

# ▶ sheet lines

**SML**  
EXTRUSION LINES – ENGINEERED TO PERFORM ▶

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▶ **FLEXIPET –  
TWIN SCREW EXTRUSION**

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**Extrusion lines –  
engineered to perform**

# One line, many options

SML's FlexiPET represents an exceptional twin-screw extruder concept that is easily adaptable to various polymers. This line is able to process virgin and regrind PET, PP and PS – material switches can be managed very quickly. FlexiPET is also versatile regarding the choice of winding systems.

## Key Features

- Designed for the highest flexibility to process different kinds of polymers and applications
- Recommended for the use of PETG and its post industrial flake stream
- Optimised to use dusty material streams
- FlexiPET lines are highly flexible in terms of useable materials and combinations
- The lowest residence time inside the extrusion unit due to conical twin screw extruders
- Reduced energy consumption
- Minimised applied shear stress

Typical thermoform application	+
PET	+
PP	+
PS	+
Optical film	~
PET / PE (recycled in reduced amounts)	++
PET / PE / EVOH (modifications required)	++
GAG sheet	++
Customised sheet projects	++

## BASIC DESIGN INCLUDES

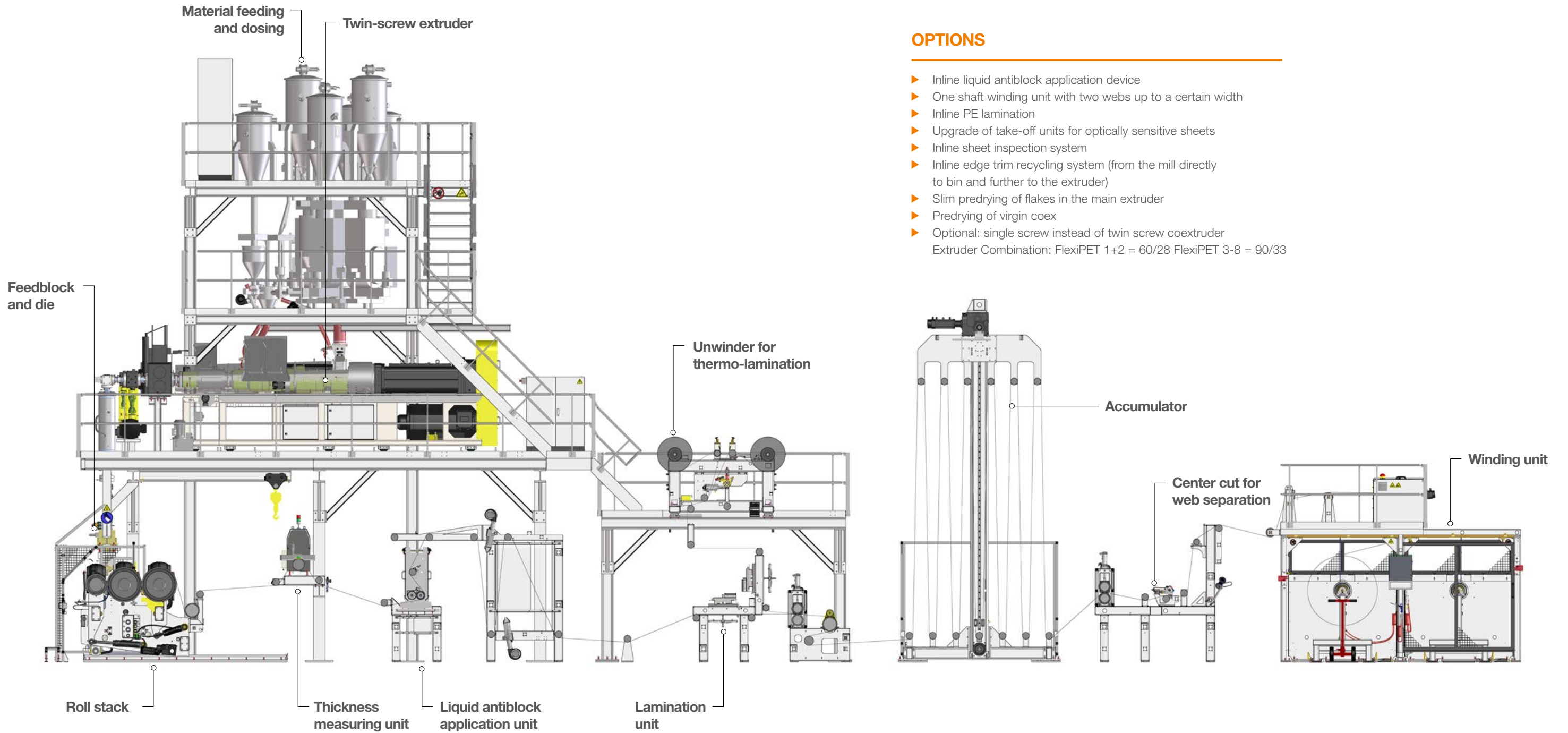
- ▶ Material dosing and conveying system for twin screw extruders (2 main + 2 side components)
- ▶ Complete extrusion unit with a conical twin screw, backflush filter, melt pump and static conical mixer
- ▶ FlexiPET 4 and below: manual die / FlexiPET 5 and up: automatic die
- ▶ Roll stack with SPG roll technology, temperature control unit, hydraulics and safety devices
- ▶ Thickness gauge
- ▶ Edge trim unit with blade knives and an edge trim mill
- ▶ Winder W501
- ▶ Automatic control system
- ▶ SML BitWise System



### The bright variety of SML's technology

PET sheet products are primarily used for food and consumer goods like trays, cups, blisters and lids. In addition, pharmaceutical and medical products have become important areas of application.





**OPTIONS**

- ▶ Inline liquid antiblock application device
  - ▶ One shaft winding unit with two webs up to a certain width
  - ▶ Inline PE lamination
  - ▶ Upgrade of take-off units for optically sensitive sheets
  - ▶ Inline sheet inspection system
  - ▶ Inline edge trim recycling system (from the mill directly to bin and further to the extruder)
  - ▶ Slim predrying of flakes in the main extruder
  - ▶ Predrying of virgin coex
  - ▶ Optional: single screw instead of twin screw coextruder
- Extruder Combination: FlexiPET 1+2 = 60/28 FlexiPET 3-8 = 90/33

**CONFIGURATION**

	FlexiPET 1	FlexiPET 2	FlexiPET 3	FlexiPET 4	FlexiPET 5	FlexiPET 6	FlexiPET 7	FlexiPET 8
Max. possible net width (mm)	800	800	950	1,150	1,380	1,530	1,730	1,930
150 µm	590	590	700	850	1,020	1,130	1,280	1,420
500 µm	590	930	940	1,350	1,390	1,410	1,420	1,430
1,000 µm	570	910	930	1,130	1,400	1,410	1,420	1,430
1,200 µm	590	800	860	1,040	1,380	1,390	1,410	1,430
1,800 µm	580	650	680	830	1,130	1,040	1,130	1,260

**GRANULES**



▶ **Take advantage  
of our global  
leadership in  
extrusion  
technology.**

**ANALYSES  
DEVELOPMENT  
PRE-TESTED PERFORMANCE  
DELIVERY ON TIME  
SERVICE SUPPORT  
CUSTOMER SATISFACTION**

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**SML - Head Office**

Gewerbepark Ost 32  
4846 Redlham  
Austria  
Phone: +43 7673 90999  
E-mail: [sml@sml.at](mailto:sml@sml.at)  
[www.sml.at](http://www.sml.at)

**SML - Machinery Far East Sdn Bhd**

(1029958-P)  
1201 Block B, Menara Amcorp  
No.18 Jalan Persiaran Barat  
46050 Petaling Jaya  
Selangor Darul Ehsan,  
Selangor, Malaysia  
Phone: +60 3 7955 9098  
E-mail: [yen@sml.at](mailto:yen@sml.at)

**SML - Moscow Office**

Ogorodny proezd, 5  
Building 3, office 408  
127254 Moscow  
Russia  
Phone: +7 495 618 8007  
E-mail: [kna@sml.at](mailto:kna@sml.at)

**SML - Beijing Office**

Unit 1410, Landmark Tower  
No. 8 North Dongsanhuan Road  
Chaoyang District  
100004 Beijing, P.R. of China  
Phone: +86 10 6590 0946  
E-mail: [sml@sml.bj.cn](mailto:sml@sml.bj.cn)

**SML - North America  
Service, Inc.**

Suite 204  
85 Eastern Avenue  
Gloucester MA 01930  
USA  
Phone: +1 978 281 0560  
Mobile: +1 978 394 1553  
E-mail: [jom@sml.at](mailto:jom@sml.at)



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