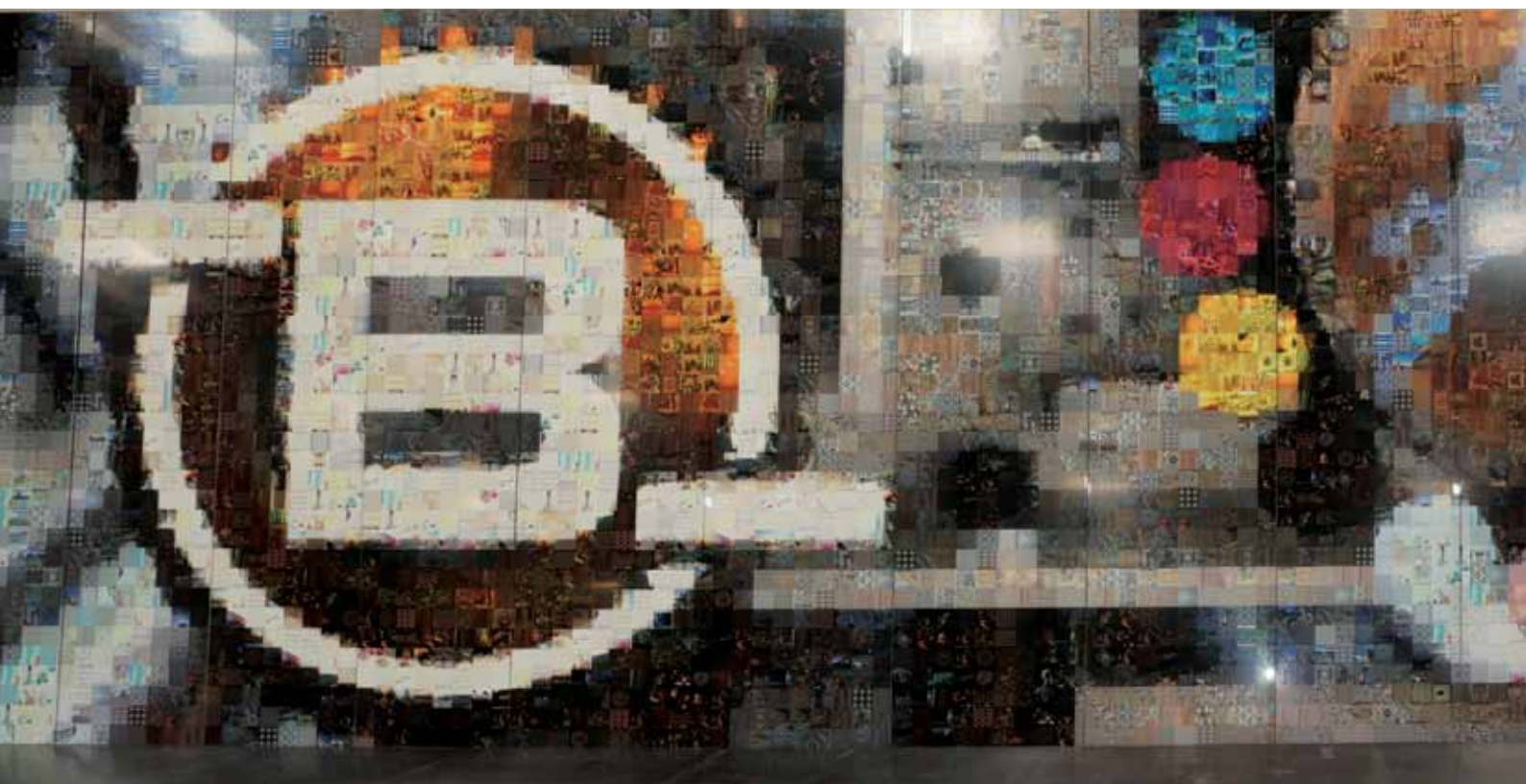




Jetmaster Series

digital printing solution



New concept of Single Pass Digital printing

The Barberan Jetmaster printers are a new concept based on Single-Pass printing technology of printing digital images on multiple substrates at an industrial level. Barberán S.A has a long history in conventional printing technologies and is one of the pioneers in Single Pass Digital printing application techniques, developing its own mechanics, electronics and software. Thanks to the experience of Barberan in the surface treatment, we are able to achieve an optimum printing quality on any type of substrate. The inks used in the Jetmaster printers are 100% UV inks which guarantees a stable process achieving a high quality print, flexibility and better cost-effectiveness.

Advantages of Digital Printing technology

- Personalization and customization of designs unmatched by analogue processes
- Short to medium print runs with no extra costs
- Quicker response time to market
- Faster proof cycle
- Variable printing
- More options of substrates to print on due to its non-contact printing technology
- Elimination of inventory
- Just-in-time delivery

In short you will be able to offer your customers with more options and provide them with better service



Jetmaster wood



Jetmaster wood



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Jetmaster up to 2310 printing width

The Barberan Jetmaster is a single pass digital printing machine at industrial level printing on wood, paper, MDF, glass, PVC, flooring and other materials with flat surface. The Jetmaster can be supplied as stand alone machine or integrated into a complete production line where panels receive a base coat , are sanded , printed and finished with a top coat of high gloss or mat.

The Barberan printing technology is based on the CMYK technology, the 4 groups of top printing heads are placed on a heavily build frame where the panels are transported by means of a holed vacuum belt with bottom vacuum system which ensures that the panels are kept in their position allowing a perfect register print. A laser device measures constantly the substrates thickness with a 0,1 mm. accuracy and automatically regulates the height of the printing groups.

The machine is equipped with a user friendly design system which enables the machine operator to convert automatically the more common formats of the digital images such as Tiff, Ai , PDF, JPG into the operational format of the Jetmaster, and at the same time manage with high precision the colors during the different stages of the design up to the final print . This reduces drastically the time spend in adjusting the print images. A graphic designer can simulate perfectly on the screen of a computer and desktop printer the final result before the actual design is passed to production on the Jetmaster . Previously the design can be optimized or altered in "photo-shop" according to the specific demands of your customers converting the process in an easy , fast and flexible way of printing and therewith gaining many benefits for you and your customers.

The Barberan printing technology is based on the concept " less is more " . By optimizing the drop size and the image processing we obtain printing results with a powerful chrome and bright colors with the minimum amount of ink. The Jetmaster controls at all times the ink costs and production process.

The Jetmaster offers a high printing quality on almost any kind of substrate at a max production speed of 55 m/ min with the possibility of instantaneous design changes during the printing process from one panel to the next or even optionally print multiple panels simultaneously.



single pass ●●●●●●



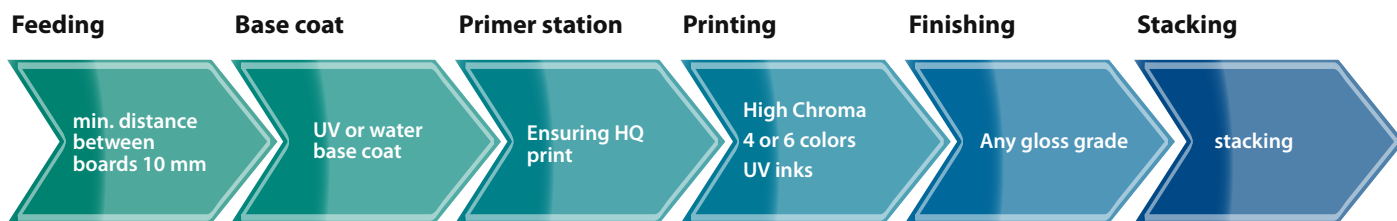
JETMASTER FEATURES

Max. printing width	210 up to 2310 mm
Board length min. – max.	1000 - 3000 mm *
Board thickness min. – max.	1 - 70 mm
CMYK Printing head groups	●●●● 4 Colors
Optionally 2 extra colors	Light Cyan and Light Magenta
Inks	UV for single pass technology
Resolution	360 dpi , 4 grey scales
Drop size	0 - 12 - 24 - 36 pl
Max. speed , depending on design	55 m/min
Minimum gap between boards	10 mm
File format	PDF , Ai , Tiff , Jpeg
Image processing "RIP"	Colorgate

* If your measurements differ please consult with technical department of Barberan SA



Printing process

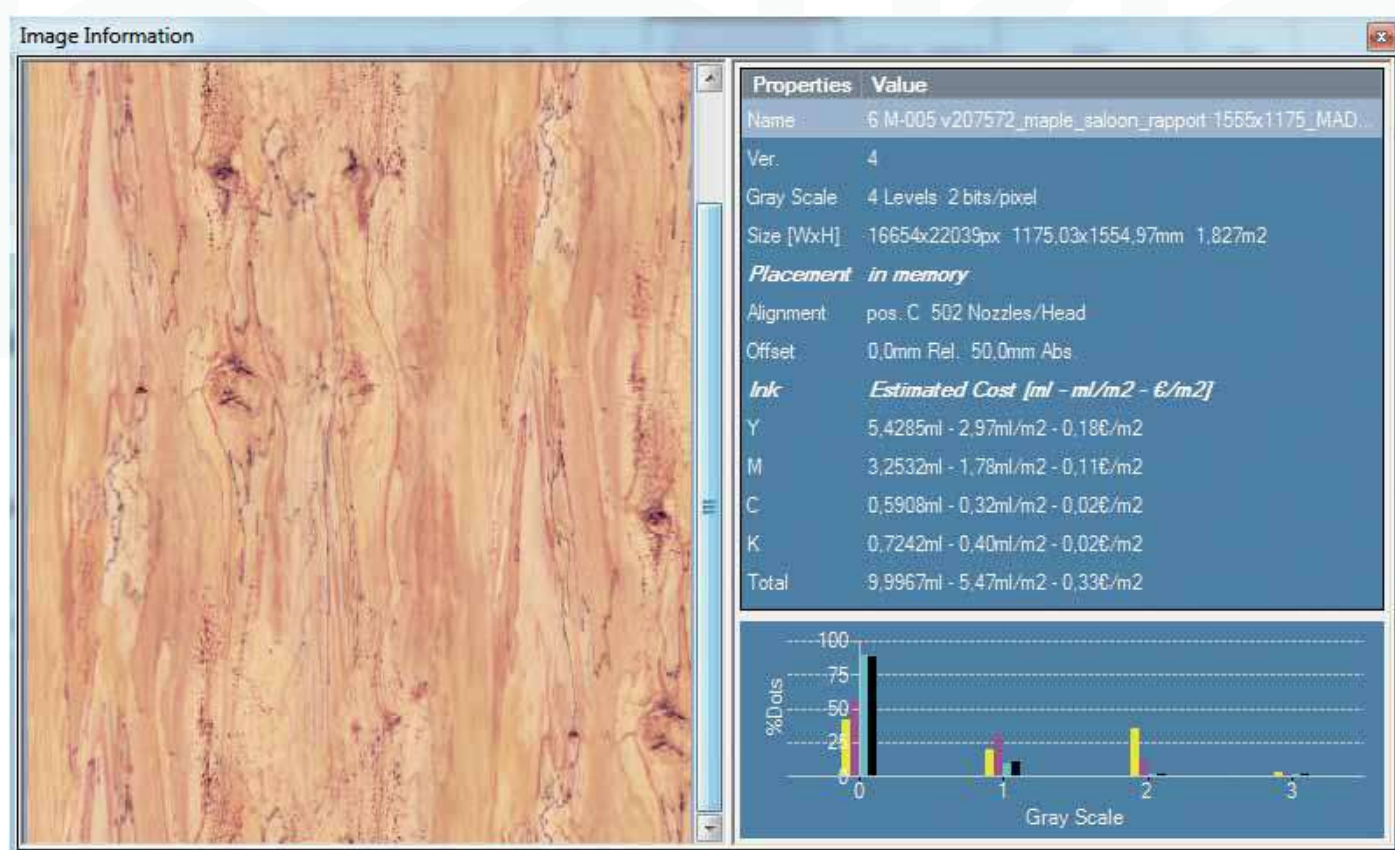


In order for a panel to be printed its surface must be white. Depending on the type of panel the conversion to a white surface can be done by an in-line lacquering process or f.e. an off-line lamination process. After the panels have been digitally printed they are finished with a top coat according to customers requirements.



The color management system used in the digital printing is able to create a fully controlled “design & print” environment. The design you see and approve on the PC monitor will have also the maximum similarity on substrate’s surface. The data base library will contain all your designs which allows you to print any of the available designs in different working modes and quantities.

The machine software will show immediately the costs per m2 of the designs to print which will help you to control better the productions costs.

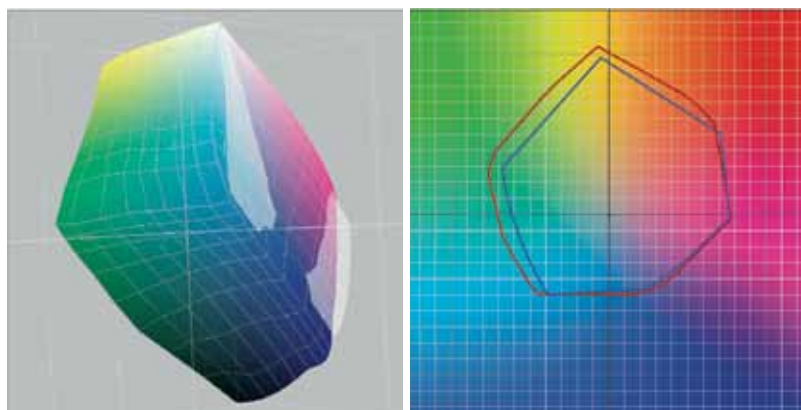


Less is more

In our Jetmaster printer, consumption of inks is drastically reduced without losing chroma. All Barberan efforts have been focused to reduce printing costs maintaining always the highest printing quality.

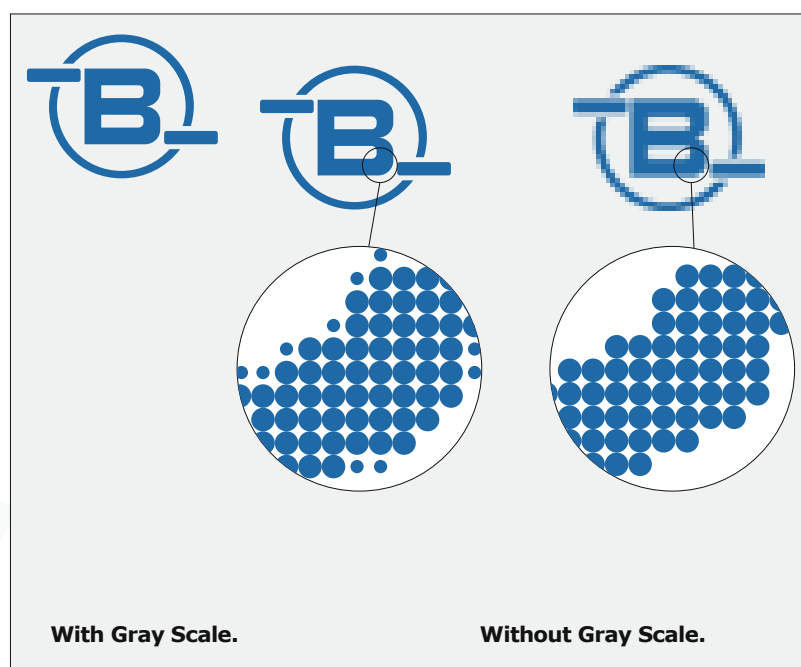
Chroma

Even comparing with standard photo profiles, color gamut of Jetmaster printer assures a wide range of possibilities. Inside color gamut $dE < 3$ is achievable by using Jetmaster Calibration Tools supplied with the machine. Your team will be trained to use and understand these tools by the Jetmaster Team in our facilities in Barcelona, in order to explore all possibilities of the machine.



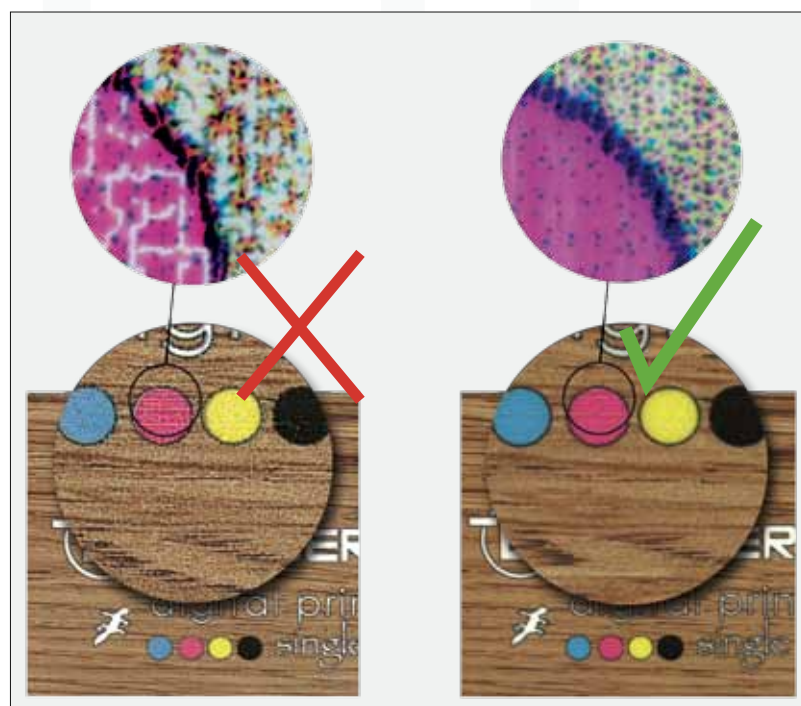
Gray Scale

With 360 dpi per color and 4 grey levels, the Jetmaster printer is capable to print really sharp images and texts with the accuracy of the thickness of a hair. Uv inks and its drying process assures also the correct size of each drop, by keeping ink in its place while printing and controlling dot expansion and color mixing.



Optical performance

Due to the exceptional gloss and powerful Chroma of specially formulated inks from different suppliers, images printed on the Jetmaster gives new sensations: deep blacks and brilliant colors that makes images vivid. A paradigm shift without high expenses on inks and tools.



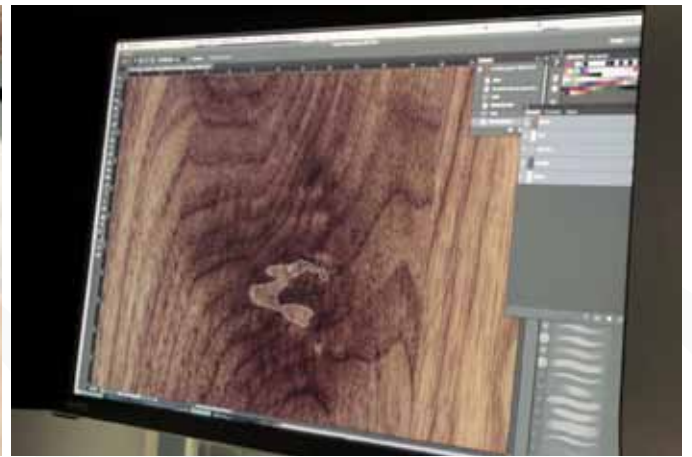
Jetmaster assembly area





Jetmaster Barberan Lab

The Barberan Jetmaster team set their goals very high and are continuously working on new improvements and developments which benefit the Barberán clients.



NEW

Jetmaster 1260 Versa

Pat.pending

Digital printing installation Jetmaster Versa for board widths up to max. 2310 mm. The Jetmaster Versa also works as a single pass printer but has a combined conveying system of vacuum cups and transport belts, producing upto 4 panels per minute.

single pass ●●●●
printing width up to 2310



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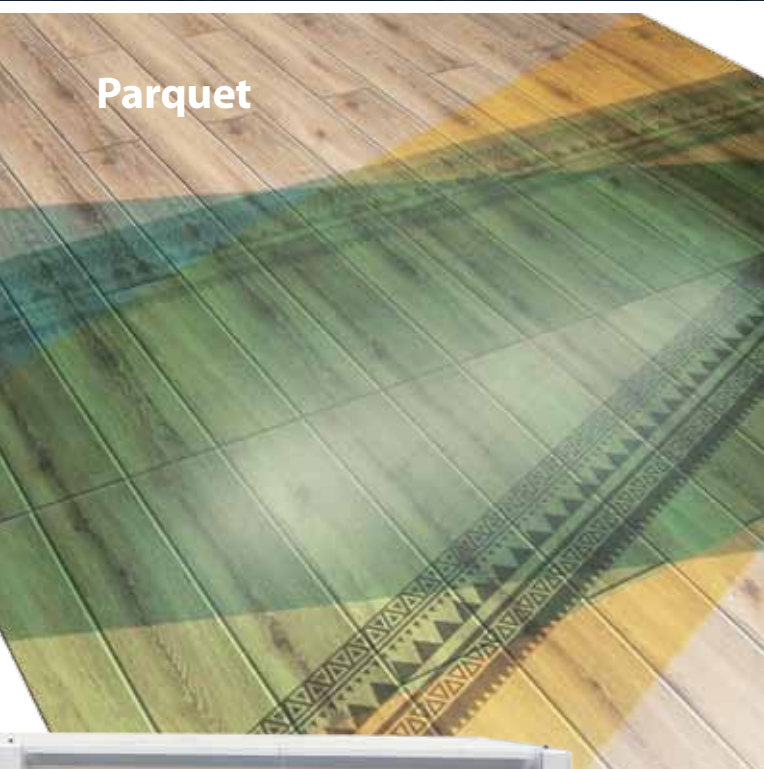
Jetmaster 210/420/630

Inkjet printing machine for widths up to 210, 420 or 630 mm
Ideally for smaller panels like f.e. ceramic tiles , parquet or
PVC wall panels.

Because of the great accurate register print the Jetmaster is capable of reproducing one big single design onto smaller slabs without having to worry about the exact accurate positioning of the images on each individual slab. They will fit perfectly ! Also these Jetmasters can be equipped with the option where the printer prints several slabs simultaneously.



single pass ●●●●



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Digital printing of decorative foil

Jetmaster digital printing machine series suitable for printing decorative paper foil rolls used in the wrapping process of mouldings or profiles made of wood, particleboard, MDF, PVC or similar materials for manufacturing skirting, decorative elements, picture frames, door frames, multi-functional parts, etc. which require a customized design or for small productions with acceptable costs due to its short preparation times.

The Jetmaster printing machines can be equipped with an additional head for the application of 3D lacquers to achieve a texture effect on the printed surface.

The maximum printing width is up to 210 mm (model Jetmaster-210-C). There is also a beta version for maximum printing widths of 420 mm (model Jetmaster-420-C). On the other hand, the possibility to manufacture printing machines for special widths, according to customer's production requirements, is not excluded.

The experience of Barberan in both, digital printing and profile wrapping, allows us to offer complete and customized solutions for each customer. The great advantage is that the customer deals with a unique machine supplier for the whole project, being able to perform all necessary tests in our laboratories in order to define which machines are necessary to produce the desired product.

Our machines apply to the foil the necessary pre-treatment and finishing processes, like for example, Hot-Coating, to increase the surface resistance, as well as base and top coats, fillers, etc. Furthermore, our profile wrapping machines can adapt to any production requirement gluing the paper foil with PUR hotmelt glue (model PUR-33-L, PUR-46-L, etc.) or EVA hotmelt glue (models RP-30, PL-32, PL-45, etc.).



Profile wrapping
Recubridora de molduras



Jetmaster-paper



UV-Varnish-210



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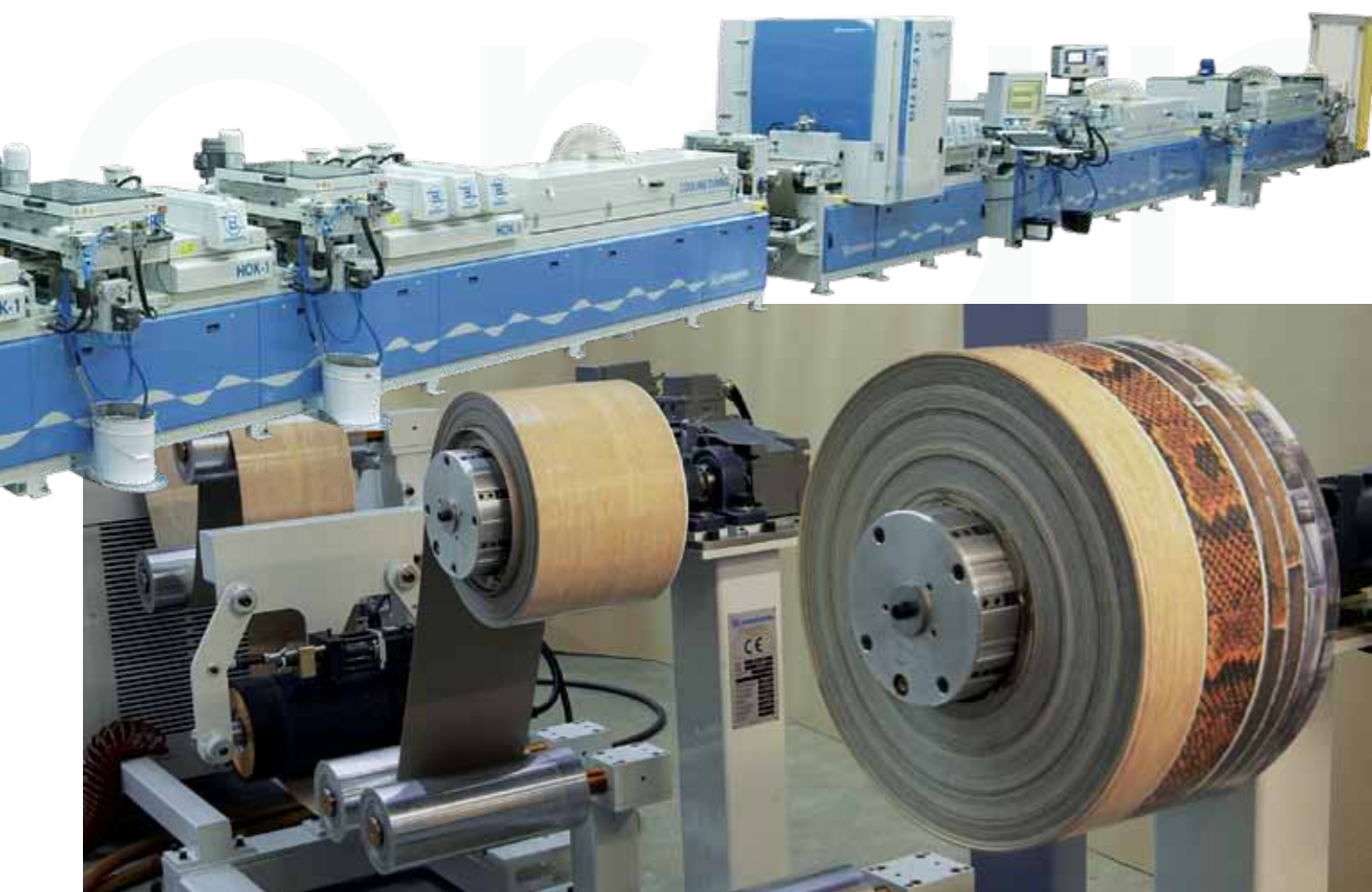
Roll to roll printing for Edgebend materials

The Barberan digital printing lines from roll to roll for f.e. edge bending materials is a perfect solution to make personalized edge designs which coincide with the designs of the top panel surface. Lines are capable of running up to 60 m/min non stop with semi-automatic reel change obtaining a high production capacity but still capable of making short runs of special designs.

Due to its design it is possible to print materials up to 2 mm. thickness. and because of its modular construction different line set ups are possible to print all types of different materials like PS , PET , ABS , PVC and even transparent edge material.

The printing line warrants the high quality of the final product by maintaining a stable temperature of the material being printed which is controlled throughout the whole process.





Printing machines for special applications

Impresoras para aplicaciones especiales





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