

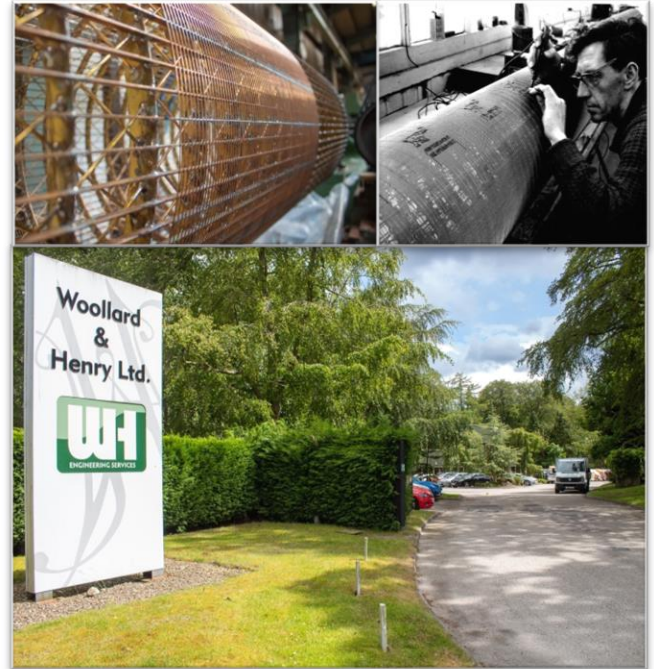


## Expanding Cylinder Mould Date

## About us

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- Established in 1873 and have been trading ever since
- Our wealth of experience and talent is unrivalled worldwide
- Always looking for innovation and development
- Employee owned since 2002
- With manufacturing sites across the UK and Europe.
- ISO 9001:2015 accredited



# W&H Expanding Cylinder Mould

- Developed in Conjunction with experts from the banknote industry
- We still work closely with the industry to optimise the run ability and usability of this unique design.

## Benefits

- Increased expansion range
- Reduced cover change time
- Improved formation
- Better profiles
- Better cover support and run time
- Improved cleaning and maintenance



## Increased Expansion Rate

- This is the only ECM with an expansion range of 220mm over the diameter.
- Most banknote mills can cover their complete range of sheet sizes with one central body.
- Fewer expanding moulds per machine reducing capital outlay when replacing older designs of expanding cylinder mould.



ECM	Total Range (Diameter)	Total Range Circumference	Operating Range	Operating Range
Gridset A	Ø 1090-Ø 1160mm	3424-3644mm	Ø 1100-Ø 1150mm	3455-3613mm
Gridset B	Ø 1140-Ø 1210mm	3581-3801mm	Ø 1150-Ø 1200mm	3612-3770mm
Gridset C	Ø 1190-Ø 1260mm	3739-3958mm	Ø 1200-Ø 1250mm	3769-3927mm
Gridset D	Ø 1240-Ø 1310mm	3896-4115mm	Ø 1250-Ø 1300mm	3926-4084mm

## Increased Expansion Rate

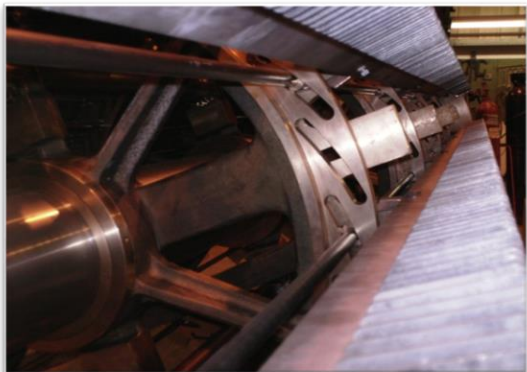
- Each set of grid plates will expand to 70mm ensuring no overlaps in cover size and maximum flexibility without effecting the concentricity of the expanding cylinder mould.
- The 220mm expansion comprises of four sets of grid plates, each offering an normal operating expansion range of 55mm.

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## Increased Expansion Rate

- This range allows optimisation of sheet sizes and reduction of inter-sheet-trim to the absolute minimum (raw material / wastage)
- The W&H ECM are very accurate over their range, typically  $\pm 0.15$  mm diameter



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## Reduced Cover Change Time

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- The 24 Grid plates, can be changed within an hour, by two experienced operators.
- Making cover changed times of two hours possible.
- Grid plates assemblies are designed to fall within EU manual handling requirements, no special lifting equipment is required.



## Improved Formation

- Longitudinal top bar causes a paddling effect in the VAT.
- No disruptive effect at increased machine speed
- Incorporated machine direction grids
- Open area design reduces stock disruption





## Open Design

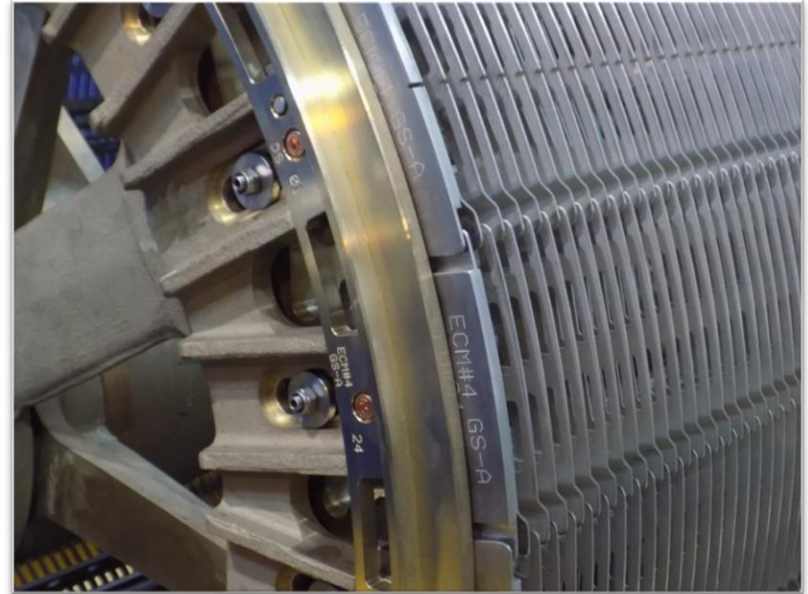
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- Increased open area at each end of our ECM.
- Improved open area allows better drainage at the ends, reducing flow disruption and negative effect on profiles



## Better Cover Support and Run Time

- Overlapping grid plates ensure the ECM supports the bank note over at all times
- The couch roll and wading roll is fully supported at all times, reducing the couch bounce effect.
- The overlapping grid plates allow a more even tension on the ECM's cover.



## Improved Cleaning and Maintenance

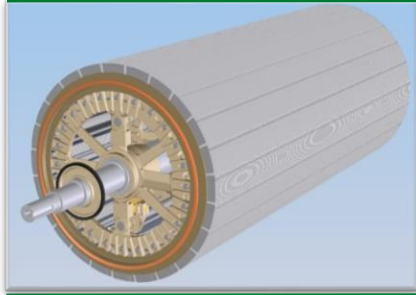
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- Open access ensures easy cleaning and maintenance.
- With the grid plates removed all expansion mechanisms are open and easily accessible for cleaning.
- Robust and Accessible designed mechanical parts.



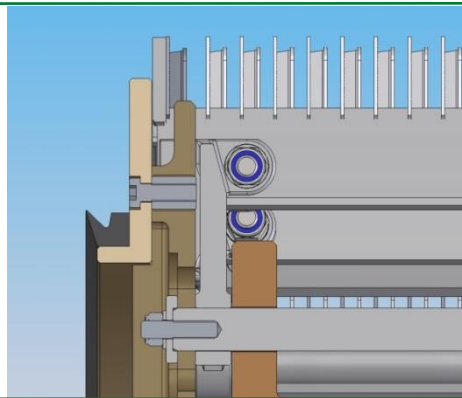
# Design to Completion

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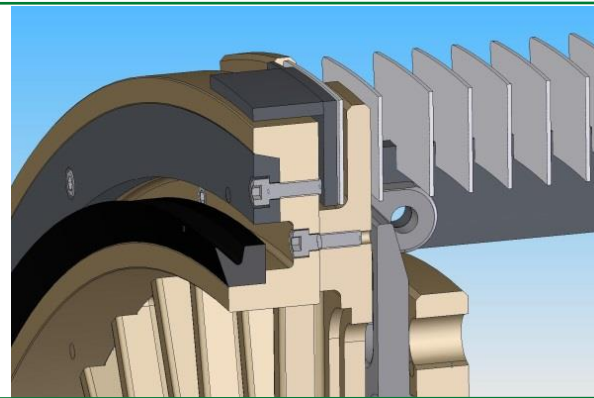




Edge Seals

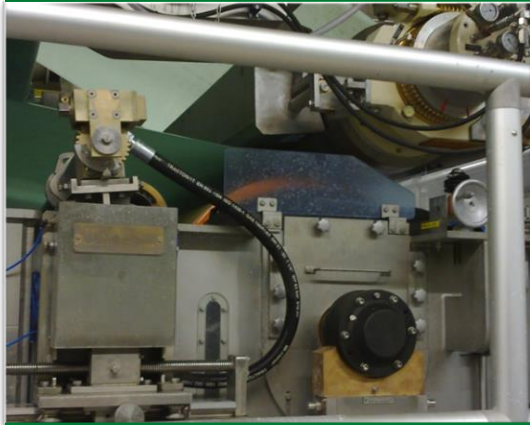


Typical



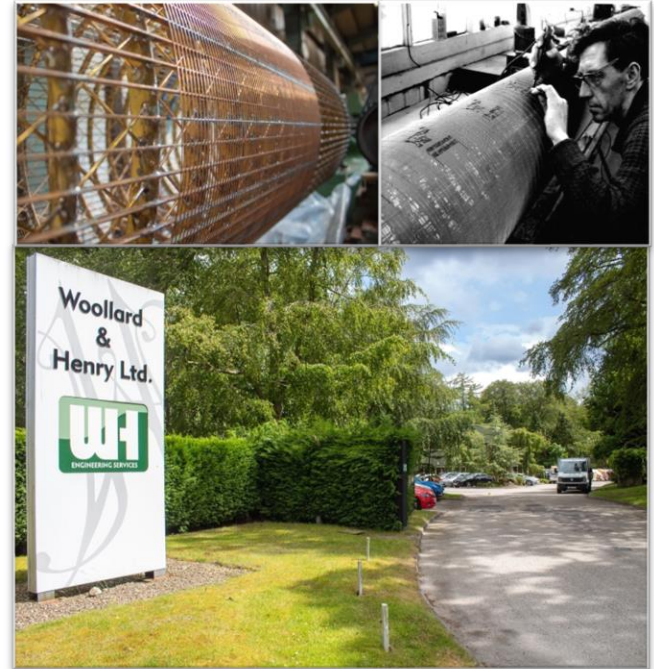
Bespoke





## Why Woollard and Henry

- Over 145 years of experience in the paper industry
- Products designed with the customer in mind
- Only ECM with expansion range of 220mm over diameter
- Reduced cover change time
- Improved cleaning and maintenance



**WOOLLARD & HENRY LTD**

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