



EMBA QS Ultima™

Smurfit Westrock Colombia,
Packing Cartón Corrugado

Project 175 Ultima
2025-06-10

Confidential, for internal use only - 2025-06-10

Operational Excellence

EMBA QS Ultima™

Typical Cost Breakdown

Paper	49
Wages	23
Fixed costs	11
Misc. Material	8
Transport	5
Depreciation	4

100

Savings :

- Paper, up to 15 %
- Ink, water, etc.
- El. Power

- Non-Crush Converting™
- Quick-Set™
- Low energy cost
- Standardisation



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EMBA QS Ultima™



175 QS Ultima™

215 QS Ultima™

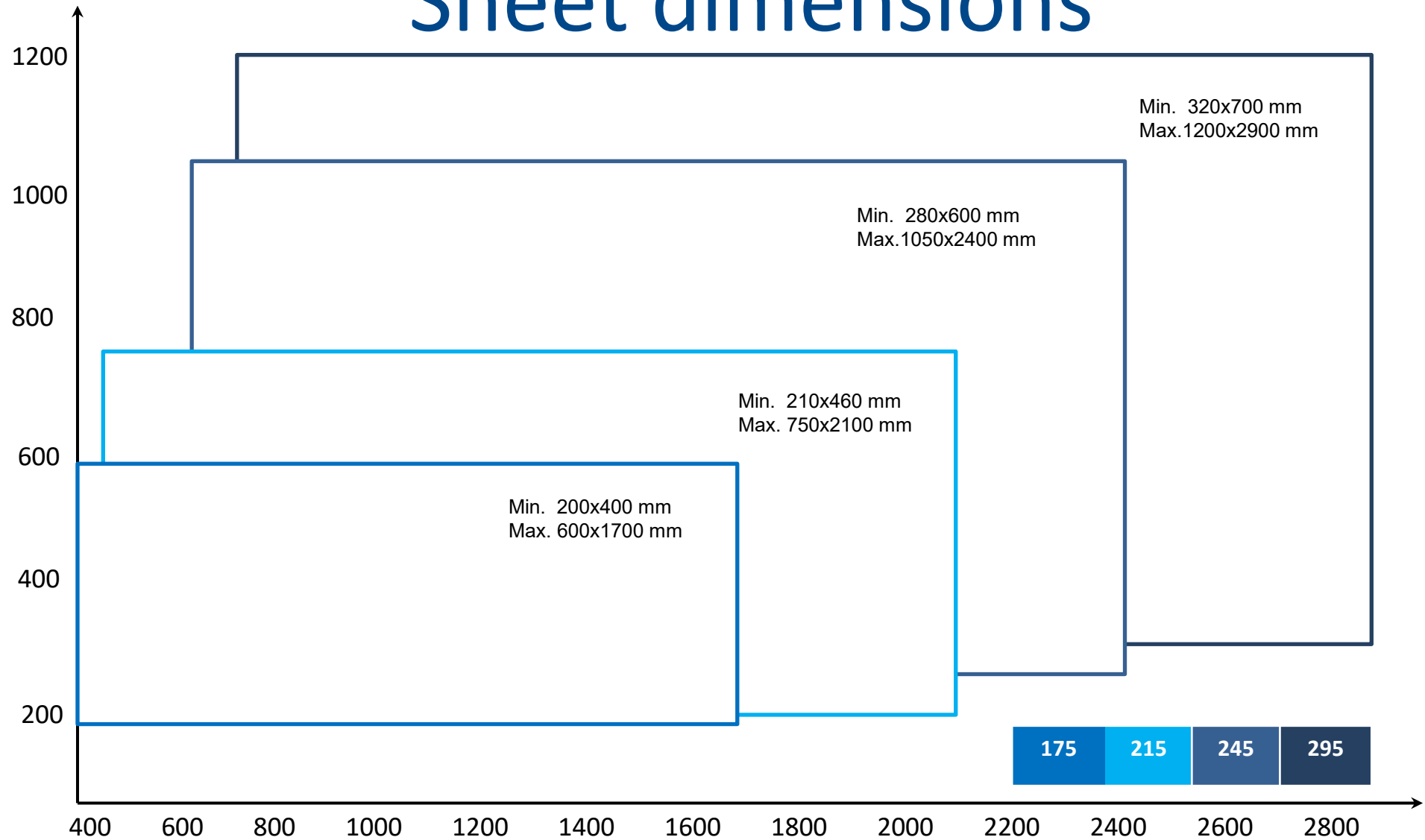
245 QS Ultima™

295 QS Ultima™



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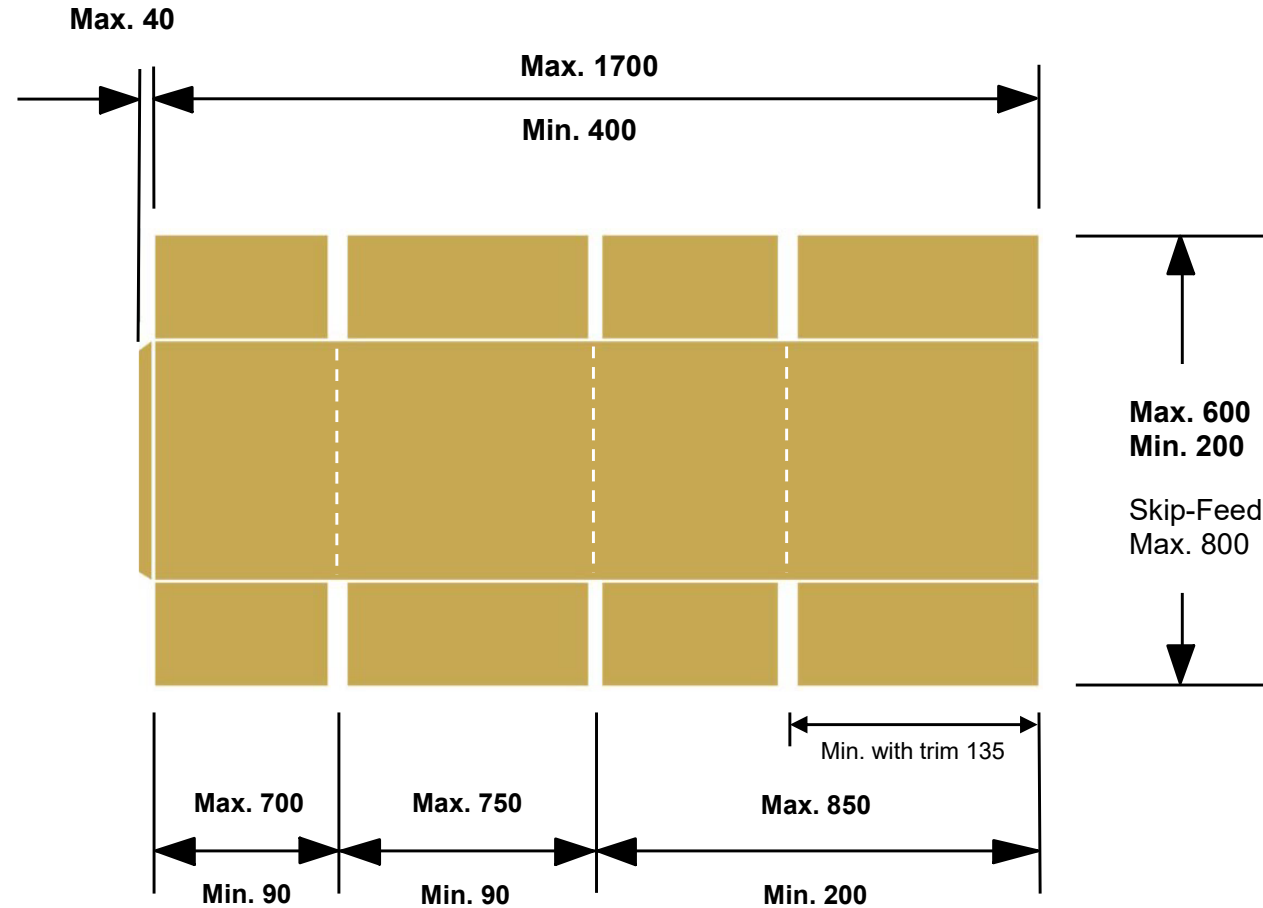
Sheet dimensions



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EMBA 175 QS Ultima™

Sheet / box size:
Metric mm



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EMBA 175 QS Ultima™

175 QS Ultima

Corrugated board caliper	1,2 – 8,0 mm
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Machine speed max.	30000 sheets / hour 500 sheets / minute
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Nominal print cylinder diameter	218,3 mm (including printing plate)
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Maximum printing area	600 x 1700 mm (full machine size)
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Maximum width unfolded sheet	1550 mm
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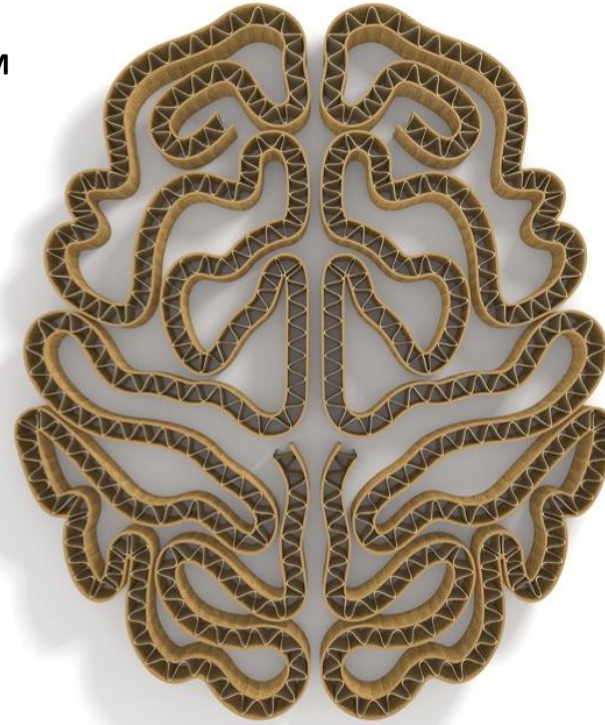


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Ultima Intelligence

Non-Crush Converting™

Quick-Set™



Ease of use

Sustainability

Future-ready

Quick-Set™



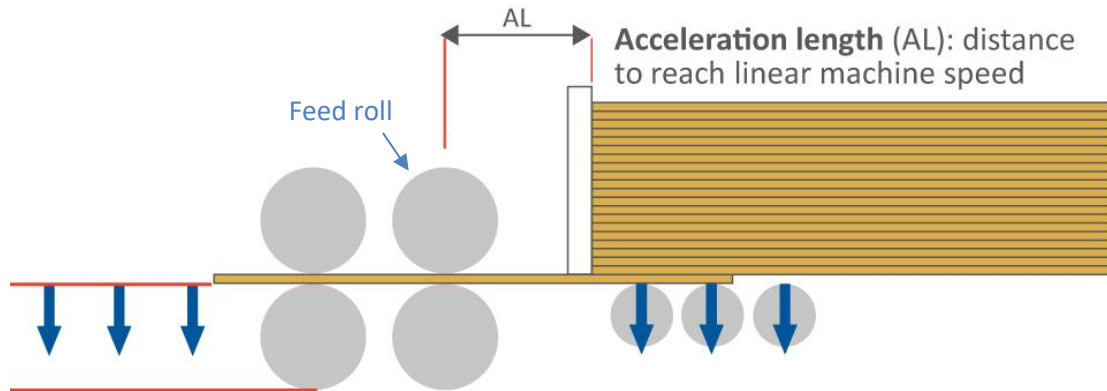
- Top printing
- Pre-set during production of print units and die-cut units in standby position
- Fixed units
(machine installed directly on floor, no rails or pit needed)
- Space between units
- Modular configurations with any requested number of print units up to 6 or 7
- Vacuum transport



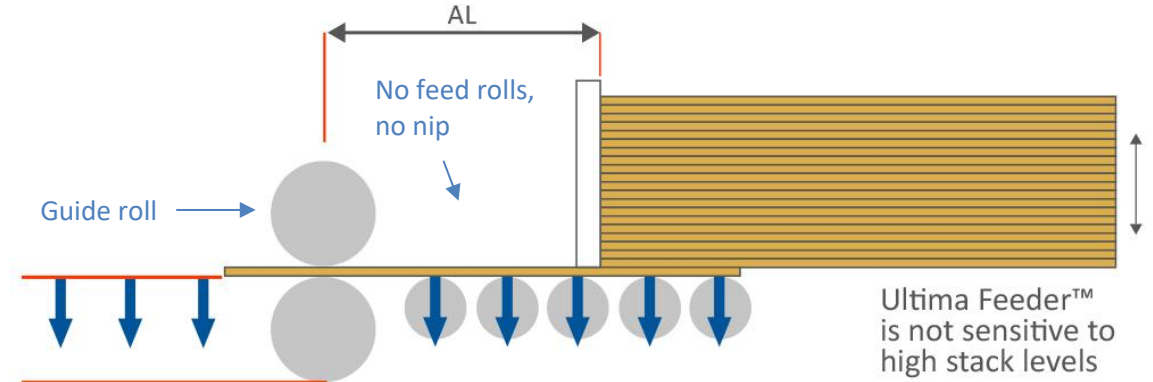
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Non-Crush Converting™

Conventional Feeder



Ultima Feeder™



Intelligent 5 axis motion control with extended acceleration length, without feed rolls, providing:

- Excellent feeding accuracy, $\pm 0,75$ mm
- No skew or slip feeding
- Minimised maintenance cost
- Maintained ECT/BCT/FCT values
- Optimised printing
- Improved operator safety



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Non-Crush Converting™

You will notice the difference

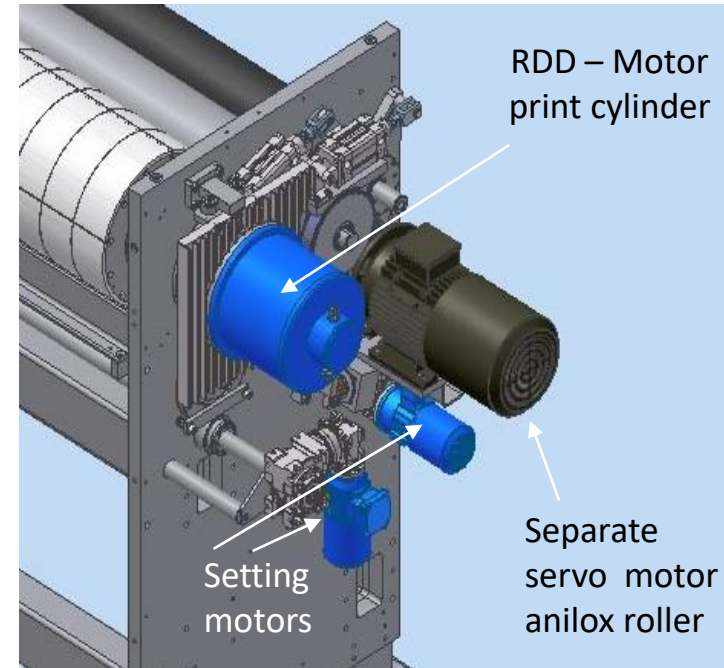
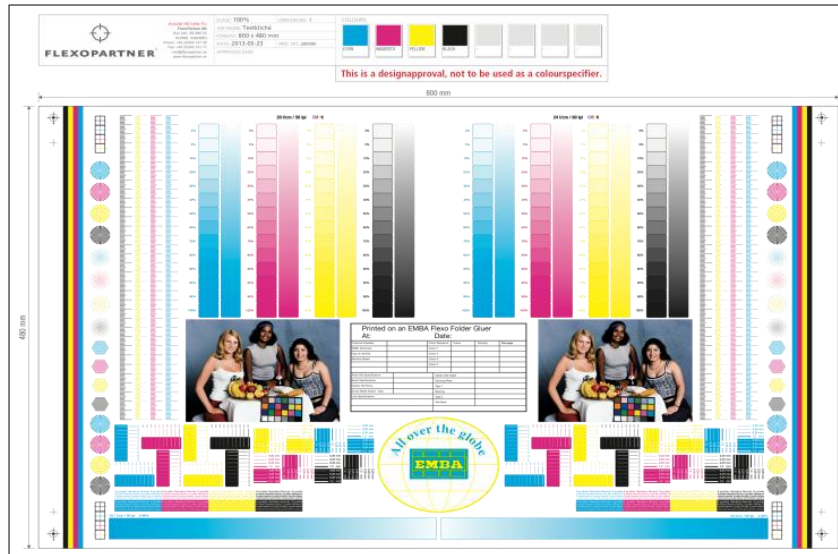
- Preserved flute strength (FCT)
- Increased box strength with uncompromised BCT value
- Highest print quality
- Upsell increased box strength / possibility for reduced paper cost



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Print quality for inline High Graphics

- Real Direct Drive
- Separat Anilox Drive
- All needed high-graphic options available



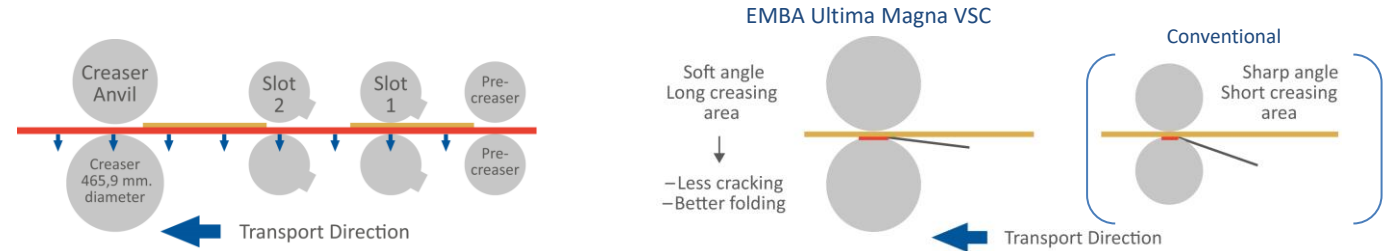
- Register $\pm 0,3-0,5$ mm, no accumulation
- PPH $\pm 1,0-1,5$ mm
- Print length correction



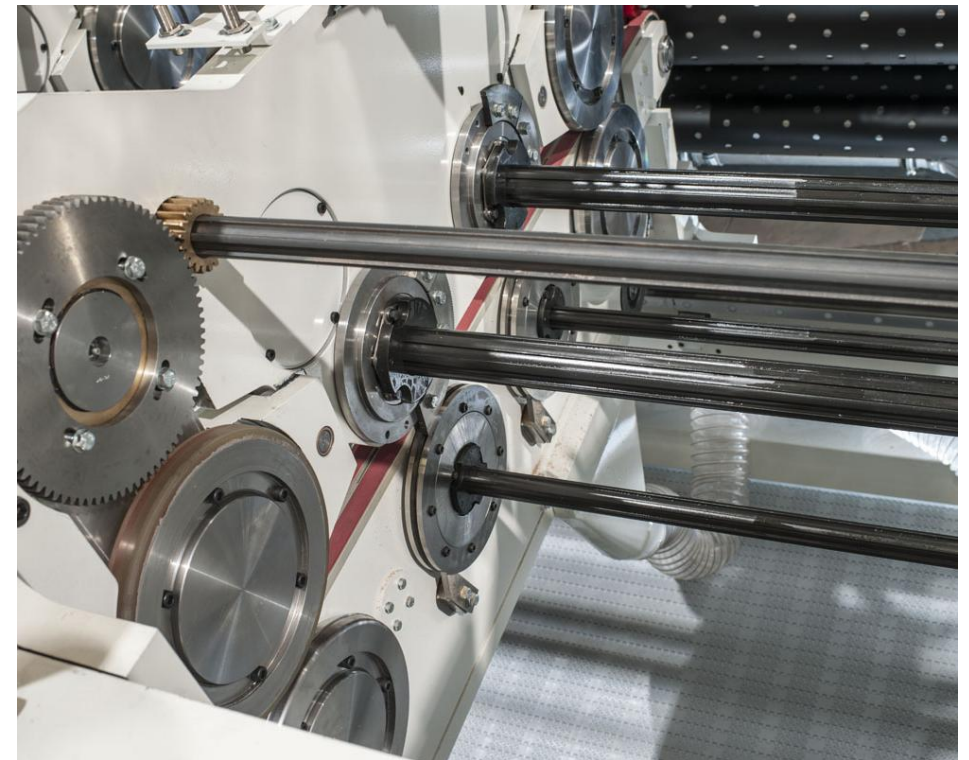
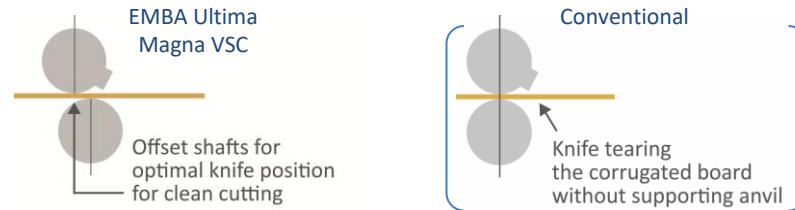
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Magna Vacuum Slotter Creaser

- Full vacuum transport
- Pre-creaser
- Enlarged creaser $\emptyset$
- Individual crushing of glue flap and opposite panel
- Easy extension of glue flap



- Clean cut
- Open design for easy maintenance



Quick Set Die-Cutter

External / Top die-cutter



Internal / bottom die-cutter

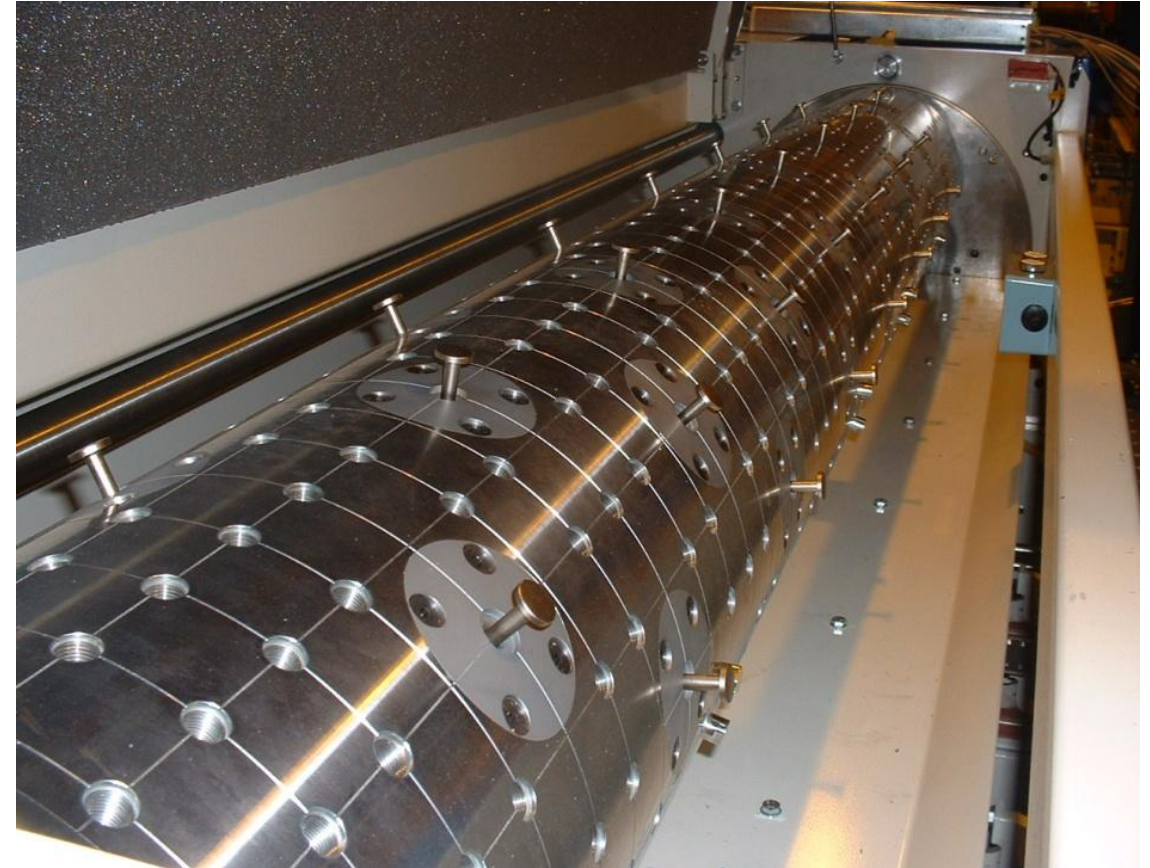


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Quick Set Die-Cutter

Serrapid tool mounting

- Quick tool change with pneumatic pistons
- Option for top die-cutter

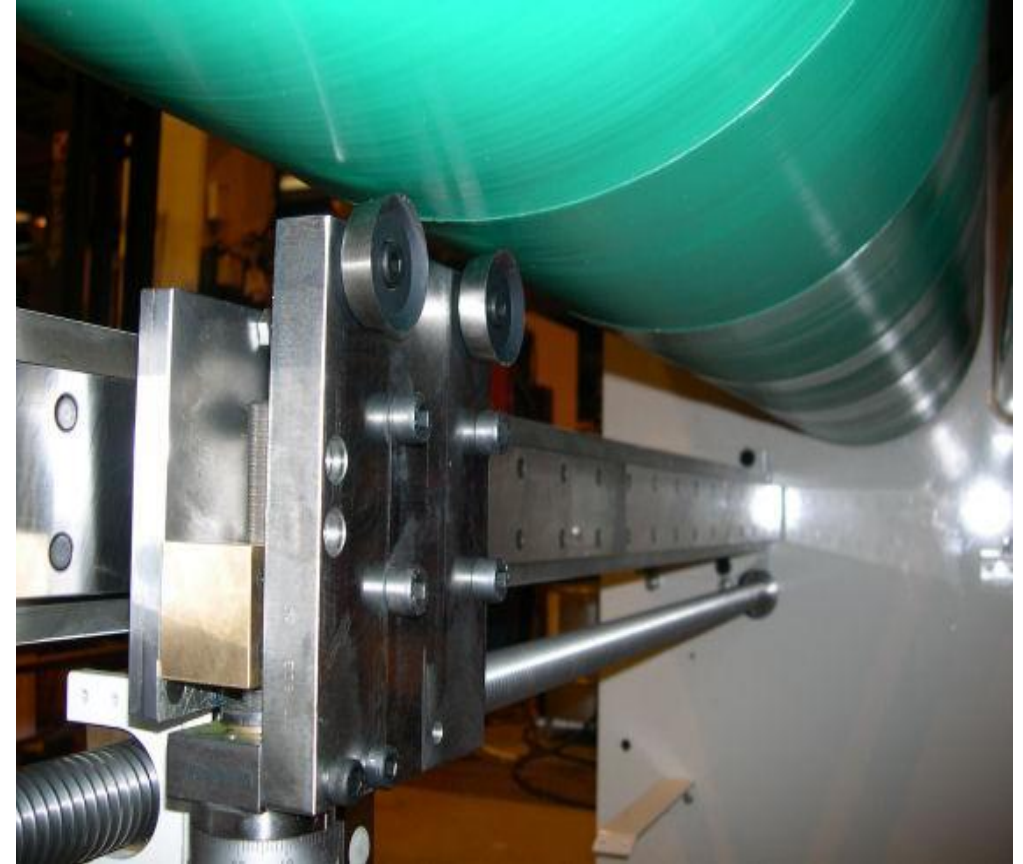


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Quick Set Die-Cutter

Grinding of anvils

- Grinding of anvil surface for enhanced D/C performance.
- Semi automatic operation at stand still of machine

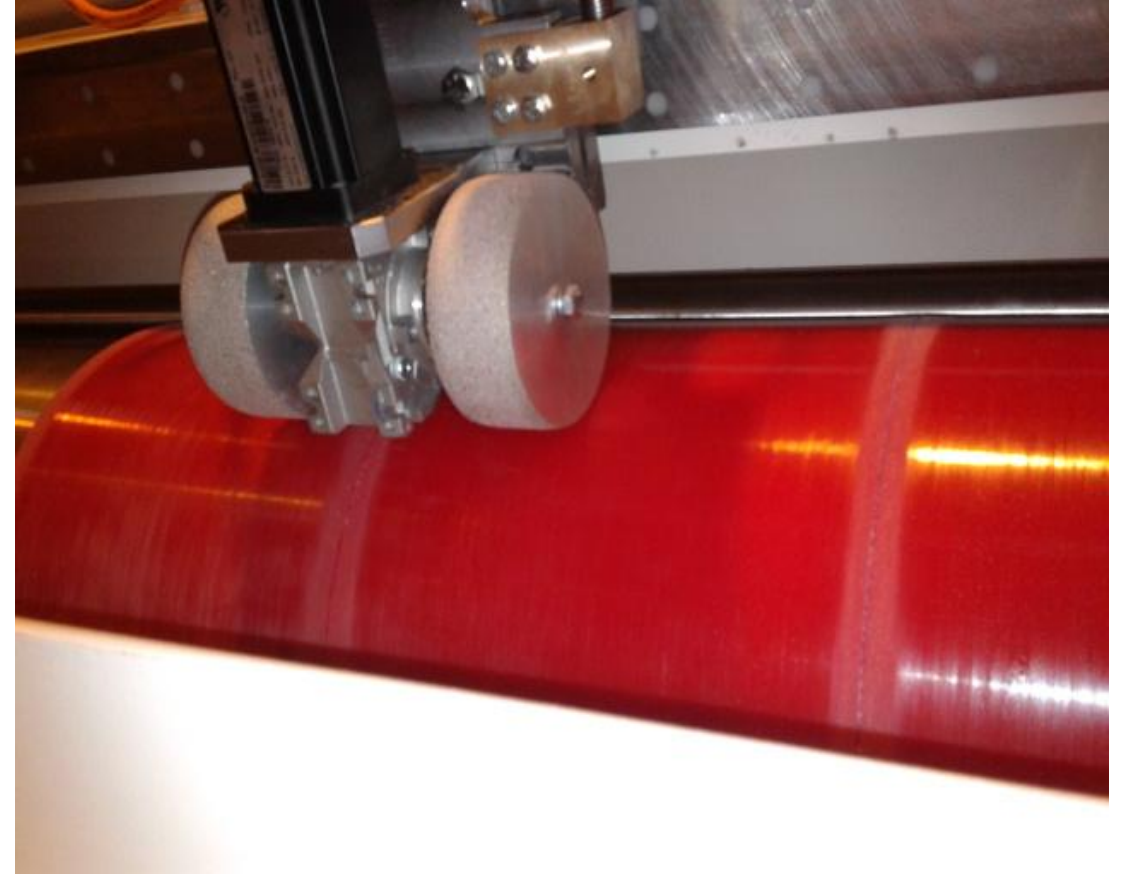


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Quick Set Die-Cutter

EMBA TrueGrind™ (option)

- Automatic anvil grinding while running for uniform anvil surface
- Automatic speed compensation of anvil cylinder



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Quick Set Die-Cutter

Top Nozzle waste suction (option)

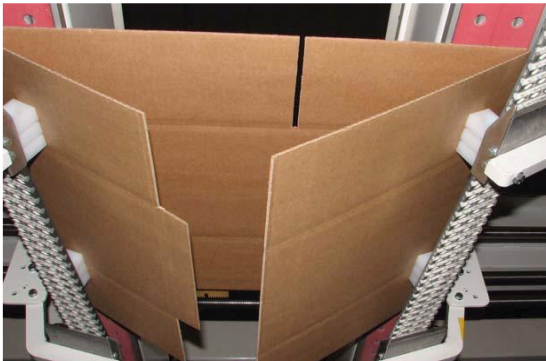
- Enhanced waste handling for complex types of die-cutting



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Vector™ Folder

- Long active High-tech Vector folding section where beams and rails have rigid floor support
- Advanced geometric folding curve for efficient use of the whole length of the folding section
- Automatic positioning of folding blocks for smooth, correct folding sequence and quick set up of order
- Gauging rollers



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APS Folder

- Long active folding section with full vacuum transport
- Folding beams and rails with rigid floor support
- Folding section with automatic setting of folding angle
- Separate speed control of folding up belts (optional)



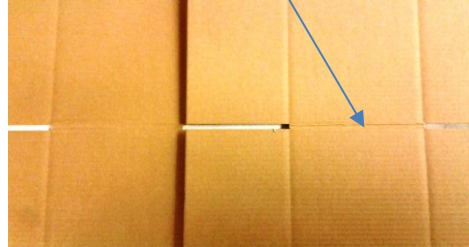
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LiquidCreaser™

Spray nozzle at
creasing line



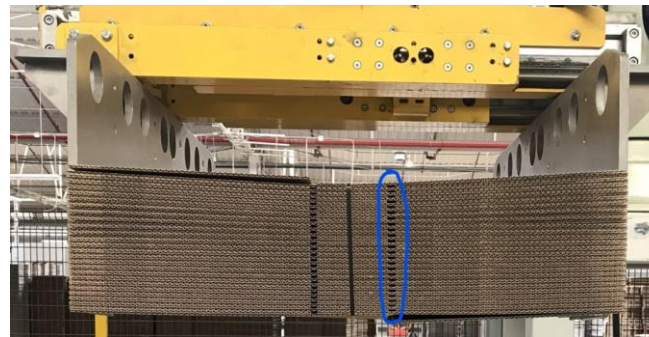
Quick softening,
Fast drying



Folding conformity



Less GAP variation



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Counter-Stacker

- Down stacking sheet flow optimised for complex die-cutting and high graphic printing
- High speed performance up to 28 bundles per minute
- Waiting/standby position at bundle ejection for extra glue binding time



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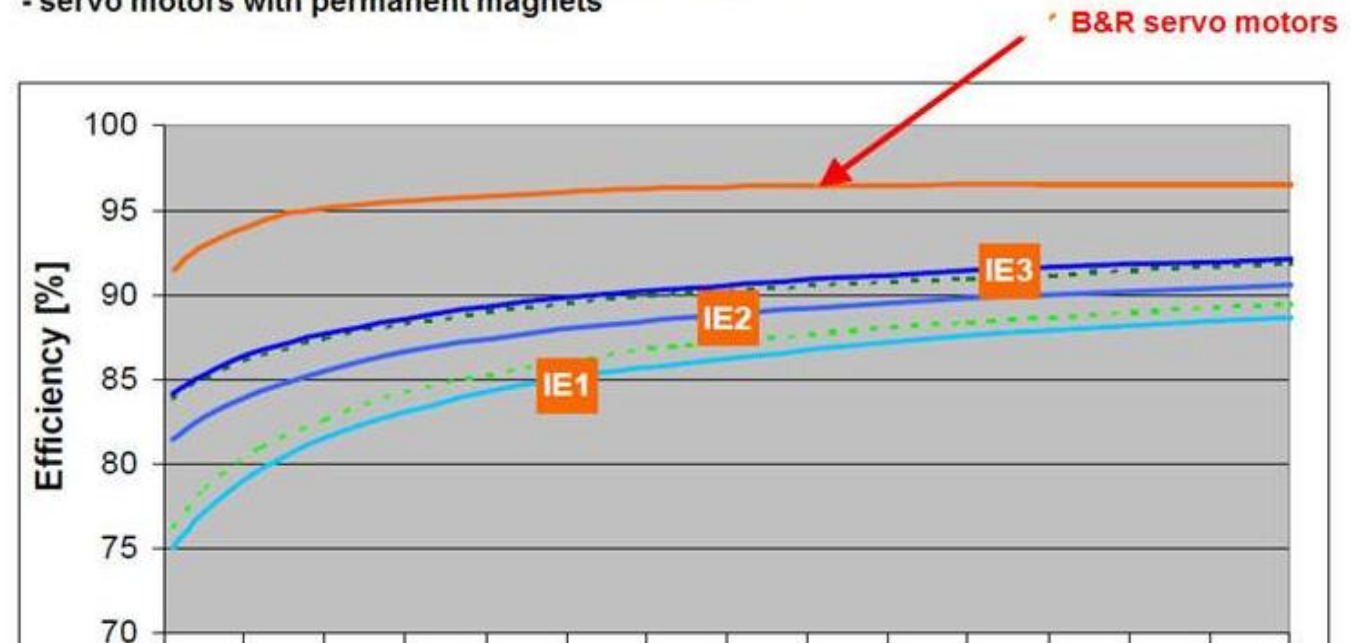
Energy Efficiency

- Power Factor correction, $\cos \phi$ close to 1, apparent power and active power almost the same
- Fully generative power supply to regenerate energy at motor retardation



comparison of the efficiency classes

- efficiency grades of 4 pole three phase motors at 50Hz
- servo motors with permanent magnets

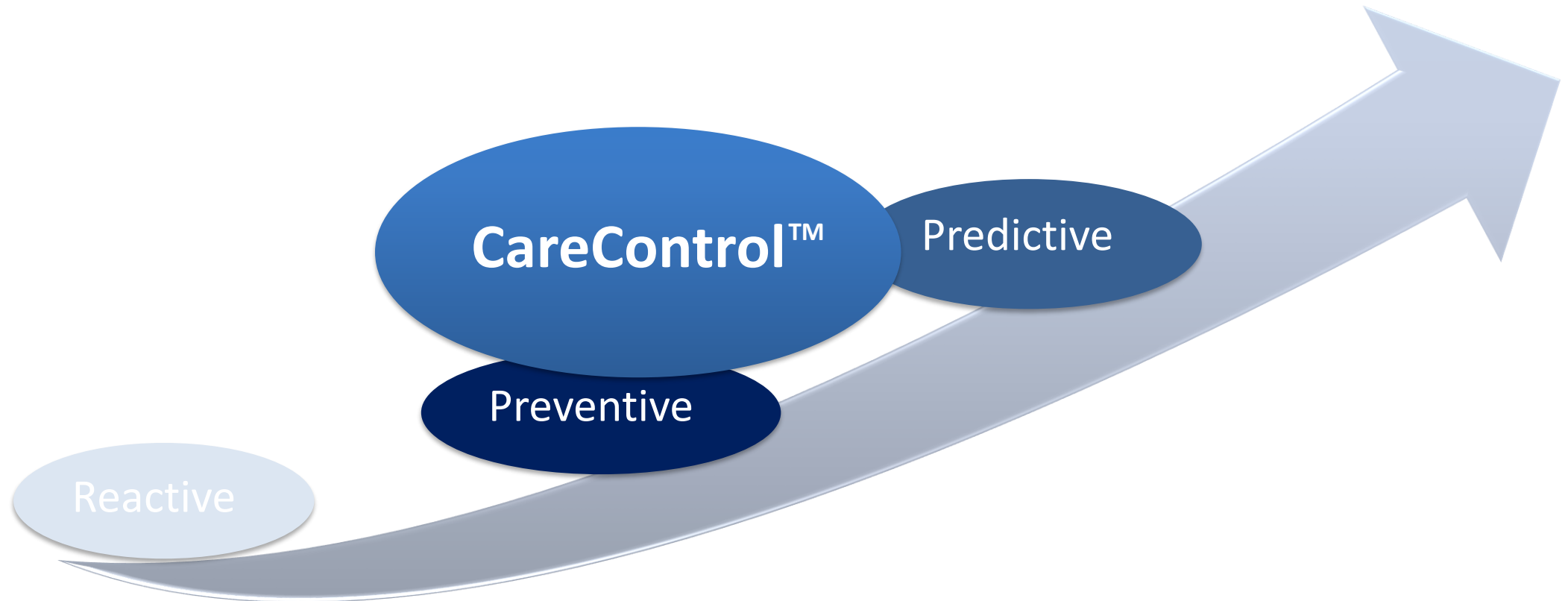


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EMBA Comfort CareControl™

Preventive - on the journey towards predictive and

Operational
excellence

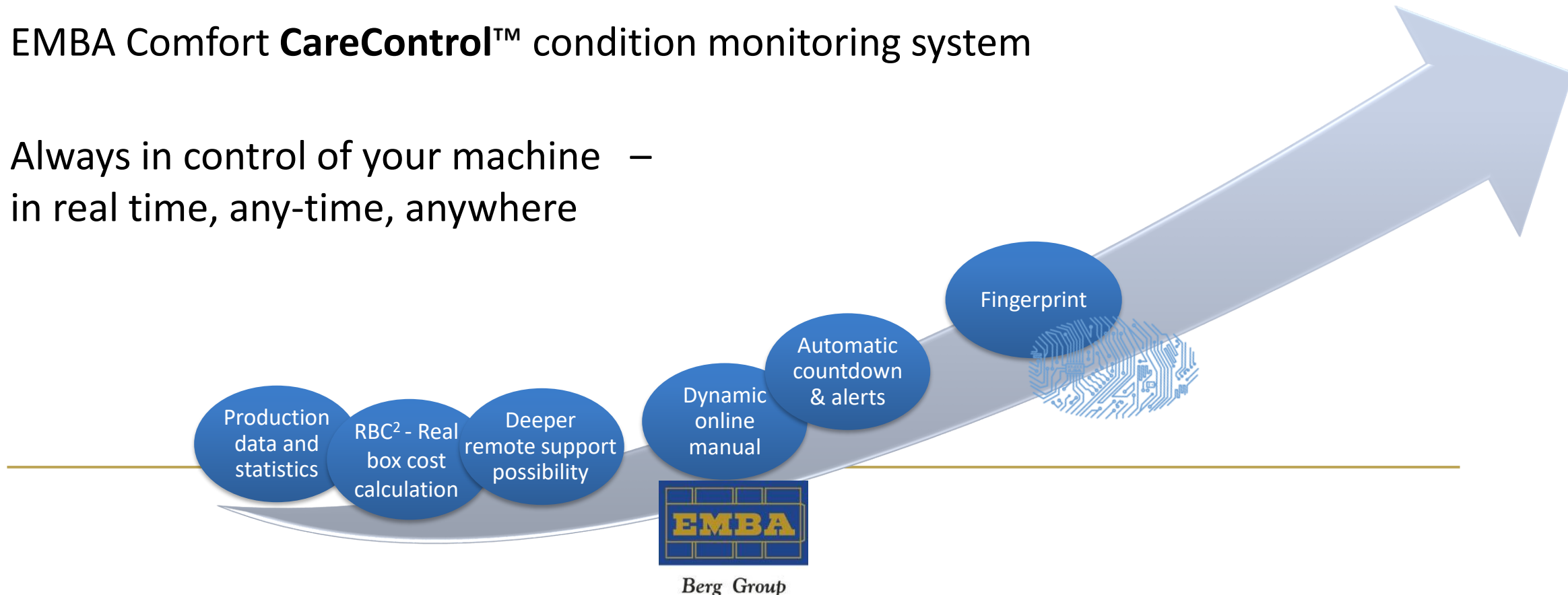


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EMBA Comfort CareControl™



- EMBA Comfort **CareControl™** condition monitoring system
- Always in control of your machine –
in real time, any-time, anywhere



Summary - EMBA QS Ultima™

- The Ultima platform – **175 QS Ultima™** **215 QS Ultima™** **245 QS Ultima™** **295 QS Ultima™**
- Quick-Set – through pre-set during production
- Non-Crush – increased box strength / reduced paper cost
- High graphics – highest print quality possible
- Maintenance & Energy efficiency – highest degree of sustainability and cost savings
- CareControl – preventive maintenance support, on the journey towards predictive operational excellence



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