QUANTUM - VERSION 2.0

HAVING SUCCESSFULLY INSTALLED AROUND A DOZEN QUANTUM CORRUGATOR LINES AROUND THE WORLD, THE MILAN-BASED OEM HAS NOW LAUNCHED A NEW VERSION OF THE SPECIALIST CORRUGATOR, THANKS TO SUCCESSFUL INTEGRATION OF R&D BETWEEN QUANTUM CORRUGATED AND FOSBER GROUP.



"FOR PLANTS THAT FOCUS ON THE PRODUCTION OF MICROFLUTE SHEETS, DIRECT OFFSET PRINTING ON CORRUGATED BOARD OR SPECIALISE IN THE USE OF LIGHT PAPERS, THE QUANTUM IS THE PERFECT MACHINE."

All Board

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Quantum corrugator can be used for the production of all types of corrugated board. It has a diverse range of options, making it suitable for the production of the finest flute single-face, right through to doublewall board.

"Quantum excels particularly in applications where traditional corrugators have limitations in productivity, quality and waste," explains Alberto Brivio, Managing Director of Quantum Corrugated Srl. "For plants that focus on the ALBERTO BRIVIO, MANAGING DIRECTOR OF QUANTUM CORRUGATED SRL



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Diverse Board Production

But the machine is not just ideal for the production of lightweight or fine flute corrugated board. It can also handle heavier papers and make heavy-duty board, including corrugated board made for the highest strength, even when using recycled papers. Some existing users of Quantum are known to produce dedicated corrugated board for ultra high quality flexo post print, or those who like to run preprinted top liners to achieve near litho quality in high volume. There are also several plants that run sheets on a Quantum that are used for single pass digital print.

"In digital printing, we know that the quality of board being run on the printer is paramount," continues Brivio. "To this end, the Quantum ensures not only the finest flutes can be run at speed, but also some of the flattest sheets "IN DIGITAL PRINTING, WE KNOW THAT THE QUALITY OF BOARD BEING RUN ON THE PRINTER IS PARAMOUNT. TO THIS END, THE QUANTUM ENSURES NOT ONLY THE FINEST FLUTES CAN BE RUN AT SPEED, BUT ALSO SOME OF THE FLATTEST SHEETS AVAILABLE IN THE MARKET GLOBALLY - PERIOD."





available in the market globally – period. Flat board creates an optimal printing surface and thanks to our process, there is no direct contact with the sheet during formation, meaning no slip or pressure marks on the outer liner."

R&D Collaboration

Available in working widths of 1.8 and 2.5 m, with configurations for various production requirements, the Quantum corrugator features a cartridge type single facer, ideal for the production of all conventional flutes with paper grades of 40gsm and higher.

Now part of the Fosber Group, the further enhancement of the Quantum was achieved in a short timeframe. "Seeing two teams of design engineers working together was something quite special," says Alberto Brivio. "We took the best of both worlds and now, the latest generation of Quantum is a reality."



Cassette fed single facer

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Building on the successful concept, the new line has benefitted from several Fosber innovations, which takes the machine to the next level.

- The new line now includes:
- Fosber Mill Roll Stands:
- Fosber Splicers;
- 'Sharp 300' dry-end;
- Fosber's 'Terminal' stacker;
- Fosber's own Syncro corrugator control system;
- PCS Process Control Supervisor.

"It was not a case of 'out with the old, in with the new'," states Mauro Adami, Technical Director at Fosber. "The Fosber R&D team was always impressed by the Quantum, as its concept really challenged the status

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quo and created a clear space for itself in the market. Our aim was to see how we could assist in the machines evolution, specifically by looking at some core components that we have in our own portfolio to benefit users around the world.

"Quantum is the ideal machine for printing houses that have the need to enlarge their production portfolio with special products and a higher production capacity," adds Mauro Adami. "Also, sheet feeders, that need to deliver high quality sheet in fine flutes or sheet plants that have the need to become independent from the sheet suppliers. This is particularly relevant for sheet plants that have production volumes that justify the need to have their

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own singlewall board production, or are located in remote places where the transport of board has a high influence on the final cost."

Sustainability at its Heart

With an eye on key industry issues, especially sustainability, the combined R&D teams ensured that the latest generation of machine puts a 'tick in the box' from an environmental stand point.

"This latest version of the Quantum sets a high bench mark," concludes

Brivio. "We have reduced the amount of energy it needs to run by over 30% and at the same time, we are helping customers make stronger board thanks to a reduction in mechanical and thermal stress on the papers, meaning they can reduce basis weights for their end-user customers. Lighter weight papers, lower starch consumption and less energy requirement all results in the ultimate in 'green' production, from the lightest single face through to heavy doublewall board."