



# STACKING with Brødbæk & Co.



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Over the last 15 years Brødbæk & Co. has developed a very wide range of flexible stack-ing solutions.

From a basic line just including a cross chain conveyor, a board singulator and a stacking machine to quite sophisticated high capacity solutions for 500 boards/min.

In this brochure you will find a few examples showing some of the Brødbæk & Co. solutions implemented worldwide.



1. Destacking using tilt hoist

## Destacking

If the timber to be stacked is not fed directly from the saw line, the stacking process actually often starts with a wood pack that must be destacked to enter the stacking line.

The destacking can be handled transversally using a tilt hoist or a vacuum destacker.

Longitudinally the destacking can be handled by a hoist with push bar or a portal solution using vacuum.



2. Destacking layer longitudinally using push bar



3. Destacking layer transversally using vacuum



4. Destacking layer longitudinally using vacuum



5. Standard stacking machine with stick laying



6. Stacking using boards as sticks



7. Very fast and accurately operating stick cassettes.



8. *BCO Stick Robot* can place up to 120 sticks/min.

## Stick laying

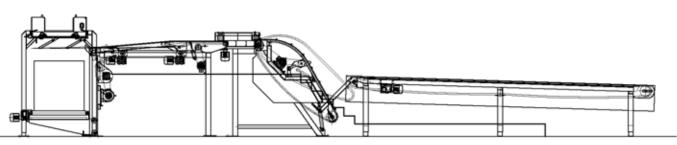
Stick laying can be performed manually or using automatic stick cassettes.

Traditional sticks can be used or you can use boards as the ones you actually stack.

In stacking lines for layer cross cutting and timber for kiln drying the *BCO Stick Robot* is often implemented due to the very high flexibility and capacity of laying 10 layers/min. or 120 sticks/min.

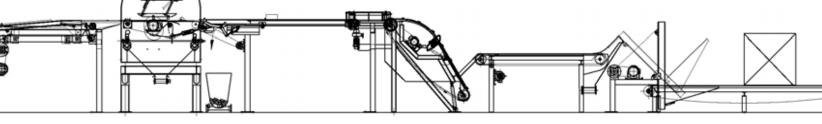


9. Stacking of mixed widths using horizontal spacing – ideal for kiln drying

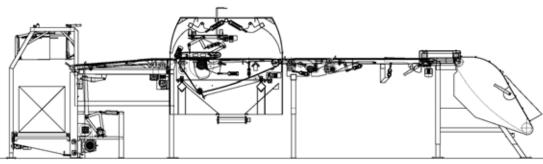


Simple stacking using cross conveyor, singulator and stacking machine with stick cassettes

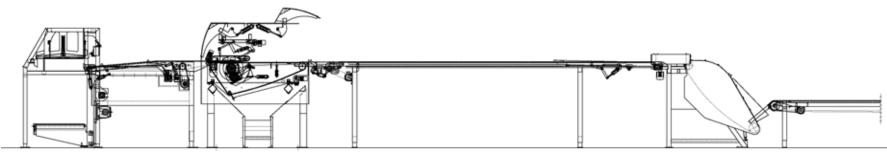
In stacking lines for layer cross cutting and kiln drying the BCO Stick Robot is often implemented due to the very high flexibility and capacity of laying 120 sticks/min.



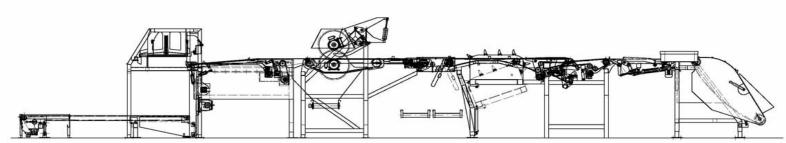
Multi Cross cut Saw for single boards added to the stacking line. If boards are not fed directly from saw line, a tilt hoist can be added



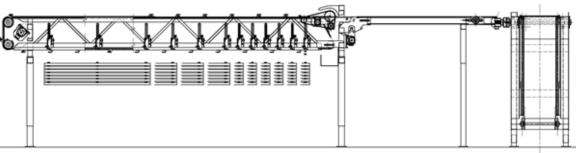
For higher capacity Multi Cross cut Saw for layers can be implemented

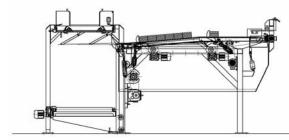


Further adding to stacking capacity is double layer cross cutting and stacking

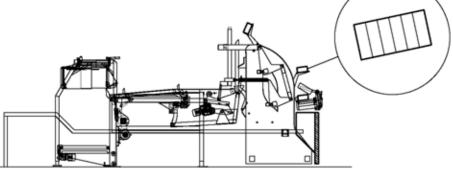


Boards and timber can be trimmed after inspection and before the stacking operation

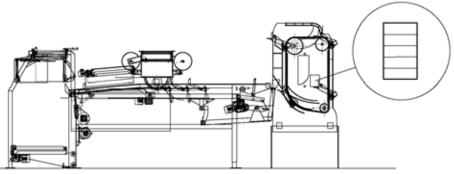




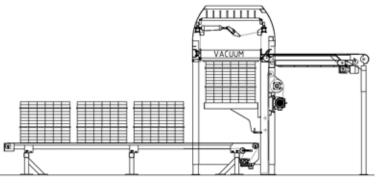
Stacking of layers after resawing



High capacity stacking of up to 500 boards/min.



Bundles of boards individually strapped before stacking



Destacking layers transversally using vacuum destacker



10. Stacking of layers of timber resawn in to battens

## Stacking patterns

Stacking can be performed in numerous patterns – a few examples:

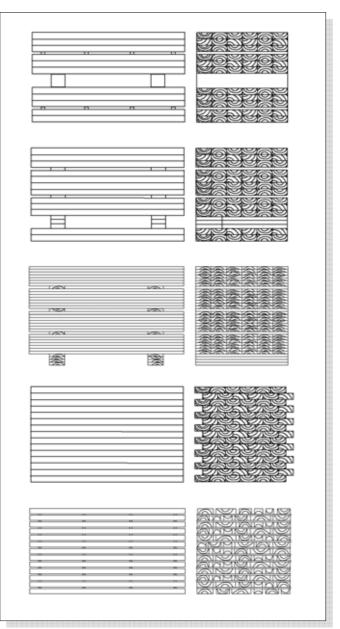
- One or multiple layers of individual boards, with or without horizontal spacing.
- Bundles of boards, battens or slats as received from resawing line
- Brick-laying for stabilizing the pack without sticks.
- Bearers can be placed under or in the pack for fork lift access.



11. Stacking of layers of planks resawn in to slats



12. Strapping of bundles can be done prior to stacking



 Many stacking patterns are possible – just ask



13. Single piece feeder *BCO Speed Feeder* getting a secure grip



14. Shark fin turner used for fast and convenient inspection



15. Magazine prior to high capacity stacking machine

### Special features

When i.e. receiving bundles of boards from a resaw line, a strapping function for each individual bundle can be integrated in your stacking line. What you will end up stacking will be strapped bundles ideal for among other markets the Do It Yourself segment.

For fast, reliable single piece feeding the **BCO Speed Feeder** can be integrated. It will feed up to 200 boards/min. enabling inspection prior to stacking.

A shark fin turner can be integrated for fast and convenient inspection. A dumpgate leading to two or more locations can handle second and third grade boards.

Trimming at 0-line as well as flexible end trimming can be added.

For very high capacity requirements the Pater noster stacking concept will match your needs. Bundles of boards will enter the vertical magazine. An adjustable number of boards will be kicked from the magazine, a complete layer will be double fair ended and led to the stacker. Capacity is up to 500 boards/min.

As an important feature all Brødbæk & Co. lines can be assembled and tested in our workshop prior to dispatch. The advantage to the customer is obvious: everything is cabled and tested from the workshop. In addition valuable time during installation and commissioning of the line on site is saved.

Brødbæk & Co. has completed a large number of complex high capacity stacking solutions proving significant gains on productivity.



16. Layers being fair-ended while entering high capacity stacking machine.



19. Access for fork lift achieved using boards as sticks in bottom of pack.



17. Layers entering same stacking machine



18. Pack of battens stacked in layers as sawn

Representative :



20. Finished pack, strapped and ready for shipment

Enquire regarding your specific requirements – Brødbæk & Co. will provide a specialized yet modular solution.

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