



SML lines – setting new standards in stretch film production

SML possesses an innovative concept for highspeed extrusion, which provides output of approximately 950 kg/h with a 90mm extruder. As conventional extruders require a 150mm screw diameter for similar output, the SML concept saves space and cuts energy consumption.

In order to support the latest marketing concepts, SML employs multi-layer technology with up to 33 layers. As an option, lines can be supplied with edge encapsulation on the die. This allows for higher line speeds at increased line stability and greater reliability.

SML offers a choice of three different stretch film winder types. Its winders series W4000 are based on conventional turret winder technology and due to an integrated algorithm for avoiding critical shaft speed, provide a combination of top production speeds and exceptionally low vibration levels.

The SML winder series W3000 constitutes a patented solution for winding on 2- and 3-inch cores without

using winding shafts. The minimum cycle time is a mere 17 seconds. Thus hand rolls with less than 200m can be produced at full production speed. Moreover, jumbo rolls on 3-inch cores with a 400mm diameter are possible.

The winder series W3000 produces individual part bobbins, which are separated by means of guiding frames and therefore no bleed trim is generated. The SML winder series W2000 is a horizontal sliding winder in shafted design. This type of winder is especially suitable for the production of short speciality orders, as it incorporates width and roll diameter flexibility.

Stretch films produced on SML cast film lines demonstrate superior characteristics:

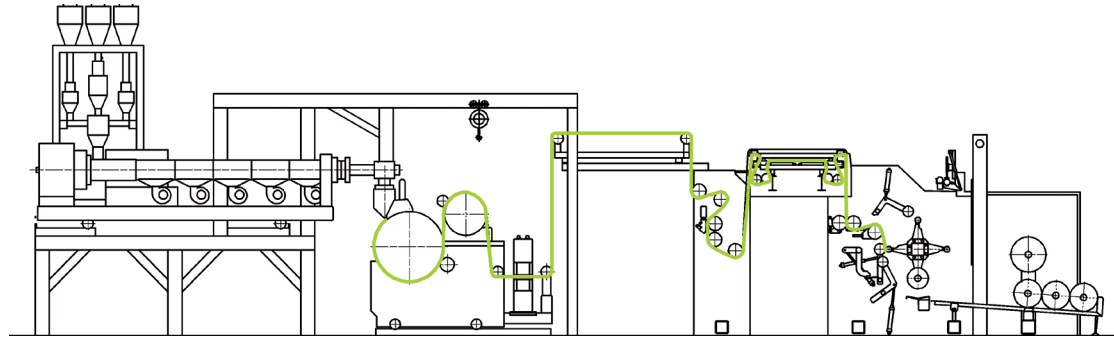
- Good tear and puncture resistance
- Excellent dart drop
- High pre-stretch levels
- Defined cling level, resulting in silent unwind
- Excellent clarity and perfect optics
- Optimum machine suitability

CAST FILM LINES

STRETCH WRAP FILM ►

product

Applications:	hand stretch, power stretch, super power stretch, cling film
Raw materials:	LLDPE, mLLDPE, VLDPE, blends with HDPE and PP
Film thickness range:	8 - 50µm
Final film width:	2 x 500 / 4 x 500 / 5 x 500 / 6 x 500 / 8 x 500 / 10 x 500mm



line configuration

RAW MATERIAL HANDLING

Feeding system:	individual pneumatic hopper loaders
Gravimetric dosing:	up to 6 components per extruder
Extruder output control:	integrated in SMILE control system

EXTRUSION

Extruder diameters:	45 / 60 / 75 / 90 / 105 / 120 / 135 / 150mm
L/D ratio:	28 or 33, depending on raw material and extruder size
High speed extruder:	HSE 90/33 up to 950 kg/h
Melt filtration:	hydraulic screen changers
Coextrusion structures:	up to 7 layers / up to 33 multilayers
Extrusion die:	automatic die with cross-profile control

CASTING UNIT

First cooling roll:	1000 or 1200mm, matt surface, driven and tempered
Second cooling roll:	400 or 600mm, chrome surface, driven and tempered
Roller width:	1600 / 2700 / 3200 / 3800 / 5000 / 6000mm
Web pinning:	dual-chamber vacuum box and electrostatic / pneumatic edge pinning
Mechanical line speed:	600 / 750 / 1000 m/min

DOWNSTREAM EQUIPMENT

Thickness measuring:	beta ray or IR-ray or x-ray gauging system
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EDGE TRIMMING

Edge trimming and bleed trimming:	inline edge and bleed trimming with blades
Edge trim recycling:	direct refeeding to main extruder by vertical scraptruder or repelletising with inline recycling unit

WINDING

Basic concepts:	series W2000 stretch wrap horizontal sliding winder series W3000 shaftless turret winder series W4000 shafted turret winder
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AUTOMATION

	SMILE control system
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