

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

1. **Type of Rewinder:**  Semi-automatic rewinder,  Fully-automatic rewinder.

Low volumes of production: A "Semi automatic rewinder" is smaller and cheaper more suitable for customers with low volumes of production. "Semi automatic rewinder" will stop between rolls and operator will need to tape and eject rolls manually.

### Input material:

2. **Paper width:**  1800mm,  2500mm,  2800mm,  other \_\_\_\_\_ mm

3. **Paper flutes:** \_\_\_\_\_. (B, C and E-flute is common)

### Output products:

4. **Number of slitting knives needed?** \_\_\_\_\_ pcs.

\*Pivab recommends 5-7 knives or 13-15 knives for best prices.

\*Minimum distance between knives is 100mm.

\*Example: 5 knives will result in 4 rolls with enabled function for edge-trim or 6 rolls without edge-trim.

\*Pivab always recommend that there should be one more tape units than knives.

5. **Production of:**  Small diameter,  Large diameter,  All sizes.

\*Small diameter rolls will need a fixed table for faster discharge. (Example 75m B-flute rolls, ~400mm diameter)

\*Large diameter rolls will need a lifting table to support outgoing rolls. (Example 1200m E-flute rolls, ~1500mm diameter)

\*All sizes will need lifting table and an extra fixed table to install when needed. (max 1500mm diameter)

6. **Examples of width we want to produce:** \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

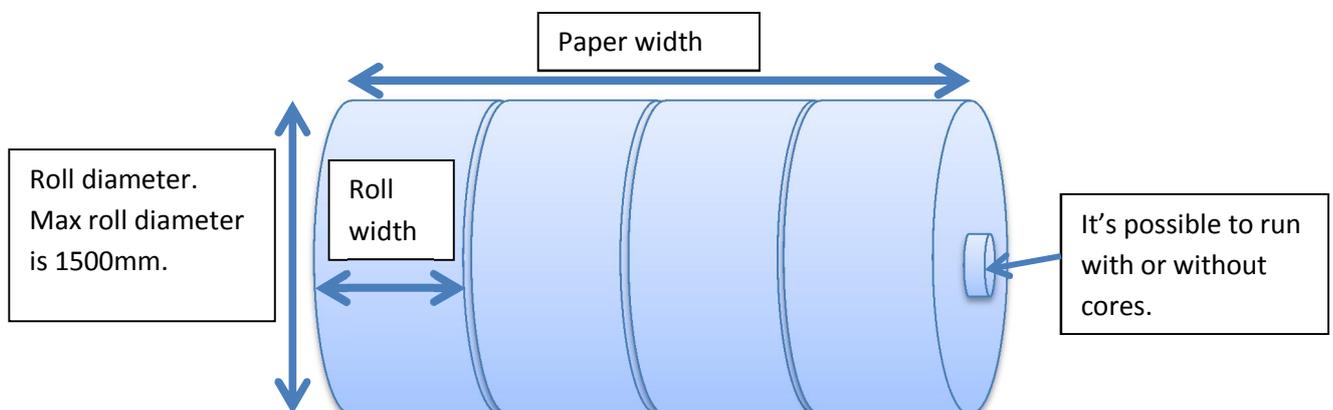
Paper quality is important and there can be some adjusting before production of some difficult combinations can be satisfied.

Producing rolls of B-flute and C-flute are relatively easy to rewind.

Producing rolls of E-flute need better settings of rewinder, bridge and paper quality. Especially if customer want many rolls with small width it will be more important to get the perfect settings.

7. **Rewinding shaft diameter:**  76mm,  100mm,  other \_\_\_\_\_ mm.

8. **Scoring knives,**  No,  Yes. we need \_\_\_\_\_ pcs.



## Additional options:

9. **Web-guide on bridge.**  No,  Pivab plates,  Pivab active.  Other.

\*Pivab plates web-guide. Easily adjust the width between 2x plates from the operation panel or with buttons on bridge. Includes 2x motors and distance sensor.

\*Pivab active web-guide. Will actively guide the paper using a steering wheel in the middle and edge measuring. Includes 1x servomotor and 2x high-resolution light grids.

Other web-guide solution: \_\_\_\_\_.

10. **Pivab Up-ender.**  No,  Yes

Raise your rolls onto pallets from conveyor.

11. **Printer.**  No,  Yes. Label printer,  Yes. Inkjet printer.

\*Labels will be written during discharge of rolls and be added manually by operator.

\*Inkjet can write data, graphic and barcode directly on rolls during discharge.

## Fully automatic rewinder options:

12. **Knife positioning system.**  Manual,  Automatic standard,  Automatic fast.

\*Manual positioning. Operator stops machine and change positions manually.

\*Automatic standard positioning. Order changes done in 20-60 seconds.

\*Automatic fast positioning (individual motors) .Fast order changes done in a few seconds.

Pivab razor blade knives are equipped with sharpening and lubrication.

13. **Tape applicators positioning system.**  Manual,  Automatic standard

\*Manual positioning. Operator change positions manually.

\*Automatic standard positioning. Changes position during production when new order have started.

14. **Core feeder.**  No,  Manual core feeder,  Automatic core feeder.

\*Manual core feeder, here you can prepare the cores and add tape before applying in the cores.

\*Automatic core feeder, will automatically add cores in machine.

## Other machine features:

15. **Emergency stop configuration?**

Corrugator as master.

All Emergency stop buttons is connected to Corrugator (2 Channels). Corrugator supply Pivab with connections to 2x contactors for ES(2 Channels) so Pivab can trigger ES on Rewinder. Pivab will provide document for this interface.

Separate ES.

ES buttons are not connected to corrugator. An ES button will only trigger ES on Rewinder. Pivab will provide document for this interface.

Other solution \_\_\_\_\_

**16. Should Pivab build program to follow or control Speed of single facer? (If Corrugator can control material on bridge on its own this is not needed).** No. Build program to follow speed of corrugator. Corrugator control loops on bridge.

Corrugator will provide relay signal to INCREASE or DECREASE speed of rewinder. 0-10V analog speed from Corrugator is required. 0-10V analog speed from Rewinder will be provided. Pivab will provide document for this interface.

 Build program to control speed of corrugator. Pivab control loops on bridge.

Pivab will provide relay signal to INCREASE or DECREASE speed of Corrugator. 0-10V analog speed from Corrugator is required. Pivab will provide document for this interface.

**17. Should Pivab prepare machine to communicate with factory systems?** No. We would like Pivab to prepare machine with Siemens CP343 module for communication.**18. How will you use the communication?** Read information such as actual speed, actual meters and other production data. Write order/recipes to rewinder from factory system.

Other: \_\_\_\_\_.

**19. Who will make the communication interface?** Customer will establish communication to PLC (Siemens CPU315-2 PN+CP343 module).

Pivab can provide the DB-addresses for some available values.

 We would like Pivab to offer a solution.

Pivab are in contact with software developer to help implement such interfaces. Customer and Pivab will need to discuss in detail how it should work.

**20. Should Pivab have ability to connect to machine online and fix problems?** No internet access. Pivab need to visit to help customer. Pivab should install a VPN-Router "RAS-400 Etic or similar" on machine. **Recommended.**

Customer will provide internet access. If through firewall allow ports 1194 & 50000.

 Customer provide connection via VPN.