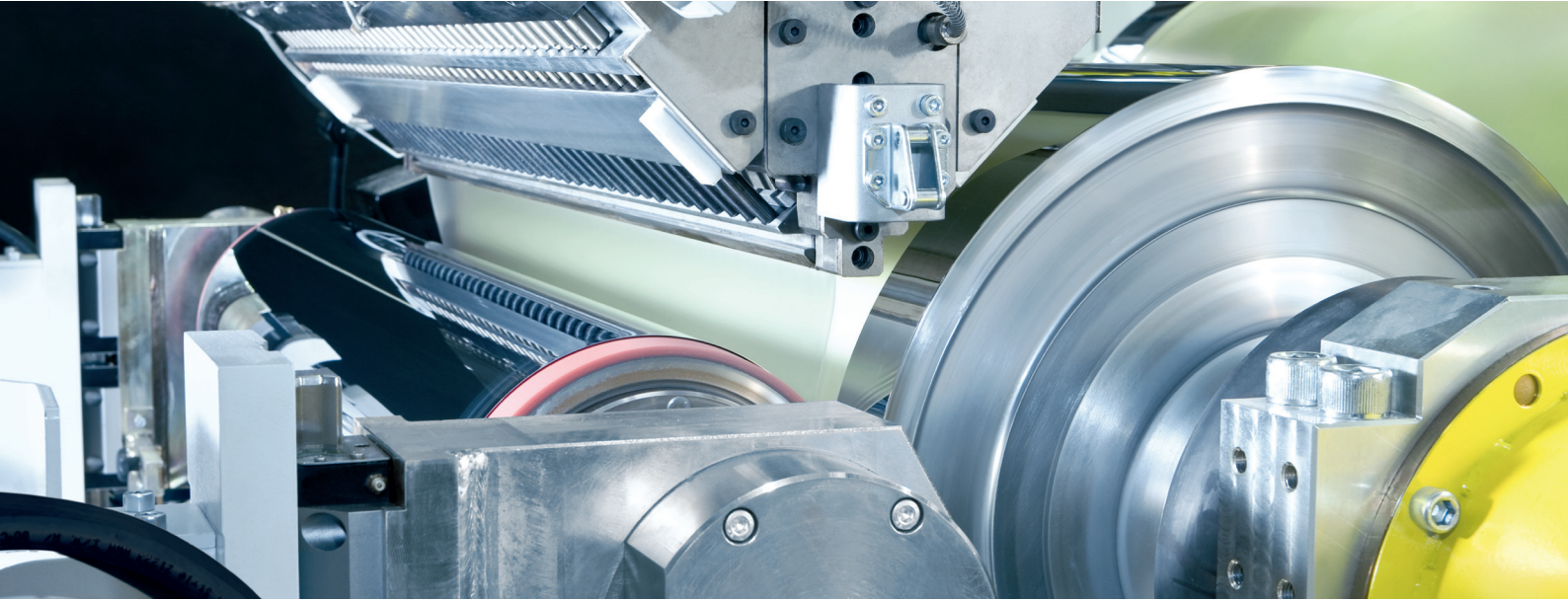


SHEET LINES

SLEEVE TOUCH TECHNOLOGY ▶



SML sleeve touch – for top quality, high-end products

SML sleeve touch technology employs a seamless belt, which is pressed onto the extruded film as an area distributed rather than a linear distributed load.

Sleeve touch technology is suitable for a thickness range of 70 - 450µm, which is located exactly between cast and calendering film. With SML sleeve touch technology it is possible to make high-end products in a superior quality, which cannot be achieved using standard calendering sheet or cast film technology.

The advantages of sleeve touch films are:

- The production of thin polished films with low pressure
- Low internal stress level as compared to calendered film
- Low shrinkage as compared to calendered film
- Excellent transparency (low haze) and high gloss
- No die lines as compared to cast film
- Low start-up waste volumes
- Optical quality is achieved upon sleeve belt contact
- Good thermoforming characteristics

The roller stack of the sleeve touch line is equipped with three different processing modules for cast, sleeve and calendering film. These modules are

mounted on trolleys and can be changed within minutes. Therefore customers developing new sleeve applications can continue to use their lines to full capacity with their current programme of cast films and calendered sheets.

SML sleeve touch technology is mainly used for:

- Highly transparent or matt folded boxes for the packing of exclusive consumer products
- Optical films for TFT screens
- Medical films for IV and dialysis bags
- Films for the graphics industry
- Decorative films for furniture applications
- Highly transparent lids for food packaging containers
- Blister packaging
- Protective films
- Specialities

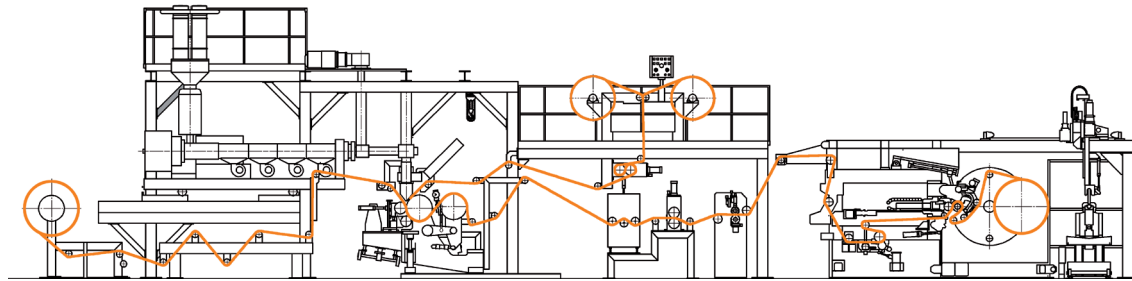
A sleeve touch line is available in the SML internal development workshop for developing specialities. This 5-layer line is equipped with three extruders and there are additional unwinds for the production of laminates and coatings.

SHEET LINES

SLEEVE TOUCH TECHNOLOGY ▶

product

Applications:	reflective sheets, stationery film, thermoformed lids and blisters multi functional credit- and chip cards, mikrotiter plates IV-bags, dialysis bag, protection film, barrier packaging film
Raw materials:	PP, A-PET, PET-G, COC, PC, PMMA, LDPE, PA special coex structures with adhesives and EVOH barrier
Sheet thickness:	70 - 450µm
Final film width:	540 - 1650mm



line configuration

RAW MATERIAL HANDLING

Feeding system:	individual pneumatic hopper loaders
Gravimetric dosing:	up to 4 components per extruder

EXTRUSION

Extruder diameters:	35 / 45 / 60 / 75 / 90 / 105 / 120 / 135mm
L/D ratio:	28 or 33 depending on extruder size
Melt filtration:	hydraulic screen changers
Melt pumps:	standard for sleeve lines
Coextrusion structures:	2 - 9 layers
Extrusion die:	manual or automatic die

SLEEVE TOUCH AND DOWNSTREAM EQUIPMENT

Sleeve rollers C01/C02	
diameter:	220/200mm or 300/370mm
Length of sleeve:	approx. 1255 / 1855mm
Sleeve widths:	700 / 1000 / 1350 / 1600 / 1750mm
Roll stack arrangement:	horizontal
Following C1 and C2 rollers:	490/490mm / 600/600mm / 600/490mm
Gauging system:	infra red system, radiometric system, white light interference
Mechanical speed:	max. 100 m/min

ALTERNATIVE PROCESSING METHOD

Cast film extrusion:	possible with casting module with air knife
Conventional sheet extrusion:	possible with calendering module with polishing roller

EDGE TRIMMING AND RECOVERY

Edge cutting:	motor driven circular knives
Grinder:	inline grinding and sacking

WINDING

Basic concepts:	series W600 cantilever winder series W900 turret winder series W1100 turret winder series W2000 horizontal sliding winder
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AUTOMATION

SMILE control system