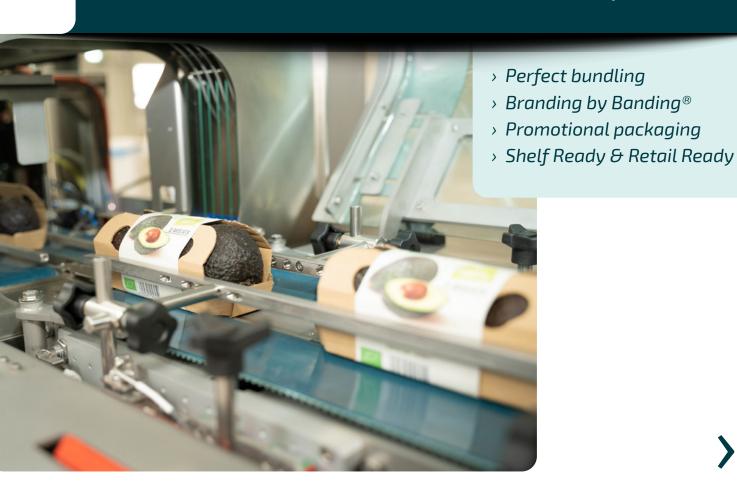


Banding for Sustainability





What is banding?

Banding is the process of one or more product being wrapped with a thin band of paper or film. An efficient way to bundle, label or seal your products. The band can be used pre-printed or unprinted. With a wide offer in banding machines and additional options, an infinite number of applications are possible in all markets.





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Banding machines

Which machine fits your situation best, depends on your product specifications, your production process, and your wishes. All our machines use our unique Ultra Clean Seal system and our vacuum feed system. These systems ensure a fast and trustworthy band transport with the least amount of wear parts as possible.

Stand Alone banding machines

The Bandall Stand Alone banding machines are available in many versions. They all have one thing in common. They are based on the successful standard model. The machine has a modular structure and is known for its flexible, durable, and highly reliable performance. An almost endless number of options such as stainless steel, Multi-Width, printer, positioning system, or press make the Stand Alone extremely versatile. With a constant focus on innovation and support, the machine meets the wishes of clients and the industry.

Standard model

The Bandall Stand Alone consists of standardized modular components. As a result, the machine can be delivered quickly and easily, completely tailored to your wishes. The machine is standard available in various arch sizes and is suitable for 28, 40, 48, 60, 75, 100 and 125 mm wide banding material. Different widths are also possible upon request.

Branding by Banding model

The stainless steel model with positioning technology is referred to as the Branding by Banding model. Thanks to the combination of stainless steel, positioning technology, and optional printing technology, this machine is the most flexible labelling and bundling machine on the market. A well-designed and wellpositioned band strengthens the appeal of your product on the shelf.

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Multi-Width option

Multiple band widths on one arch

The Multi-Width option allows you to adjust the banding machine to a number of other band widths in no time. Simply add or remove components, like the channel reducer, to or from the arch, change the banding material, and you are ready to go! A machine running 100 mm material, can now be adjusted to, for example, 90 mm or 75 mm by using these reducers. Or a machine using a width of 75 mm can then be adjusted to 60 mm or 48 mm. This way the already flexible Bandall machine is even more flexible.





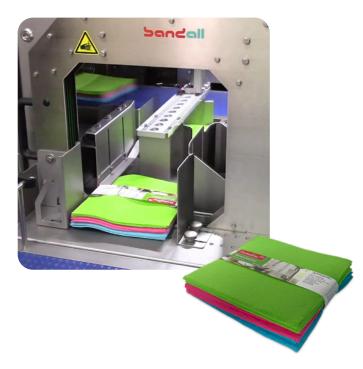
Fully Automatic Banding

The Bandall fully automated banding machines are designed for high production volumes and higher speeds in automated processes. Depending on your product specifications and the way in which the products must be guided to the banding arch, Bandall offers four basic models that each individually can be developed further as specials, the V-series, multi-head machines, and other fully automated tailor made configurations.



Tailor made

We build your fully automated banding machine on the foundation of the standard machine, based on various standardized sizes and modules. From there. the machines can further be customized, depending on how your product must be guided through the banding process.



Accurate infeed, feed-through and outfeed

Functional (servo-driven) pushers ensure a perfect positioning towards the banding arch. In addition, various infeed and outfeed options are available, such as powered roller conveyors, food grade conveyor belts, etc.

Which fully automatic machine fits your production process?

To decide which machine fits you best, we advise you to get in touch, as all advice fully depends on your product and the way it leaves your production process.

Possible solutions are:

- > Bandall TXL, Product feed-through with powered top and bottom transport belts for more speed and precision.
- > Bandall TRL, Products are being transported in a linear
- > Bandall TRC, Infeed with a corner set-up, the product is rotated 90 degrees before going into the banding
- > Bandall TRB. Infeed and outfeed line with independently driven conveyor belts.



Fully automated stacking and bundling

Bandall offers various possibilities for the fully automatic stacking and bundling of products using only one machine. Whether you're stacking and bundling 2, 3, or 7 products, big or small, Bandall offers the right solution. From standardized to fully automatic and customized multihead machines.

An example of a fully automatic stacking and bundling machine is the V-TRC-ST. This machine bundles up to 240 (small) boxes per minute in a corner position.





Modular banding machines

Components of Bandall's proven banding technology can also be integrated separately into your existing production and packaging processes. Your own integrators will incorporate the separate modules in existing packaging lines. Always in close consultation with your engineering team.

The separate modules include a banding head and arch, the control box and the (external) reel holder. The control unit of the modules are prepared for signal exchange with other components. This way it is fully modified to your systems.

Some benefits of the Bandall Modular include:

- > Guaranteed Bandall quality
- > Excellent guidance and adjustment
- > Excellent references in virtually all markets

Click here for our machine folders

Multi-head machines

The speed at which your products leave your production process can be a reason to use a banding machine with two, three or more banding heads. High-tech distribution systems, Servo-driven pushers and sensor technologies ensure a perfect banding process.

The final decision for a multi-head machine depends on many factors. Starting with your own production speeds, but also a number of other possible options could influence the decision. An extensive consultation with our sales team could lead to the construction of a machine with two, three, four, or even five heads.

When should you choose a multihead machine

A multi-head banding machine can be an option if that way the speed of the banding process corresponds with the speed of which your products come out of the production process.

Benefits with multi-head machines

- > High production speeds achievable
- > Easy to combine with stacking and flexible printing
- Many options and applications possible
- Excellent references



From **standard** to **special**

You can expand each Bandall banding machine with a wide range of options, such as printers, stackers, press, etc. Your product and process specifications are always leading and can generate various customized solutions. It is possible that the speed at which your products leave your production process is a reason to offer a multi-head version. This allows even higher production speeds to be achieved.



Applications

Banding with Bandall knows many applications. Combinations of which are possible.

Labelling & **Branding by Banding®**

A band can serve perfectly as a label, as the entirety of the band can be printed on. The wafer thin banding material offers many advantages in comparison to selfadhesive labels or sleeves. A well-designed band leads to a higher chance of being picked up from the shelves, meaning an increase in sales.

Our Branding by Banding application allows for more in store visibility using a pre-printed band. Any and all required product, brand, and additional information can be aesthetically printed. With the Bandall banding technology, you are assured that all information is visible in the correct location. Together with Optimum Group Max. Aarts our expertises come together.

You can also print variable information during the banding process.







Bundling

With a Bandall you can bundle and band your products damage free, regardless of branch or industry. Simply with a small narrow strip of paper or film. Think of bundling high quality printed matter, luxury packaging such as for perfume, security documents, and (inmould) labels. Promotional packaging is also easily made.

Unique Bandall vacuum feed system

The unique Bandall vacuum feed system eliminates friction in the arch. This helps to create a faster and more reliable band transport. The advantages include:

- > Fewer parts that are subject to wear
- > Only banding system compatible with very large arch
- > Side sealing and top sealing possible without affecting quality or performance

Always the right tension

The band tension can be accurately adjusted, taking into account how fragile your product is. This way, the band always has the correct tension around your products. From loose to very tight, the tension is always perfectly adjusted to your products.





Promotional packaging

Want to create promotional or discount packaging? With a band, you can band multiple products with ease. Pre-printed with promotional text, unprinted, or printed on during the banding process. Fast, simple and affordable. With many immediate benefits in terms of material reduction. Especially compared to alternative packaging materials, such as shrink film or sleeves.

Stand out on the shelf

With ease, you can bundle two, three, four, six, or even more cans of fish, cold cuts, soup, soaps, or chocolate bars. A band in your own style gives your promotional packaging even more appeal, and a greater chance of being picked up from the shelf.

Your **advantages**

- > An eye-catching promotional package, superfast and
- > More impact with less material, less energy and fewer actions
- > More efficient than other packaging methods, such as shrink film and sleeves
- > A band can be easily removed

Shelf Ready and Retail Ready Packaging

Shelf Ready Packaging with a band, replacing outer cartons, unnecessary cardboard and shrink film. The reduction in packaging materials is massive and can lead up to over 80 per cent. Save cost, time and packaging material with banding.

Easily placed on the shelf

The shop assistant places the products, held together with a band, directly from a pallet or crate onto the shelf. The band can easily be taken off. Banding leads to more efficiency and less material.

Retail Ready Packaging

Banding makes Retail Ready Packaging even simpler. Using a band makes outer boxes and shrink film unnecessary. From production location to distribution centres and from the lorry to the store. A band ensures your product is transported from A to B with the least amount of packaging material as possible. Arrived at the final destination, the shop assistant putting your products on the shelf can remove the band in seconds.

Using a band for the Retail Ready Packaging process gives multiple advantages, such as:

- > Reduction of packaging materials
- > Makes internal transport and order picking more efficient
- Sustainable





Print & Band

A band can also serve as a carrier of information. However, some information may vary. Think of barcodes, specific product information or information in a specific language. With an integrated printer you can print this information onto the band, during the banding process. With a Bandall banding machine and an integrated printer, you can print unlimited information during the banding process. On the entirety of the band: meaning the entire width and length. A useful technique for variable information such as QR codes, barcodes or the sell-by date. But also think of full product



Banding Material

Film when necessary...

Sometimes using a paper band, despite sustainability goals, is not the best solution. Paper is often more fragile and less strong than film. Film can be used to bundle heavier products without fear of the material ripping. Film is also considered to be the better choice for products stored in humid environments, such as a freezer or fridge. Finally, film offers more elasticity than paper, which is desirable for banding different products.



... **Paper** when possible

National and international regulations regarding packaging materials are becoming increasingly strict. On top of that consumers' demand for sustainability is increasing as well. And sometimes paper is even the only option. Think of packaging fruits and vegetables in France. A good example of a 100% recyclable paper band that follows all European guidelines is the ECO. BANDING®. This Kraft paper band with ECO.SEAL can be disposed of in the paper bin.



Unprinted banding material

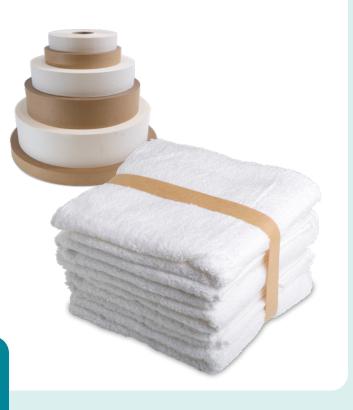
Plain bands are available in white and transparent films as well as white and brown paper. This type of band is often an environmentally friendly and costefficient alternative to 'strapping'. An unprinted band is frequently used for bundling and sealing products. An unprinted band and still communicating information is possible with our printing while banding application!

Benefits of an unprinted band

- > Environmentally friendly
- Highly effective bundling technology
- > Best alternative for strapping and shrink film
- > Flexible printing options

A well-designed pre-printed band offers opportunities for your brand and product communication.





Printed banding material

Most types of banding material, whether it concerns paper or film, can easily be printed. A well-designed preprinted band offers opportunities for your brand and product communication. The band changes into a label that offers opportunities for information, 360 degrees around the product.

Positioned printing

By using the optional positioning system of the machine, all printed elements on the band are shown in the right place. The type of information can vary. Examples being branding such as logos or storytelling, but also production information or ingredients.

Continues printing

With continues printing, no specific positioning is required. This often concerns a promotional text, which is always visible, regardless of the position. For example "Three for the price of two". It could also be a logo that is continuously repeated on the band.



Banding with paper

Packaging with paper is gaining a lot of attention worldwide. It contributes to the reduction of plastics. Paper is available in various types and is offered in white or brown. Whether paper is the best choice for you depends on many factors that we would be happy to discuss during a consultation.

We currently broadly offer the following types of paper:

- > FSC Kraft paper in brown and white
- > White MC paper
- > Laminated paper

The thickness of the paper is expressed in grams and varies between 70 and 125 grams. The Bandall Research & Development department is constantly working on various endurance tests on the latest types of environmentally friendly paper.

Is a paper band suitable for your product?

The answer to this question is more complex than it seems. Questions or issues that are discussed during a consultation are:

- > How is the packaging structured?
- > How strong should the banding solution be considering your product?
- > Are there any special conditions in relation to dust, humidity, and temperature?
- > What are the packaging regulations in your country?
- > Etc.

Recyclability

The level of recyclability of a band depends on the composition of the paper and its finish. The used inks and coating have effect on this. Depending on the composition of the band, it may be disposed of as used paper or residual waste. Both options are possible.

Bandall will always recommend the most sustainable banding solution, based on your product, specifications, and what is possible.

ECO. **BANDING®**

A good example of a fully recyclable paper band is the ECO.BANDING. We offer the ECO.BANDING® in collaboration with Optimum Group Max. Aarts. This band consists of FSC certified Kraft paper. Only 2 per cent of the surface consists of the so-called ECO.SEAL, which is positioned on the band. The whole band, including the ECO.SEAL, is fully compliant with European regulations regarding single-use plastic (Directive (EU) 2019/904" Recital 11) and the French legislation regarding the ban on plastic packaging (AGEC).



Banding with film

Banding material made of film is available in many types and sizes. The choice for a certain type of film depends on the customer's wishes and the specifications of the product. The band thickness is expressed in mu. Bandall's advanced vacuum band feed-through system is able to process the thinnest banding material available on the market; starting at 35 mu.



The advantages of film:

- > Strong carrying capacity
- > Easy to print
- > Easily recyclable
- > A functional level of elasticity, if required

Various types of film

- > White (foamed) PP films
- Transparent PP films
- Transparent BOPP films
- White BOPP films

Specials

Bandall's Showtab

With SHOWTAB, there is room for more information, more branding, QR- or bar codes. The SHOWTAB is a band with an extra extension that offers the opportunity to print extra variable data, all in 1 step. With the extension, for example, tracking & tracing codes are always within reach.



Special printing techniques

In collaboration with Optimum Group Max. Aarts in Enschede, the Netherlands, Bandall offers numerous special banding concepts. Such as:

- › A luxurious look with additional gold and silver print
- Luxury laminated finishes
- > Food grade inks
- > ECO.BANDING with positioned ECO.SEAL
- > Die cut for additional attention value

Banding for a sustainable world

Bandall is an internationally operating family business that focuses on sustainable bundling and banding solutions since 1990. This helps us to offer an infinite number of solutions for the entire packaging industry, with advantages in terms of reducing packaging material and eliminating plastics. With a worldwide network of distributors and its own international branches, Bandall is always locally presented.



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