

SYNCAST™

Syncast™ Polyamide Calender Rolls

Syncast™ Polyamide calender rolls from RHL are a state of the art solution for many calendering and embossing applications. Excellent resistance to surface damage ensures minimum maintenance and a very long service life.

Syncast™ can be supplied as a complete roll, or the Syncast™ sleeve can be supplied to the customer's required specification.



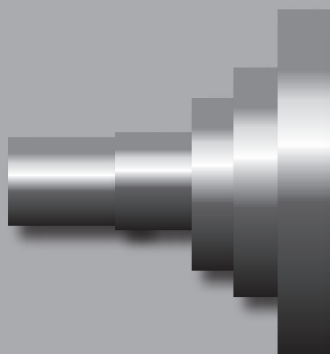
Construction

Syncast™ rolls comprise a spun-cast sleeve (approximately 50mm thick) manufactured from the highest quality polymers, fitted to a precision engineered carbon steel core. Syncast™ sleeves can be easily removed (on site if required) to facilitate re-machining or replacement.

Syncast™ sleeves are cast on industry leading equipment ensuring the optimum density and elasticity throughout. Careful mixing and temperature control of the polymers, combined with excellent pressure control during casting, guarantees that every Syncast™ sleeve is perfectly cast for optimum performance. (Note: Inferior cast polyamide type sleeves on the market are susceptible to hot spots caused by uneven density, bad polymerisation and short polymers).

Internal water cooling can be utilised in Syncast™ rolls. The Syncast™ unique water cooling system is effective in cooling the complete surface of the roll. Water cooling enables continuous operation under the most extreme conditions (maximum steel roll temperatures of up to approximately 220°C). For continuous operation, Syncast™ rolls can withstand up to approximately 130°C surface temperature.

Syncast™ rolls can be produced up to 6m face length and 1m diameter, with a parallel or crowned profile. Syncast™ sleeves are fully annealed and ultrasonically checked, guaranteeing optimum quality and performance.



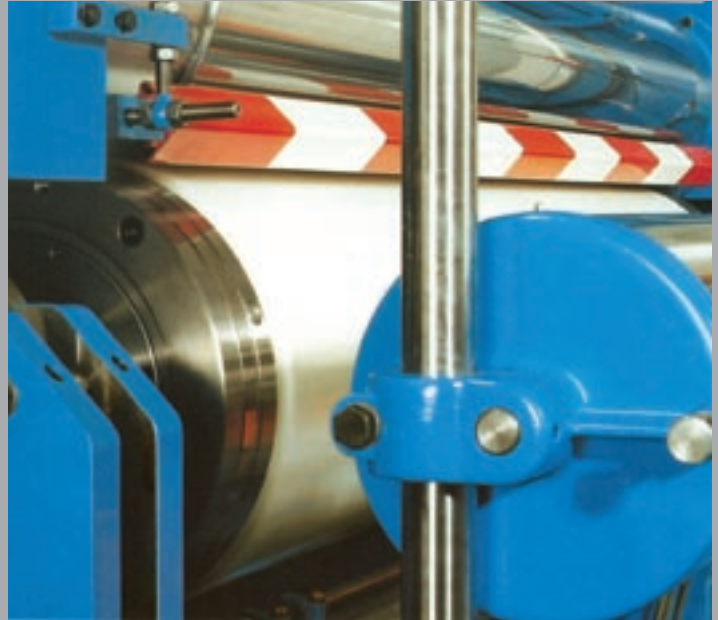
Applications

Textile Calendering

Woven and Knitted Natural Fabrics
Woven and Knitted Synthetic Fabrics
Non-Woven Fabrics (Thermobonding)

Embossing

Woven and Knitted Natural Fabrics
Woven and Knitted Synthetic Fabrics
Special Papers
Vinyl / Imitation Leathers
Aluminium Foils



Operational Benefits

- No 'washing in' required
- Highly resistant to surface marks, e.g. from selvages, sewing seams, creases and knots etc
- Syncast™ rolls level out the majority of surface marks during operation
- Different material widths can be run without edge marking problems
- Resistant to most commonly used processing chemicals
- Syncast™ rolls can be re-machined several times and provide an excellent service life

Quality Benefits

- Excellent smoothing effect
- Excellent glazing effect when used in conjunction with a highly polished steel roll
- Excellent densification of calendered cloth
- Running stability enables higher and more homogenous lustre at higher speeds
- Syncast™ produces excellent lustre/ feel/ matt effects when used in combination with cotton rolls

Maximum Running Conditions

Maximum Linear Pressure	350 kg/cm
Maximum Speed	200 m/min
Maximum Surface Temperature of heated steel roll	220°C
Maximum Surface Temperature of Syncast™ roll	130°C

Richard Hough Limited

