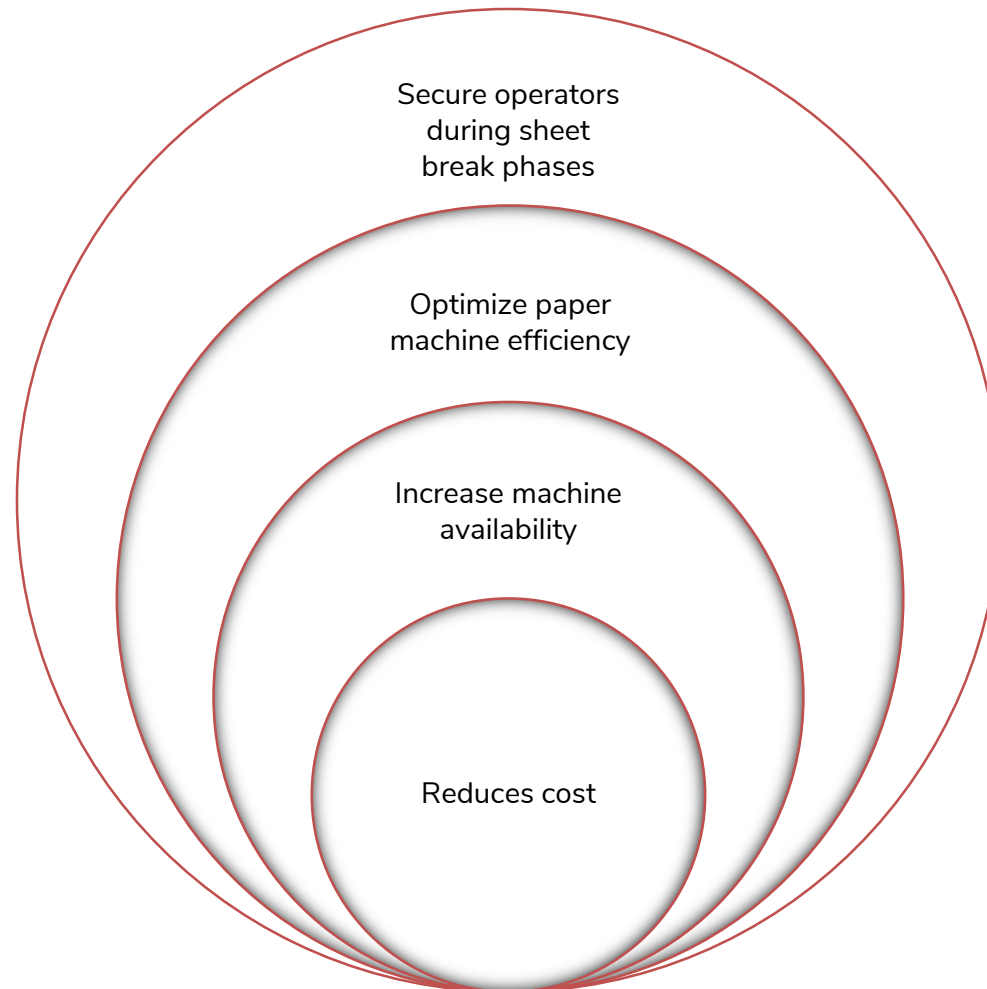
1) “Lanjet-C”, Wet End Tail Cutter

- Automatic tail cutter
- Flexibility to program any type of maneuver
- Option for programming different tail widths (only available in execution with Encoder)
- Option for working on automatic or manual
- Remote control from control boxes in dryer section, reel...
- Possibility of installing Edge Trimming Jets on the “Lanjet-C” body
- Option of cantilever design (easier and faster wire change)
- Nozzle movement at different speeds
- With simple, double or triple high precision nozzles

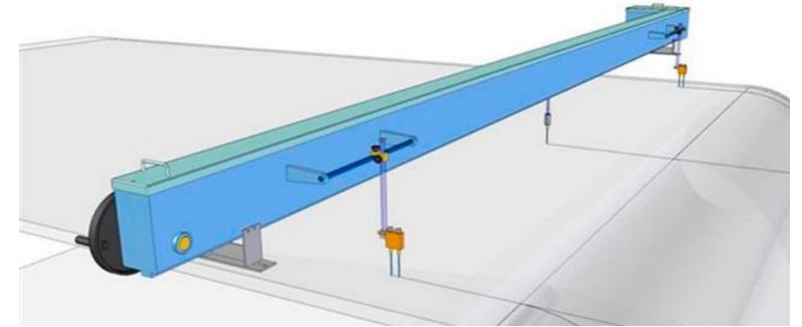
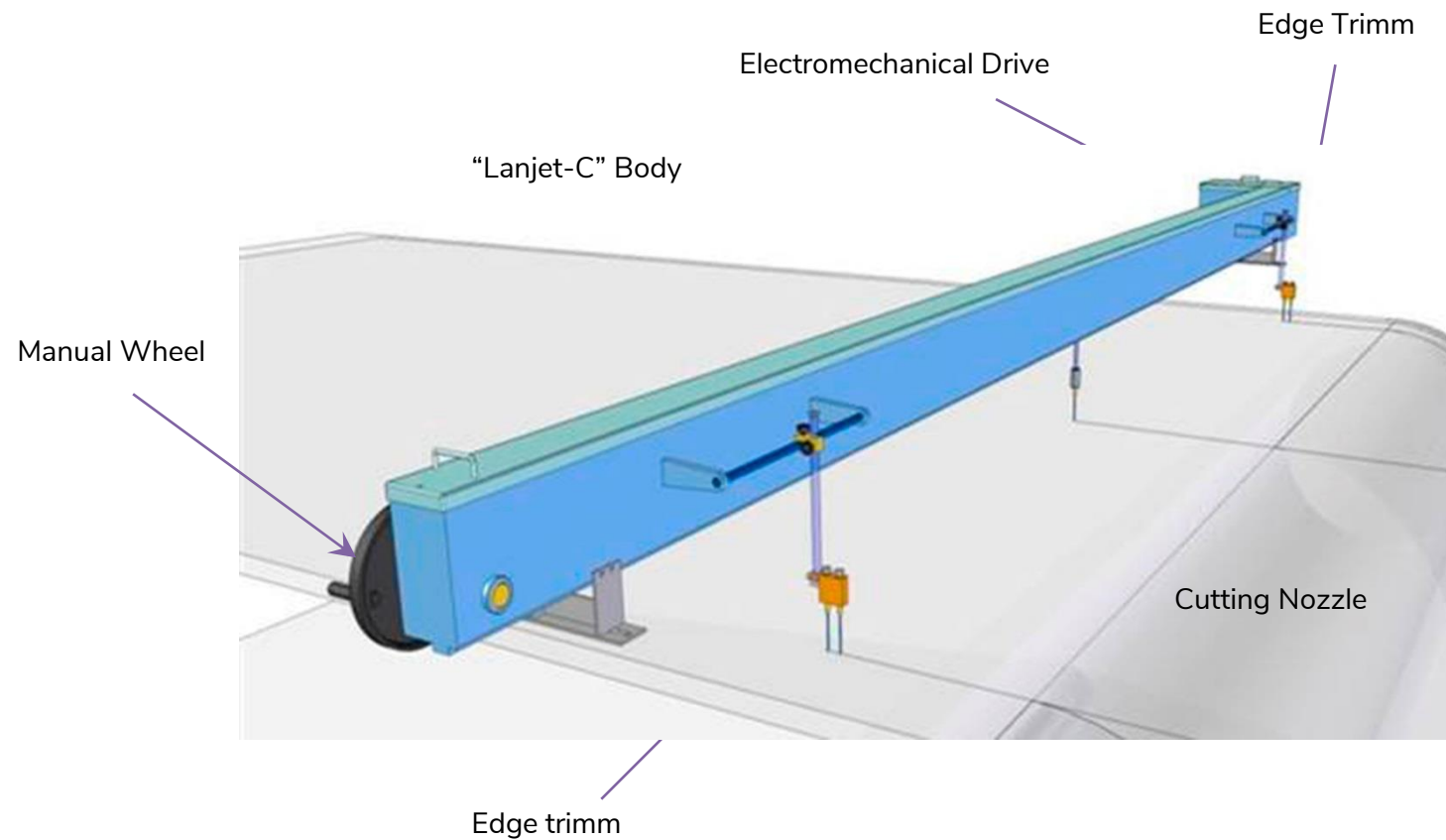


BENEFITS (vs Manual)	Reduce Tail cutting/threading time
	↓
	Increase Machine efficiency
	Improve Machine operator security

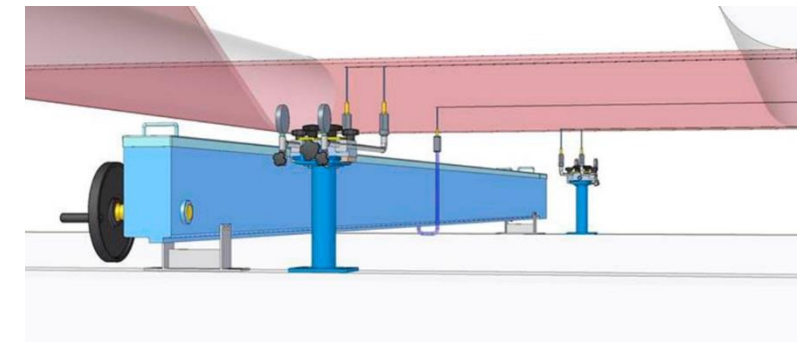
Why a Lantier Automatic Lanjet-C Tail Cutter?



“Lanjet-C”, Sheet cutter Components

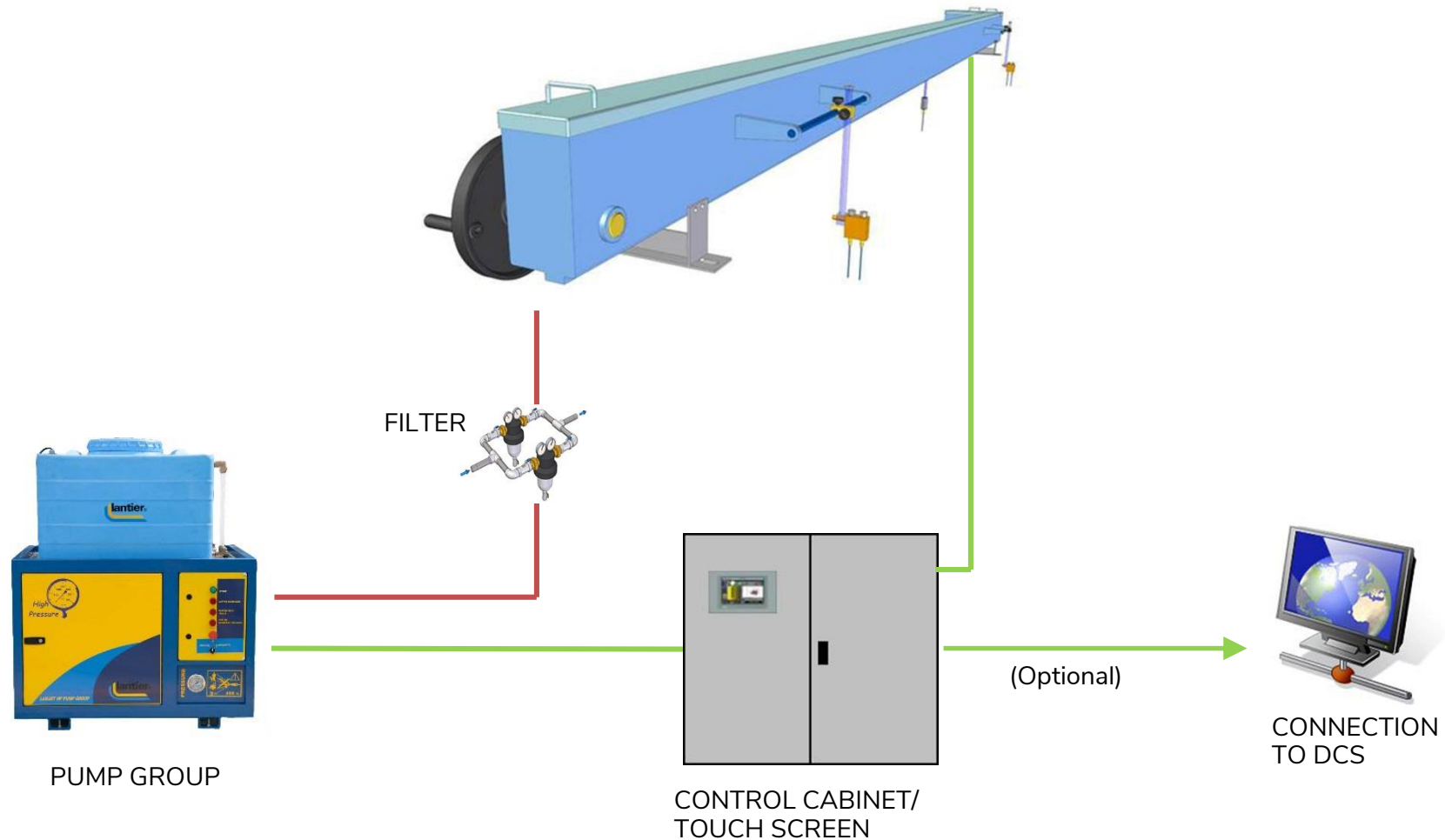


Fourdrinier



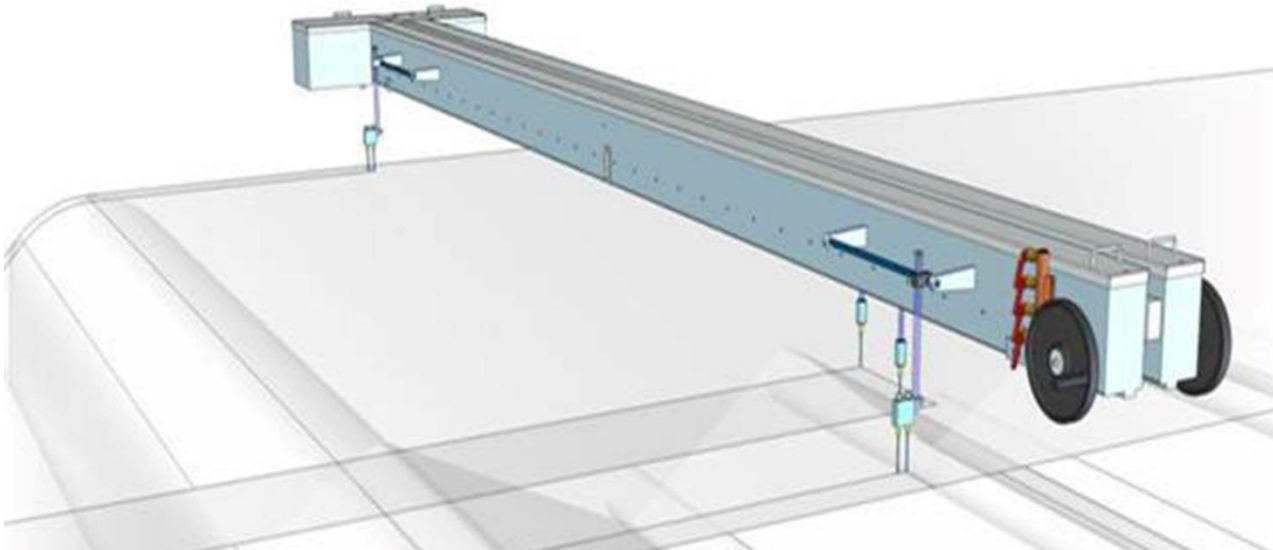
Tissue Crescent Former

Lanjet-C Tail Cutter Scope of Supply



2) “Double Lanjet-C”, Wet End Tail and Format Cutter

- Automatic tail and format cutting (thought to easily modify the produced format from the “Double Lanjet-C” control)
- Flexibility to program any type of maneuver
- Option for programming different tail widths
- Option for working on automatic or manual
- Remote control from control boxes in dryer section, reel...
- Possibility of installing Edge Trimming Jets on the “Lanjet-C” body
- Option of cantilever design (easier and faster wire change)
- Nozzle movement at different speeds available
- With simple, double or triple high precision nozzles



BENEFITS (vs Manual)

Reduce Tail cutting/threading time



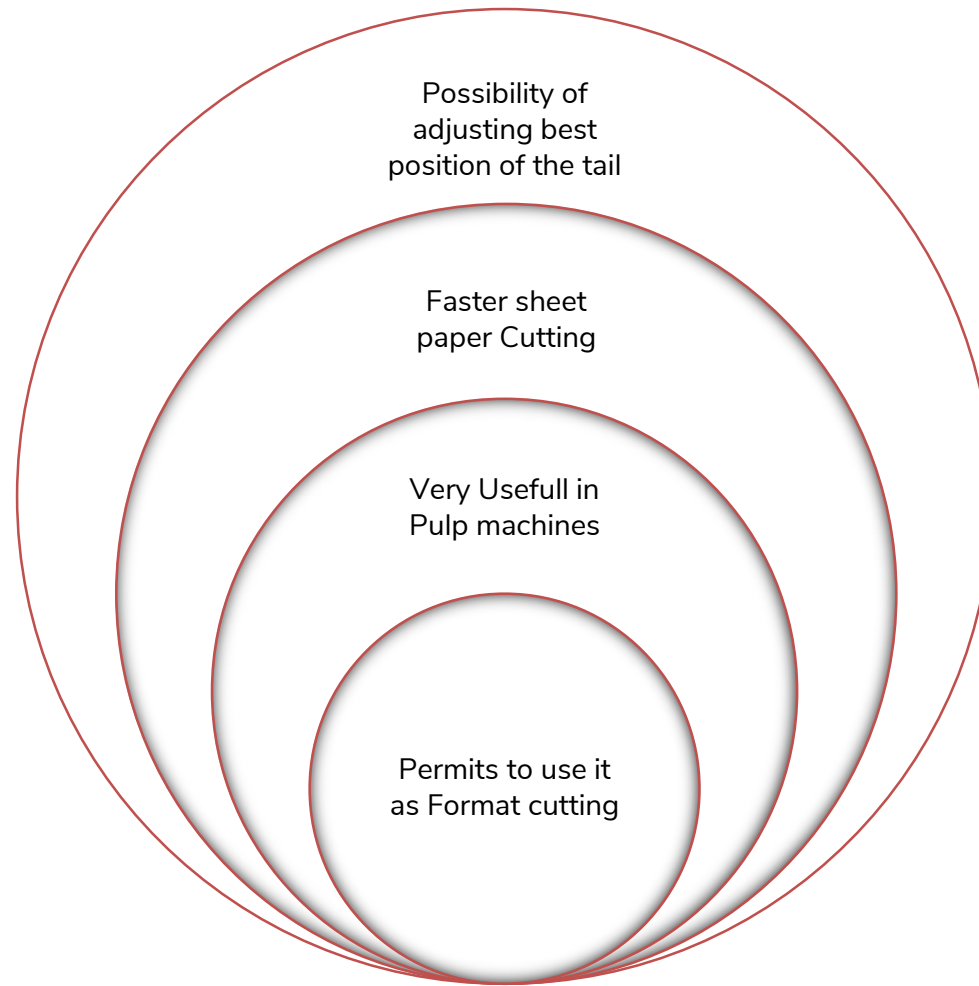
Increase Machine efficiency

Improve Machine operator security

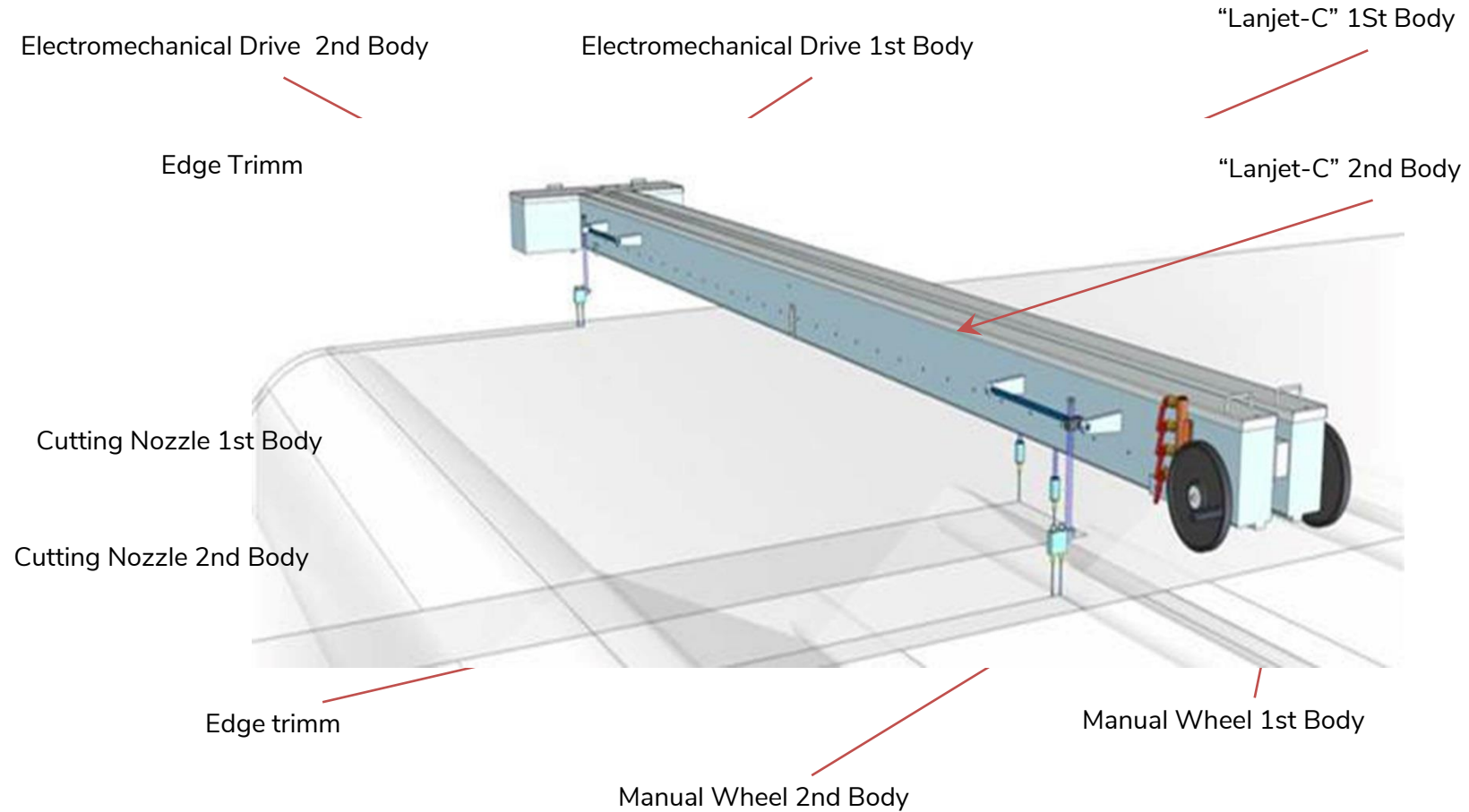
Optimize pulp/paper used for production

Improve Trimm cutting quality

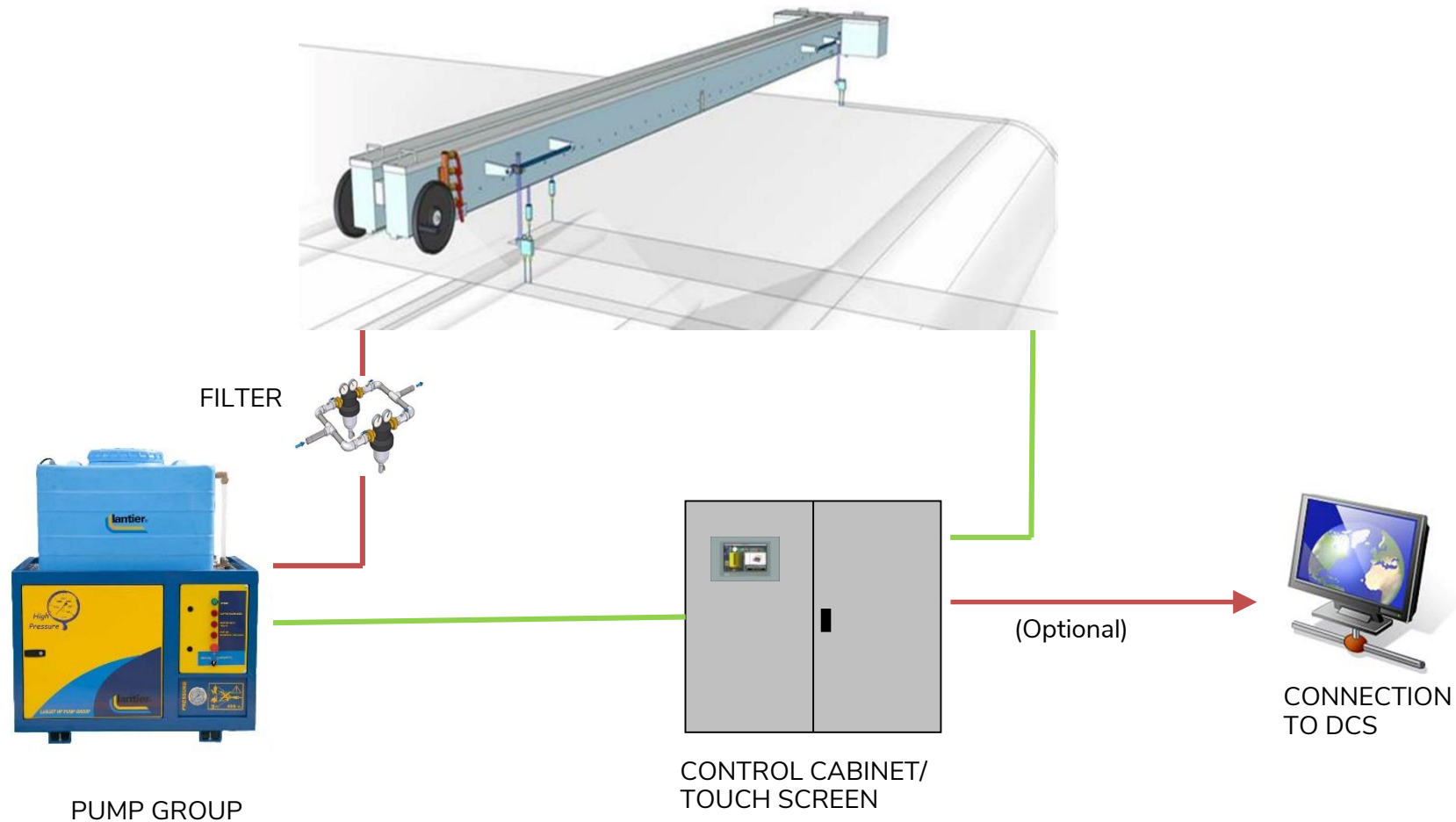
Why a Lantier Automatic Lanjet –C double Tail Cutter?



“Lanjet-C”, Tail cutter Components

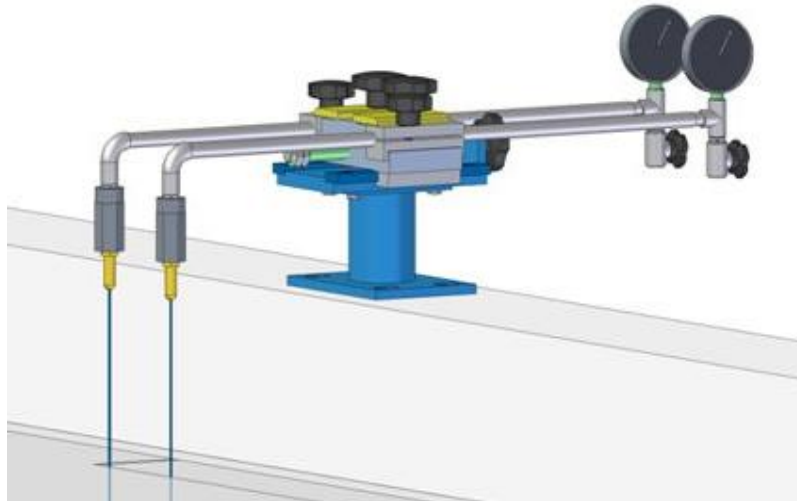


Double Lanjet-C tail cutter – Scope of Supply



3) Lantier Edge Trimming Jets

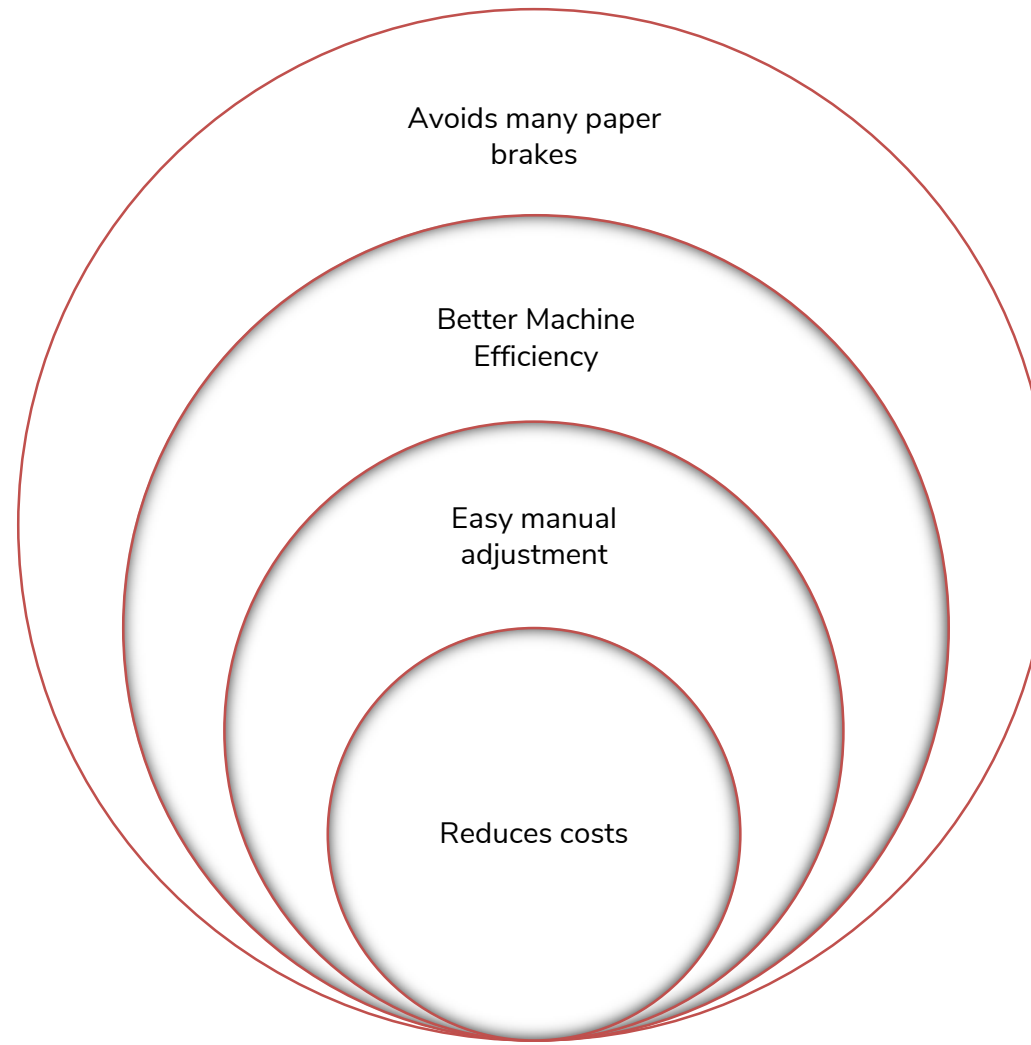
- With simple, double or triple high precision nozzles
- Manual adjustment of nozzle position (lineally and horizontally)
- Special design which allows disassembling one nozzle without stopping the paper machine
- Fast nozzle change maintaining the position of the nozzle (No need of new adjustment for cutting the edge exactly in the same position)
- The angle for fixing the nozzle can be adapted to each customer.
- A good Edge Trimm jet can avoid 50% of paper breaks in the machine.



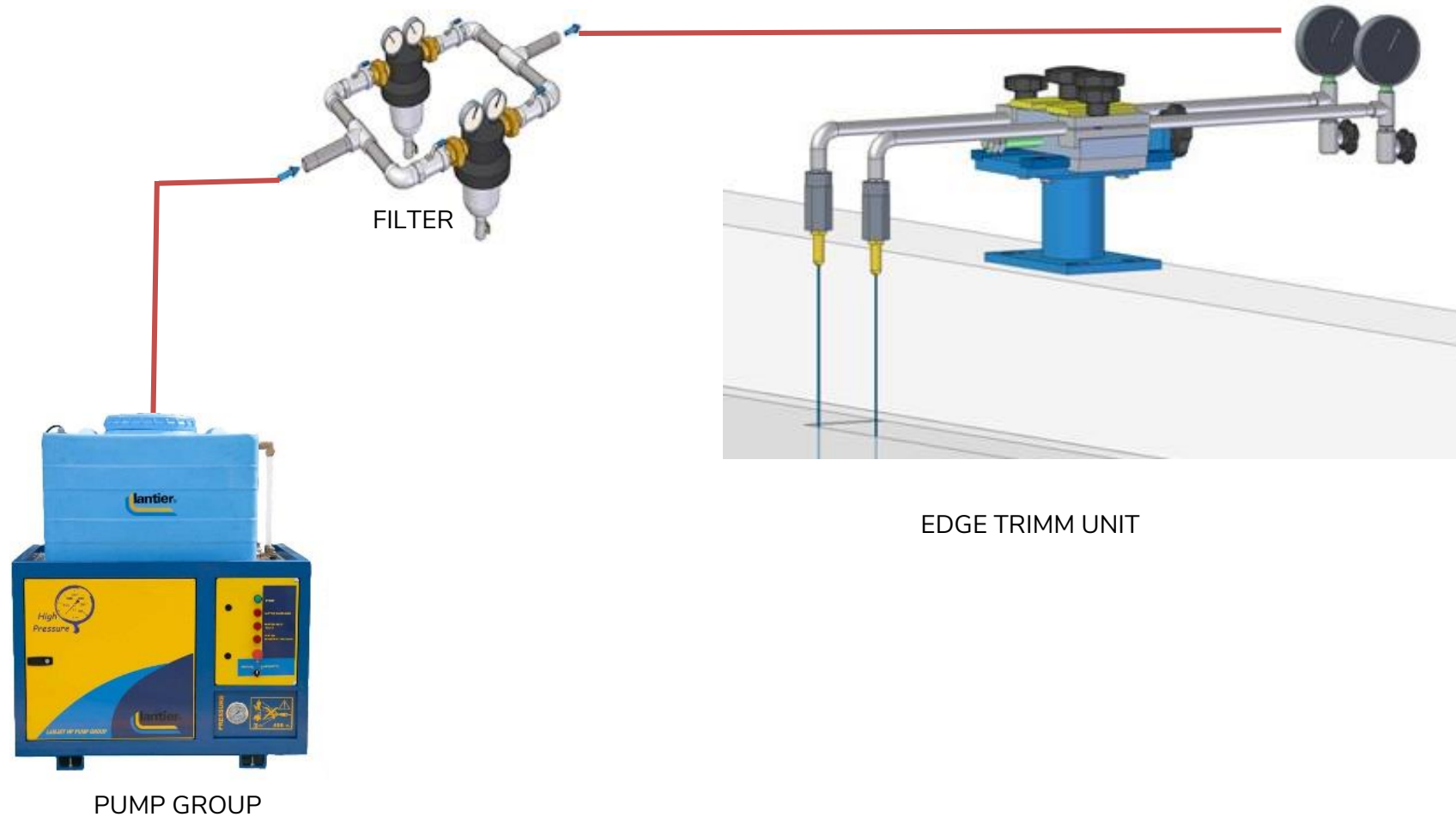
BENEFITS

Improve security	Machine	operator
Optimize pulp/paper used for production		
Improve Trimm cutting quality		

Why a Lantier Edge Trimm Shower?



Edge Trimm – Scope of Supply



R.O.I.

Sheet Cutters reduce the time of passing the tail

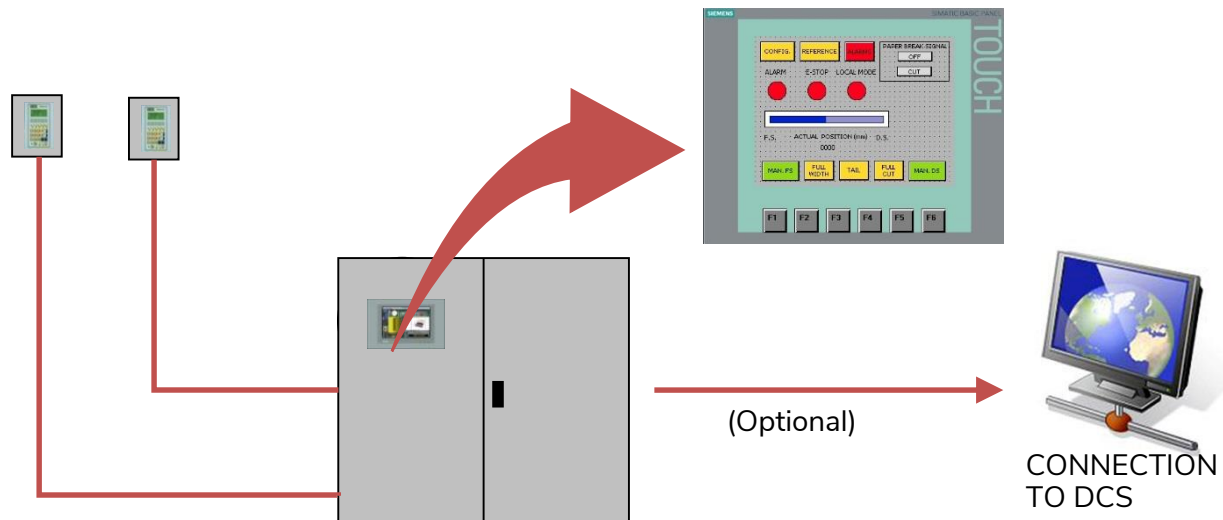
Machines Characteristics.

- 6 meters Width
- 10 Paper grade changes per week
- 80 gsm (0,08 Kg per m²)
- 1.000 m/min
- Profit per Kg (0,15 E/Kg). General Information
- Number of productive weeks 50

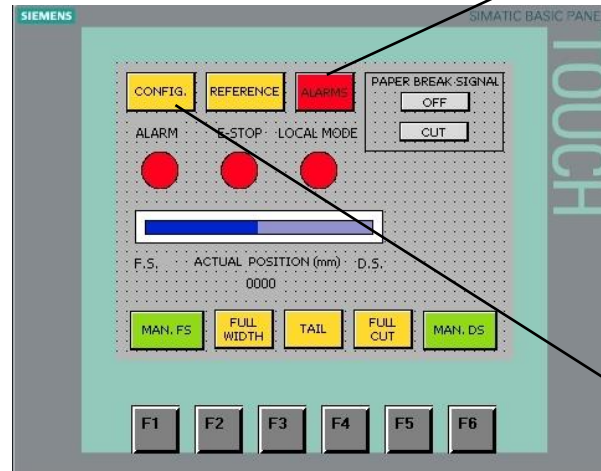
$ROI = 6 \times 10 \times 0,08 \times 1.000 \times 0,15 \times 50 = 36.000$ Euro per year.

Control of the Lanjet-C and pumping Group

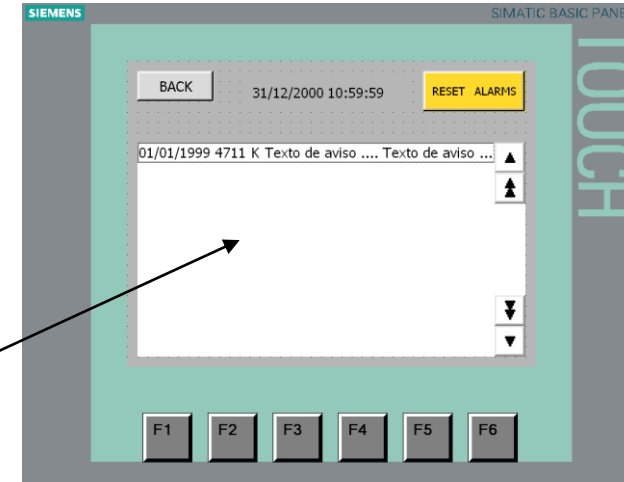
- Main cabinet with touch screen for the control of the Lanjet-C and Pump group
- The main cabinet will be situated in the general control cabinet room of the paper mill.
- Auxiliary buttons for the Lanjet-C sheet cutter different movements, such as tail, open, cut, format...
- The auxiliary buttons can be located for example in the size press or in the reel Drumm.



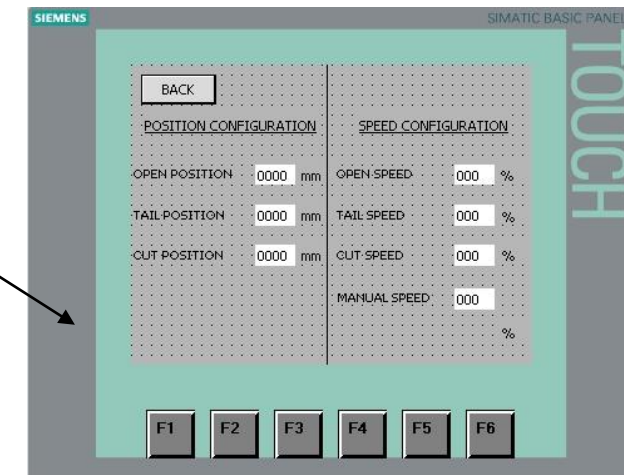
Touch screen description



Main screen: This screen is used to activate all equipment movements and for configuring the automatic movement when paper break occurs. Also is used to control equipment and head position and check equipment status.

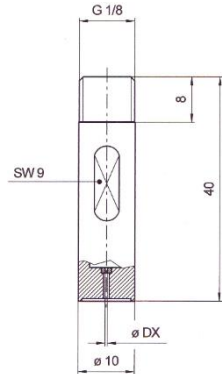


Alarms screen: This screen is used to check active alarms and historical. Also you can find the configurable system clock.

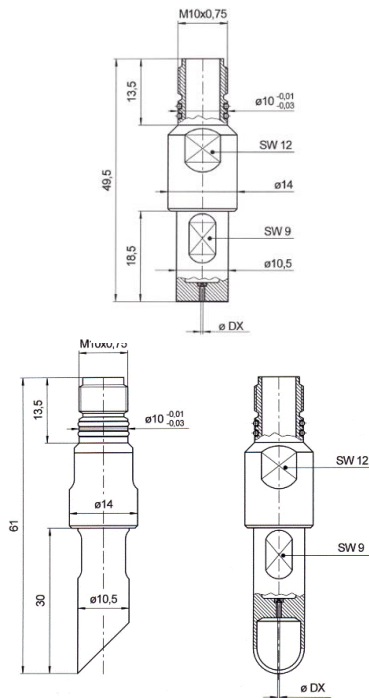


Configuration screen: This screen is used to configure movement positions and speeds.

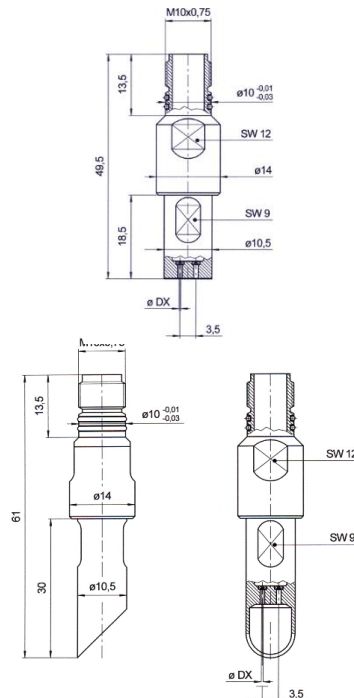
Cutting Nozzles



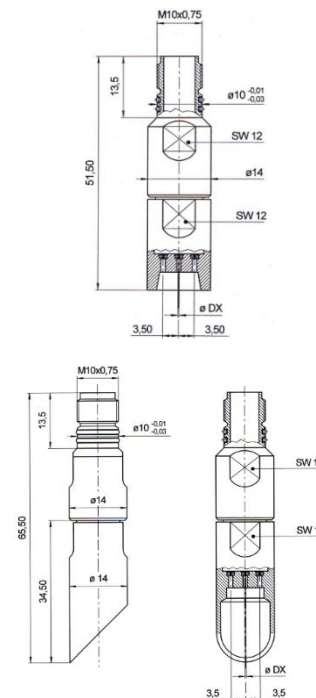
Single jet



Double jet



Triple jet

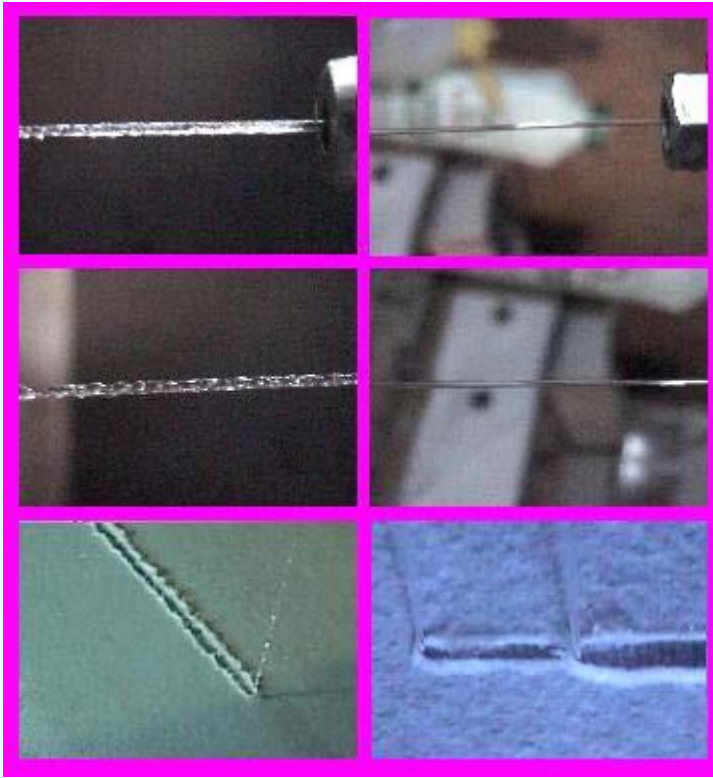


Pump Group

- Water pressure till 35 bar
- The control of the pump group is integrated in the control of the Lanjet-C Sheet Cutter.
- Specially designed for avoiding pulsations.



Cutting principles



Source PMS

LEFT.

The water is not laminated. Just after the exit of the nozzle the jet becomes into water drops and this cutting is not efficient.

RIGHT

The water is whole laminated and the jet is not changed in the whole length of the jet.

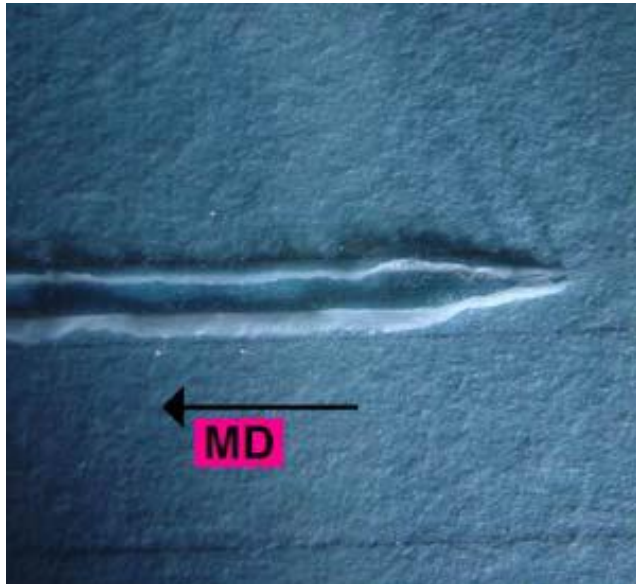
WATER QUALITY AND CONDITIONS.

*The water must be fresh and very well filtered.

*The pressure can oscillate between 15-30 BAR normally. Now always bigger pressure mean better cutting. The pressure depends on:

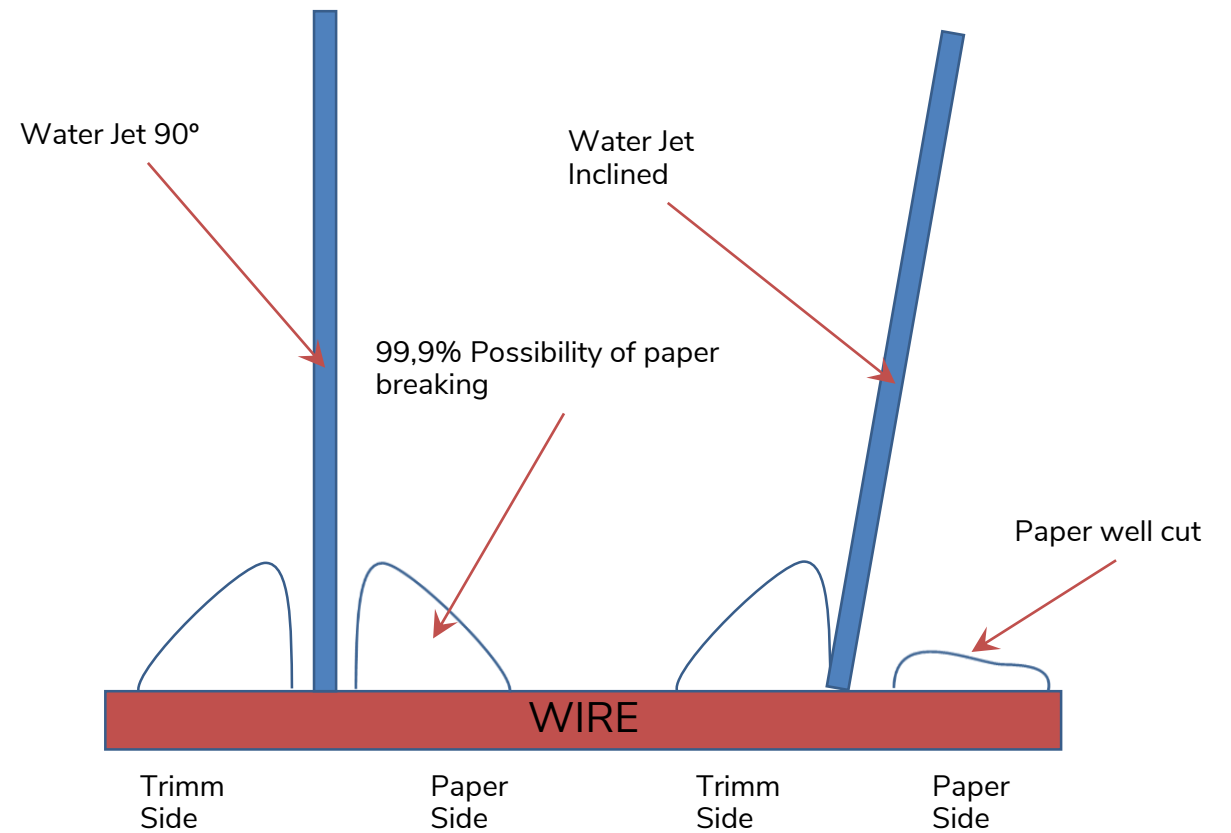
- Speed of machine
- Type of fibber
- Type of nozzle
- Paper gramage.

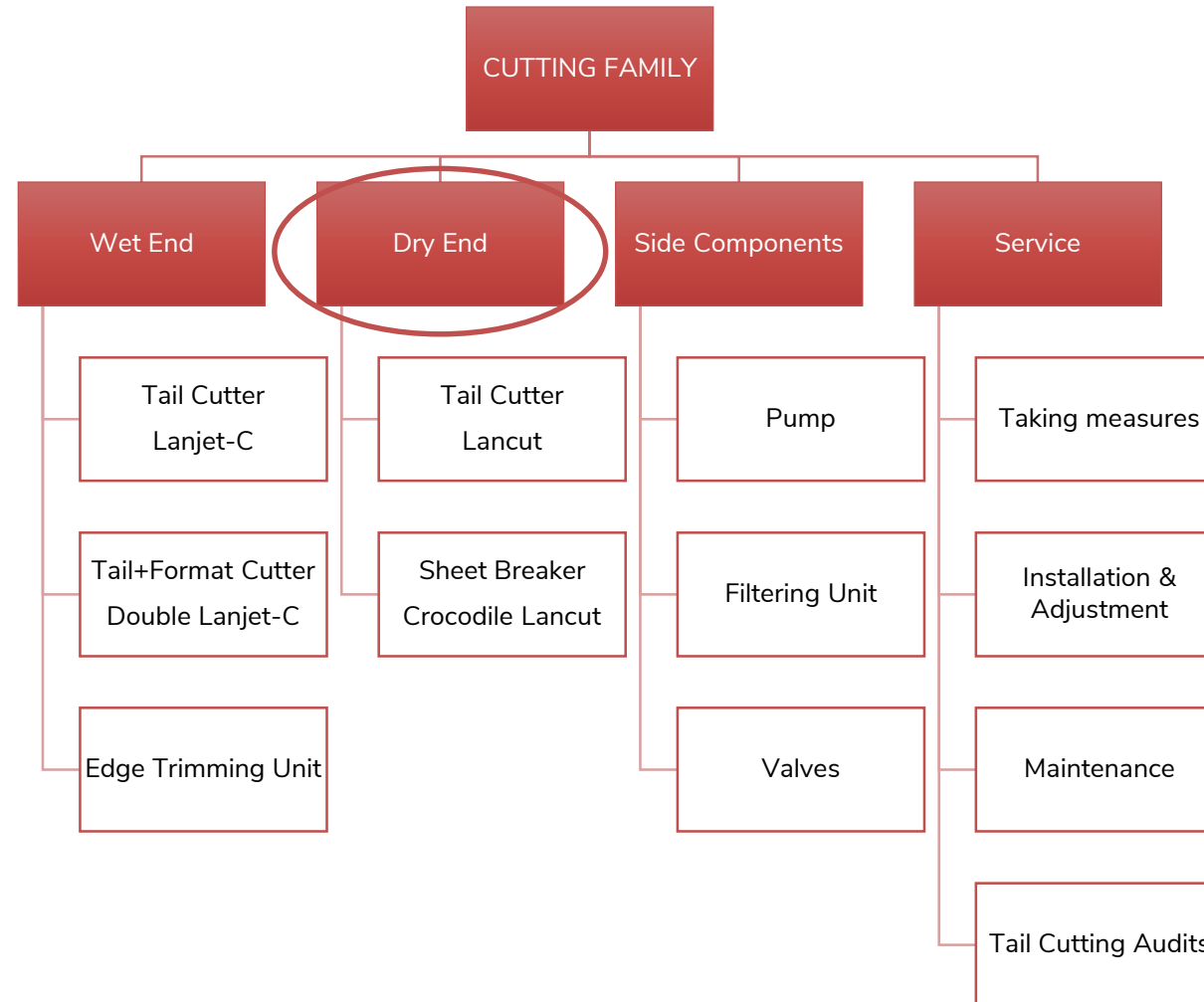
Cutting principles



Source PMS

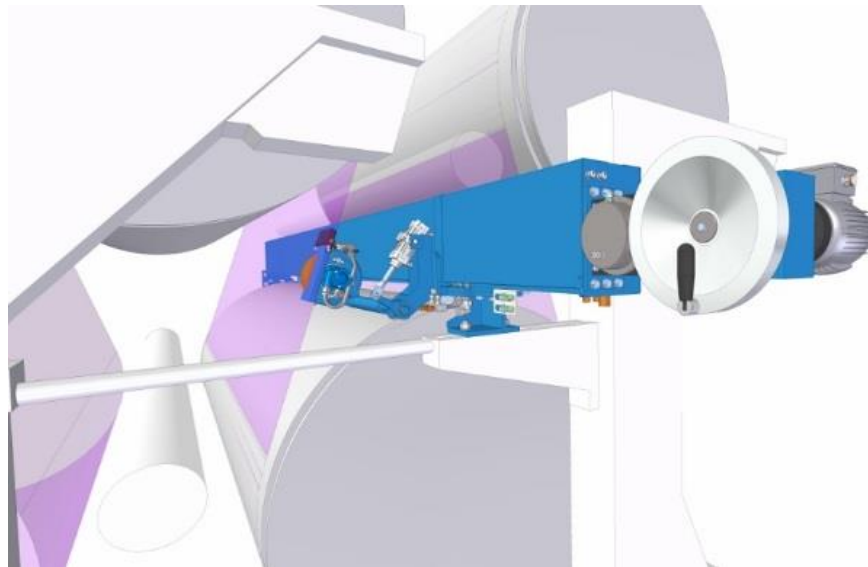
This picture shows how a bigger pressure does not mean a regular sheet tail cutting.





5) “Lancut”, Dry End Tail Cutter

- Automatic tail cutting with rotating blade
- Flexibility to program any type of maneuver
- Remote control from control boxes in dryer section, reel...
- Applicable for cutting any type of paper and board
- Option for programming different tail widths (only available in execution with Encoder)
- Option for working on automatic or manual
- Rotating blade movement at different speeds available



BENEFITS (vs Manual)

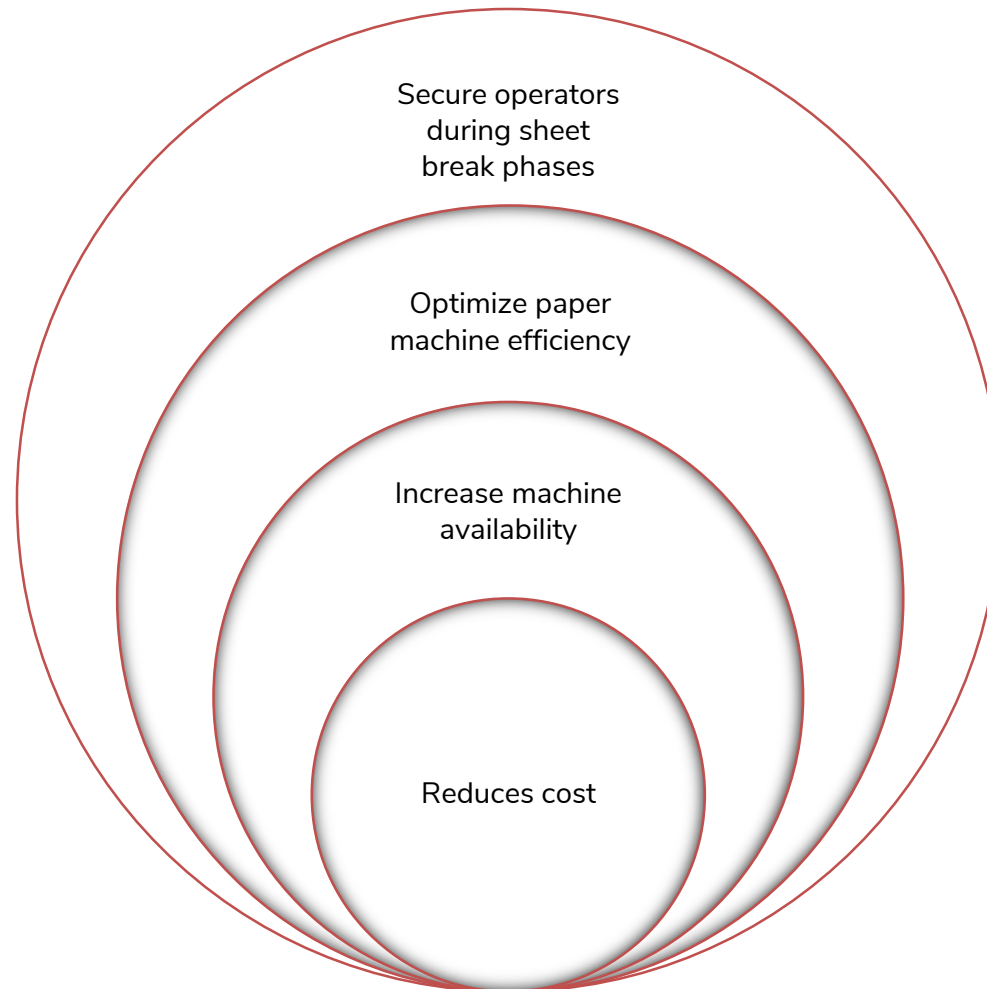
Reduce Tail cutting/threading time



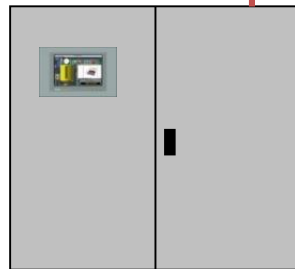
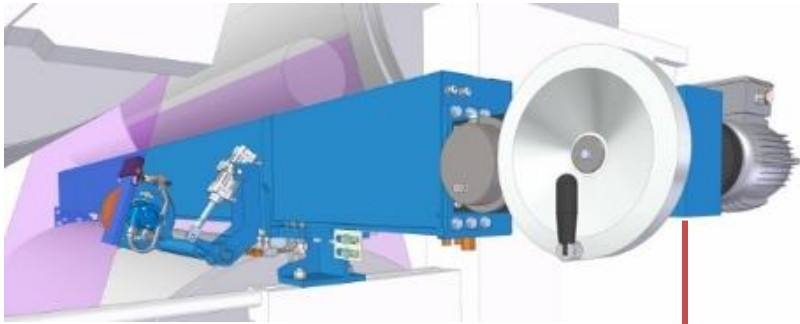
Increase Machine efficiency

Improve Machine operator security

Why a Lantier Automatic Lancut Sheet Cutter?



Lancut Tail Cutter – Scope of Supply



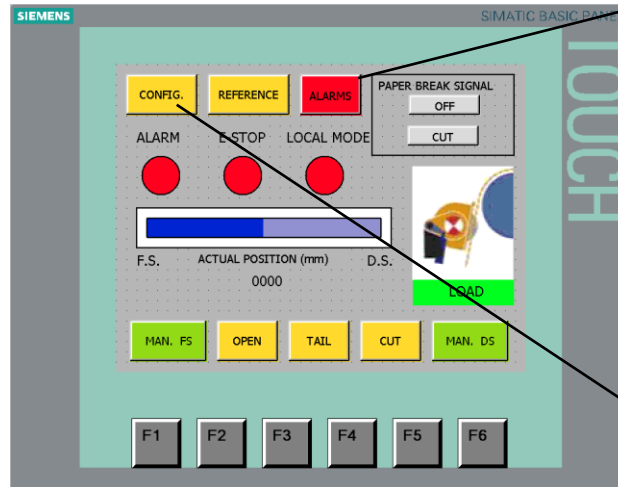
CONTROL CABINET/
TOUCH SCREEN

OPTIONAL

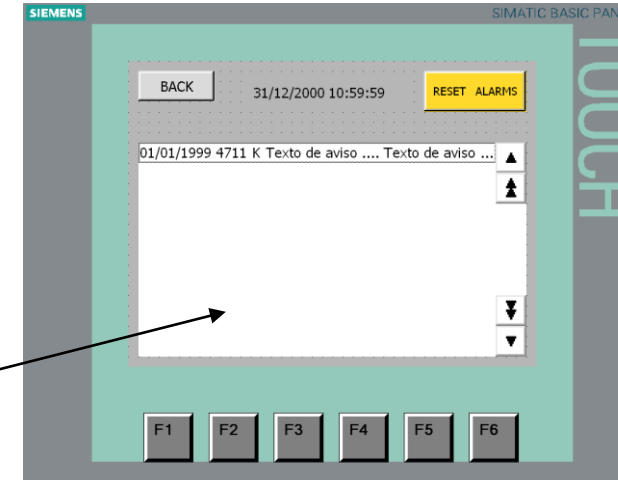


CONNECTION
TO DCS

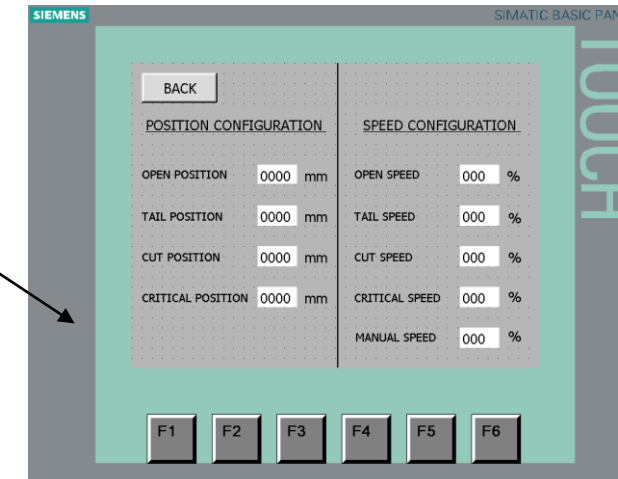
Touch screen description



Main screen: This screen is used to activate all equipment movements and for configuring the automatic movement when paper break occurs. Also is used to control equipment and head position and check equipment status.

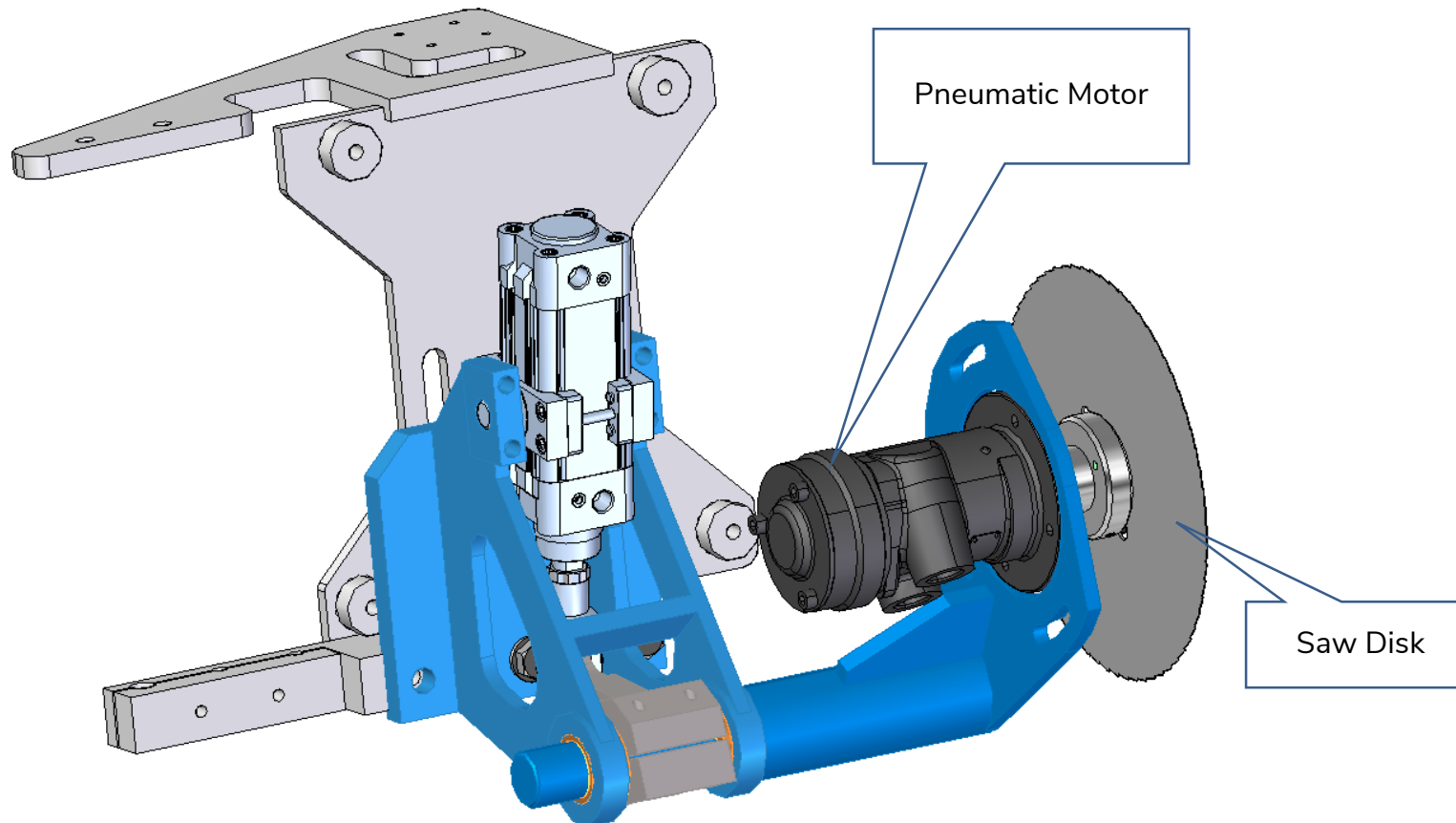


Alarms screen: This screen is used to check active alarms and historical. Also you can find the configurable system clock.



Configuration screen: This screen is used to configure movement positions and speeds.

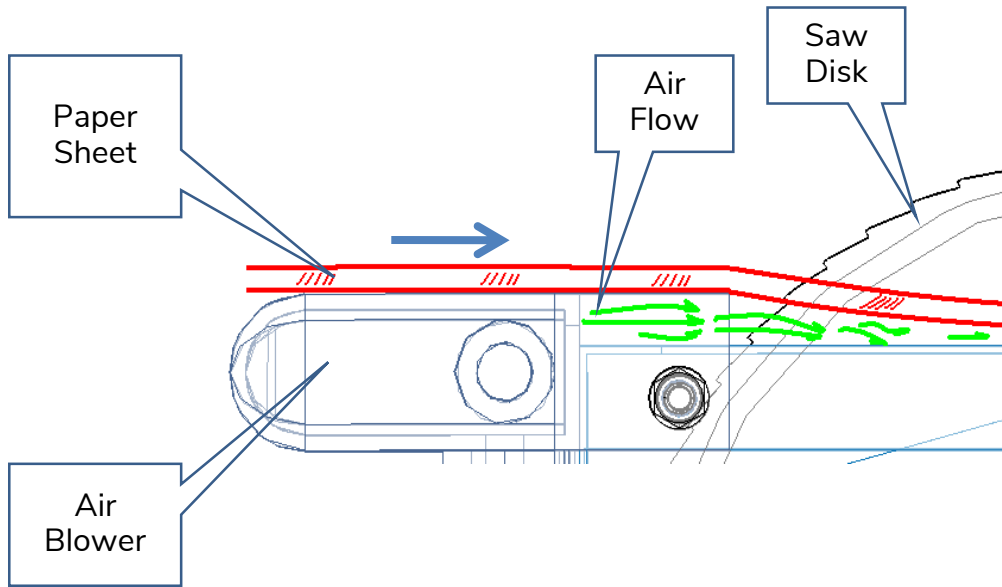
Lancut Head



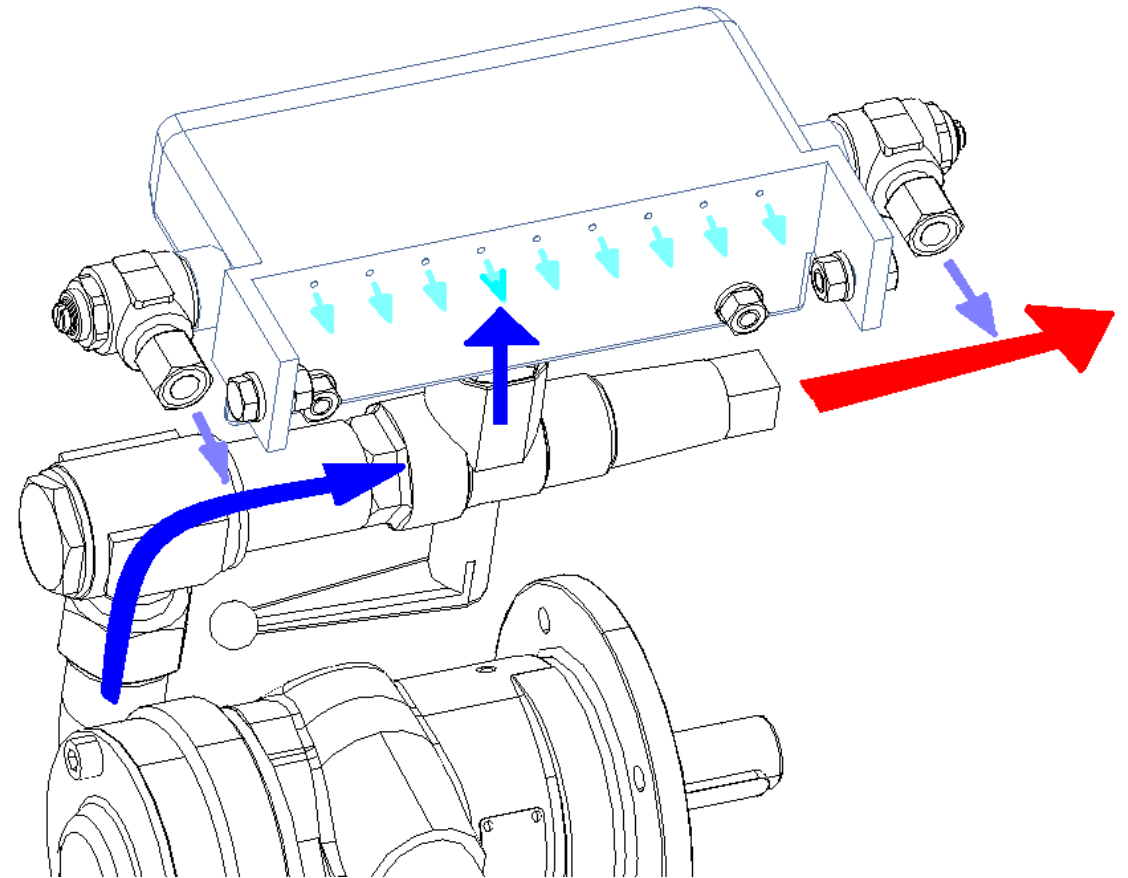
Characteristics of Pneumatic Motors:

- Reliable Starting
- High starting torque and good low speed characteristics
- Wide speed and torque range
- Sturdy, compact construction to withstand rough treatment
- Inlet and outlet port restrictors permit free speed running
- Long working life and easy servicing

Cutting Head: Venturi Effect



The cutting head includes an air blower that generates a vacuum due to Venturi effect so it holds better the sheet against the cover and it gets an improved cutting.



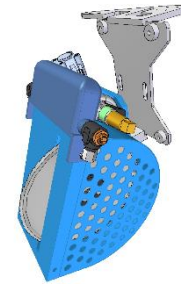
Safety for LANCUT Sheet Cutters

Machine Safety Directive and harmonized standard EN ISO 12100 specify a three-step method to work on risk reduction This is the method:

- **Integrated security**, which means to remove risks during design process. Lancut Tail Sheet Cutters includes them(see the cover that surrounds the saw disk)



- **Information for the use**; this is done, for example using security warnings and a manual of instructions (see some warnings usually included).



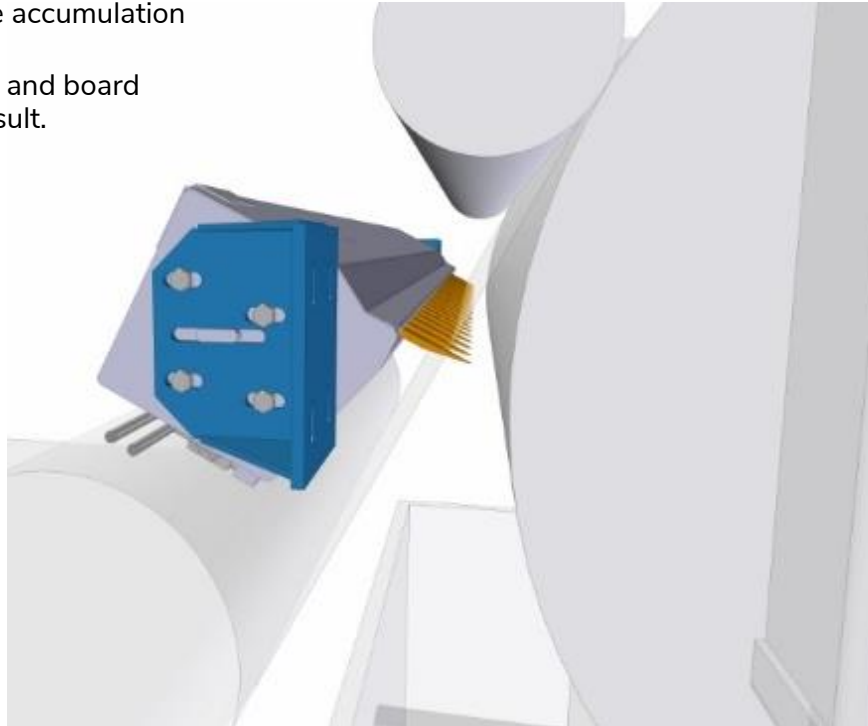
Cover

- **Technical and additional safety means**; for example the use of guards and optic sensors (they can be integrated upon request)



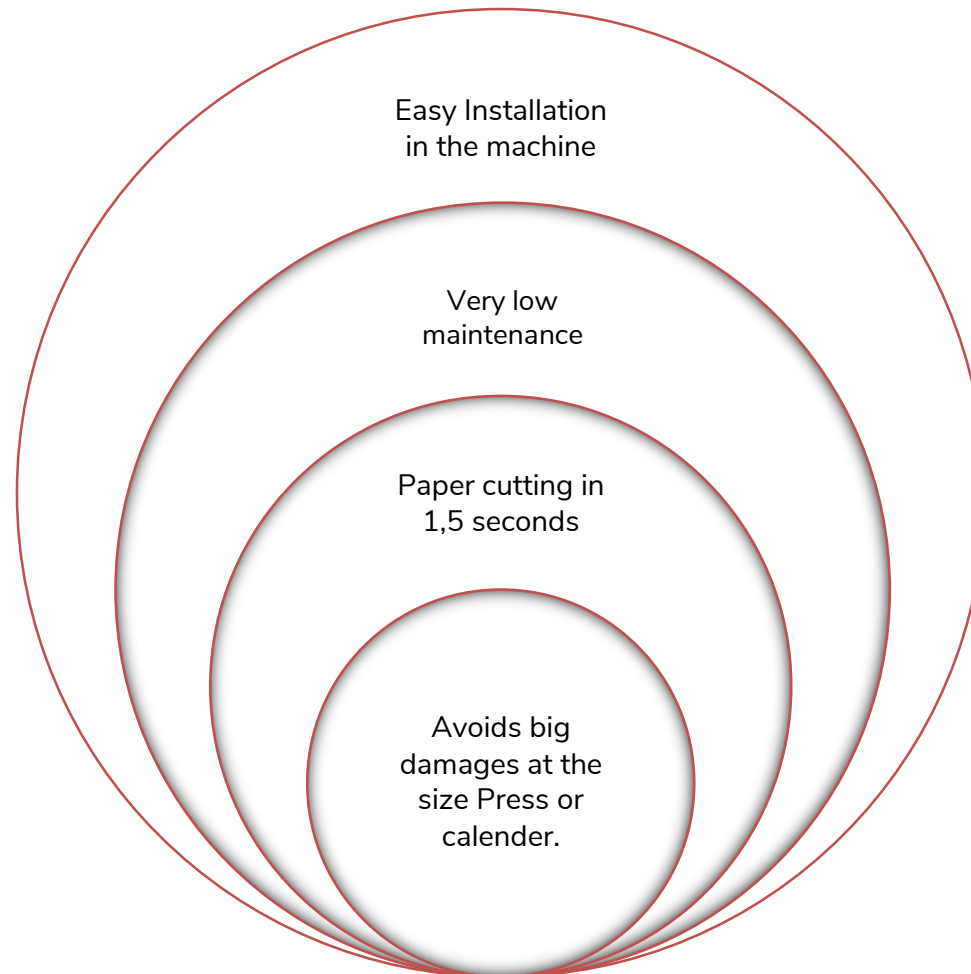
6) “Crocodile Lancut”, Emergency Sheet Cutter

- Allows cutting the whole width of the sheet in a moment
- Possibility of acting after receiving paper brakes signal (automatic) or manual control
- To avoid damages in rolls caused by the accumulation of paper due to paper breaks
- Applicable for cutting any type of paper and board (450 gsm Max). For heavier papers consult.

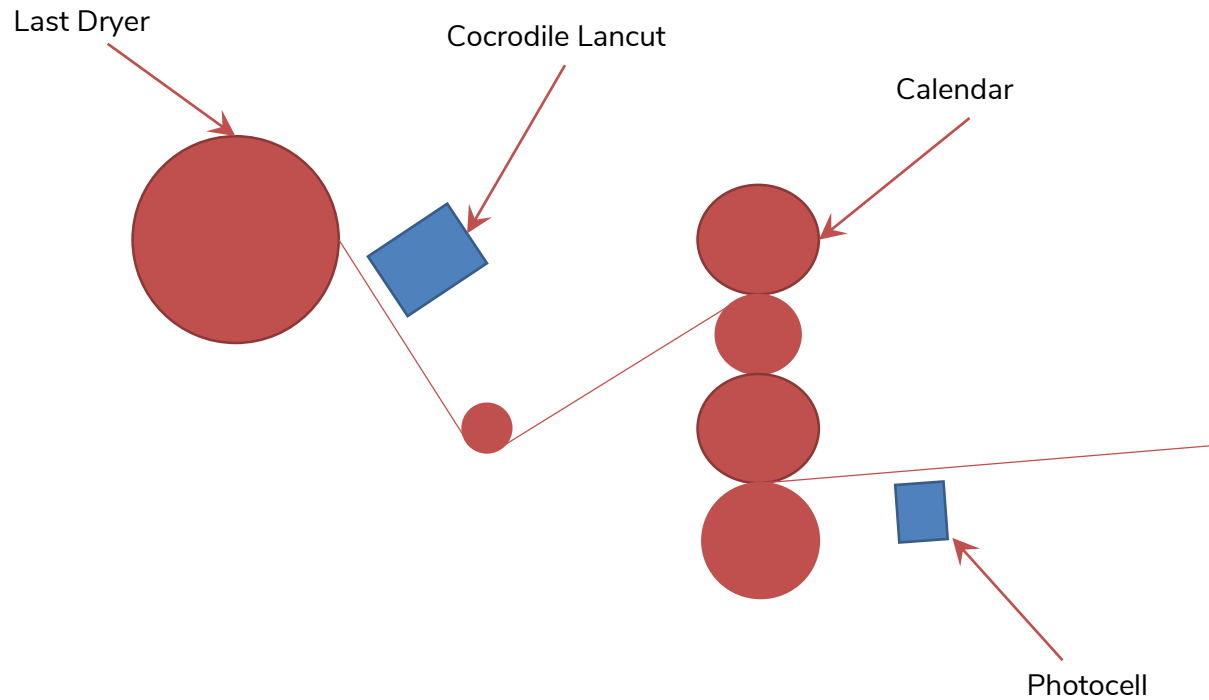


BENEFITS (vs Manual)	Avoid paper jam ↓ Increase Machine efficiency
	Avoid damage in Size-Press/Calander Rolls
	Improve Machine operator security

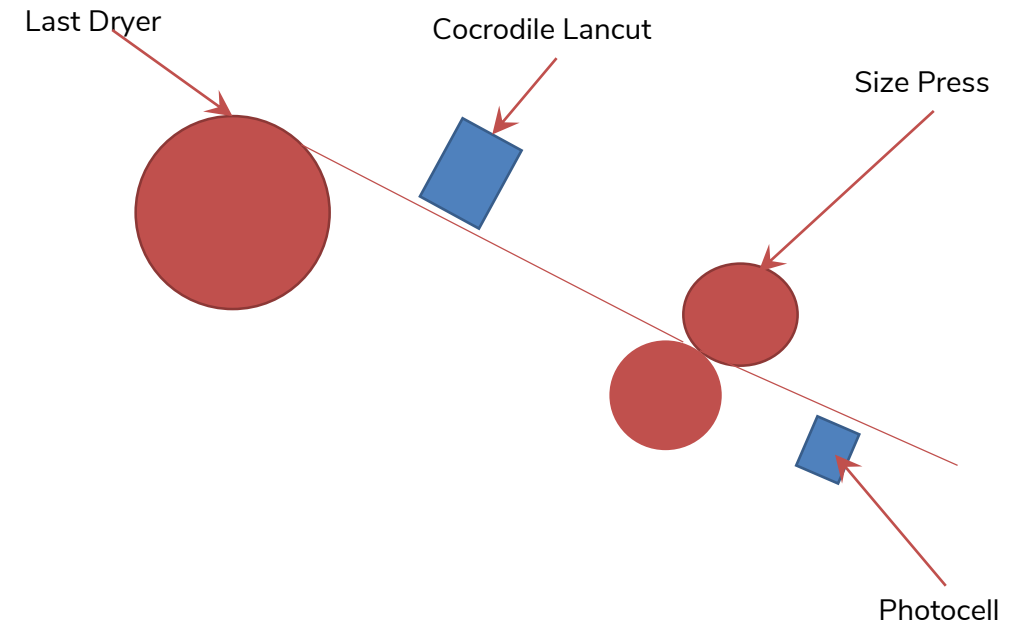
Why a Lantier Crocodrile Lancut Sheet Cutter?



Installation position in the Machine

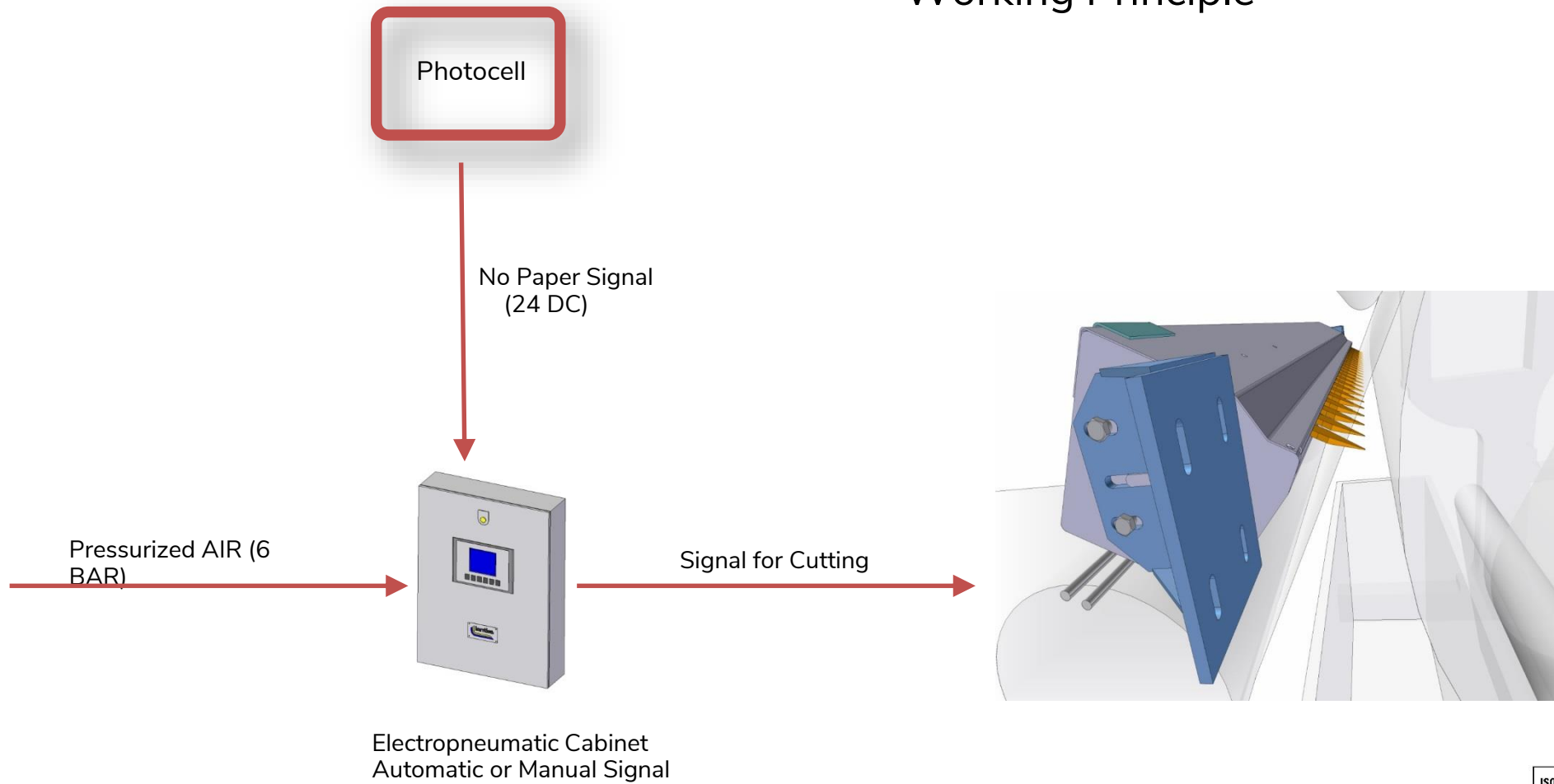


Before Calender



Before Size-Press

Working Principle



Safety for CROCODRILE LANCUT Sheet Cutters

Machine Safety Directive and harmonized standard EN ISO 12100 specify a three-step method to work on risk reduction This is the method:

- **Integrated security**, which means to remove risks during design process. Cocodrile Lancut equipments include them (see the security retaining clip and the safety cover to disassemble the pneumatic cylinder).



- **Information for the use**; this is done, for example using security warnings and a manual of instructions (see warning usually included).



- **Technical and additional safety means**; for example the use of guards and optic sensors (they can be integrated upon request)

