



Esterlam
Advanced Doctor Blade Technology



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History of Esterlam

- Don Hailey develops first synthetic doctor blade in early 1970's
- Esterlam blades developed for mirror finish chrome rollers
- Blades coat magnetic media audio, video & computer devices
- New industries create new challenges - Esterlam resolve these
- Esterlam work with OEM's & corporates on coating development
- Esterlam help develop new battery & new energy storage
- Mobile phone and communication technology
- Esterlam used to produce tech for EV's, Aerospace & military
- RFID tag and security technology



Esterlam today

- Years of knowledge & experience - please feel free to use it
- Continual investment in new materials - we're always looking
- Work closely with many OEM's on holder & machine designs
- Investment in technical & production personnel
- Work closely with academia on new development projects
- Work with industry associations on sharing knowledge
- Full blade & system analysis to help improve production
- Free technical support & sampling service



Li-On components

- Used in production of films used as separator membrane
- Coating ceramic to separator membrane - micro gravure
- Coating graphite to foils in anode/cathode production
- Components for Energy harvesting & storage units
- Components for Aerospace & marine technology
- Components for military applications
- RFID tag and security
- Mobile phone and communication technology

Different processes used

- Enclosed chamber system - Flexo process.

Utilises an enclosed chamber to prevent solvent emissions, premature drying of coating & prevents dust contamination

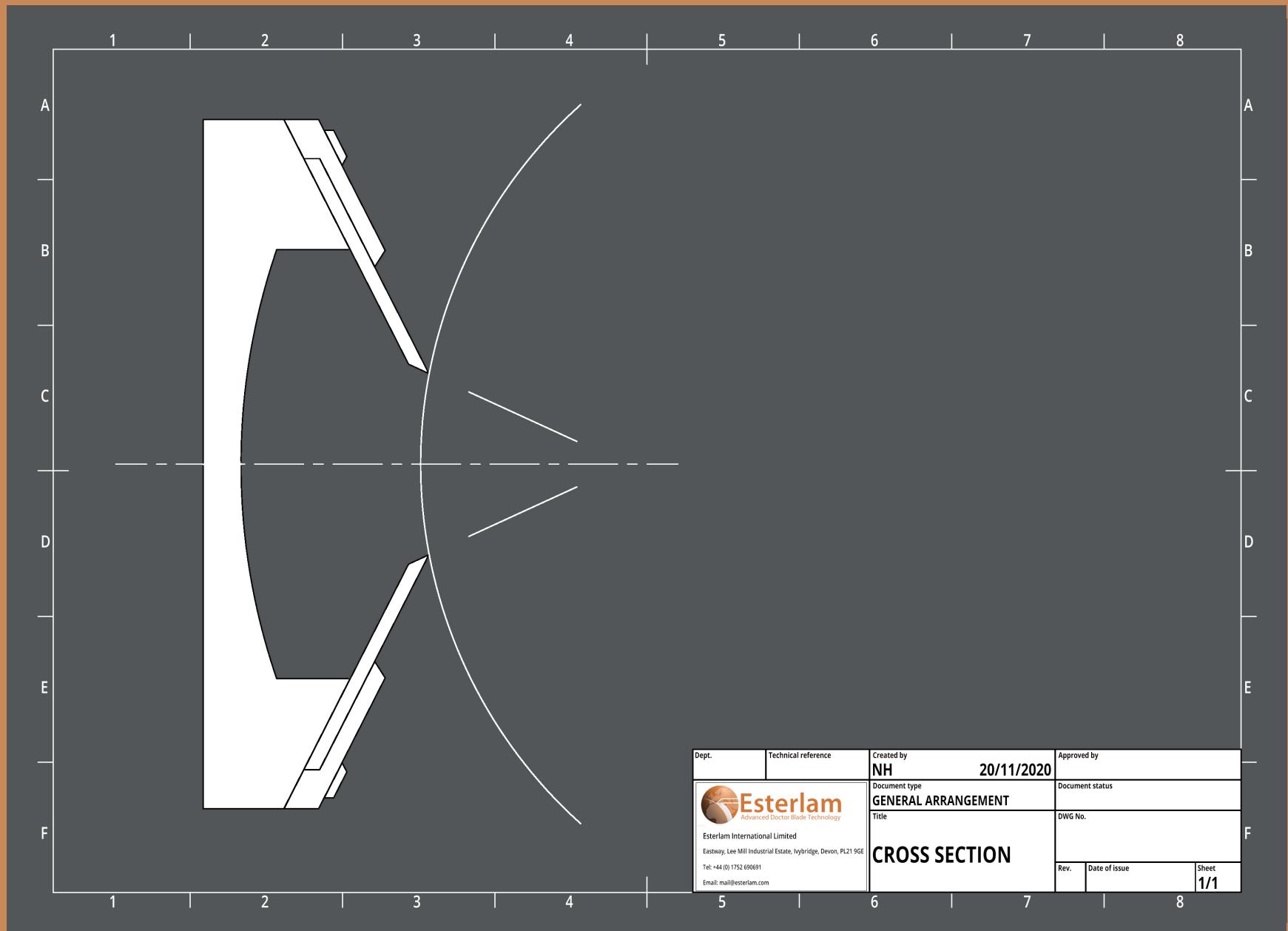
- Single reverse angle blade system - Flexo process.

Single blade & tray - Blade chisels coating/ink off roller surface.

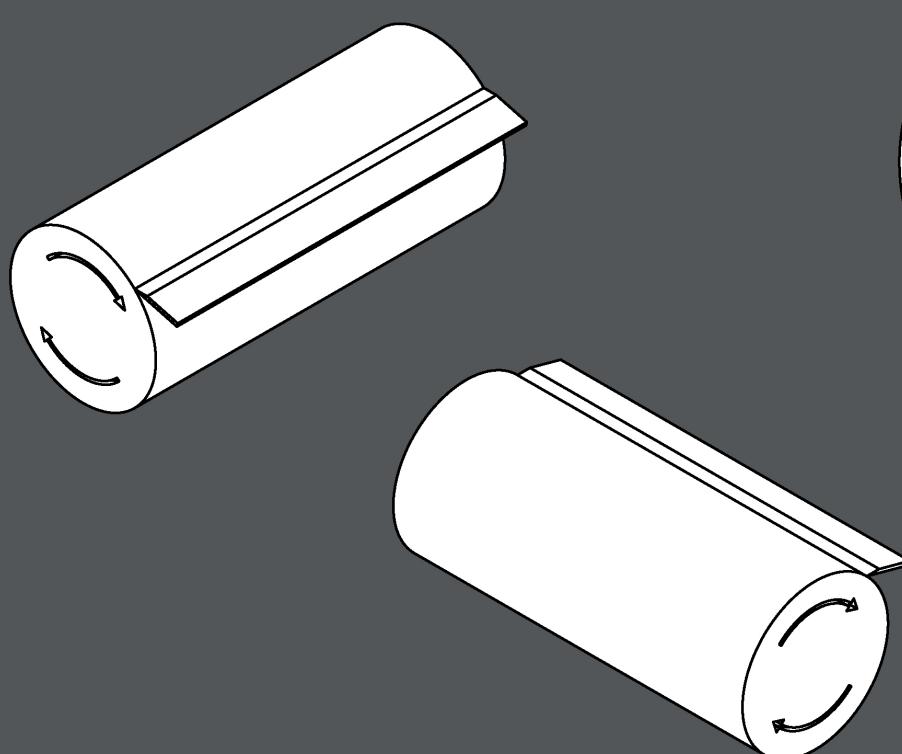
Optimum blade angle is 30-35 degrees.

- Single trailing blade system - Gravure process.

Single blade & tray - Blade drags ink off roller surface. Optimum blade angle is 60-65 degrees. Sometimes requires back support



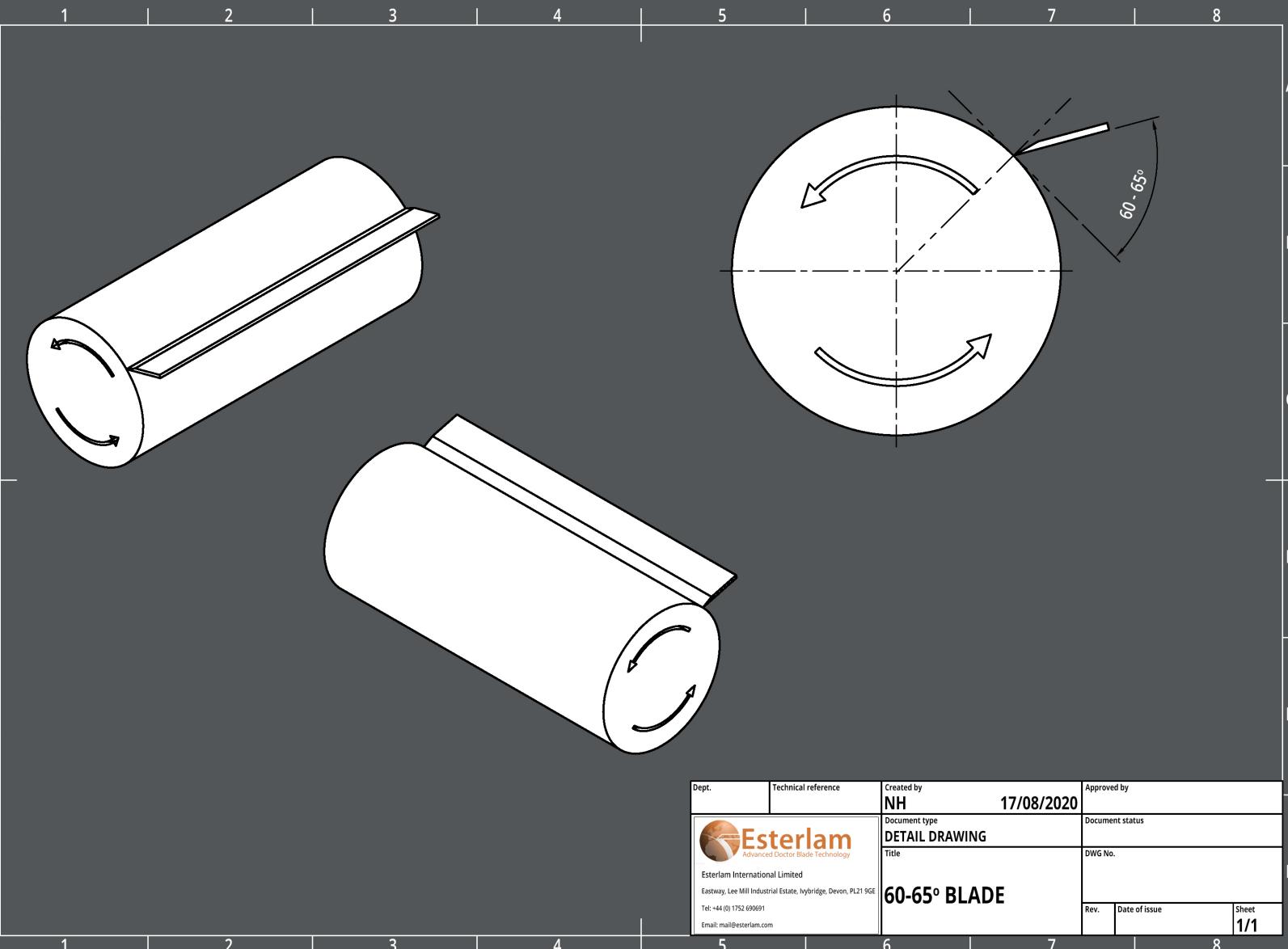
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