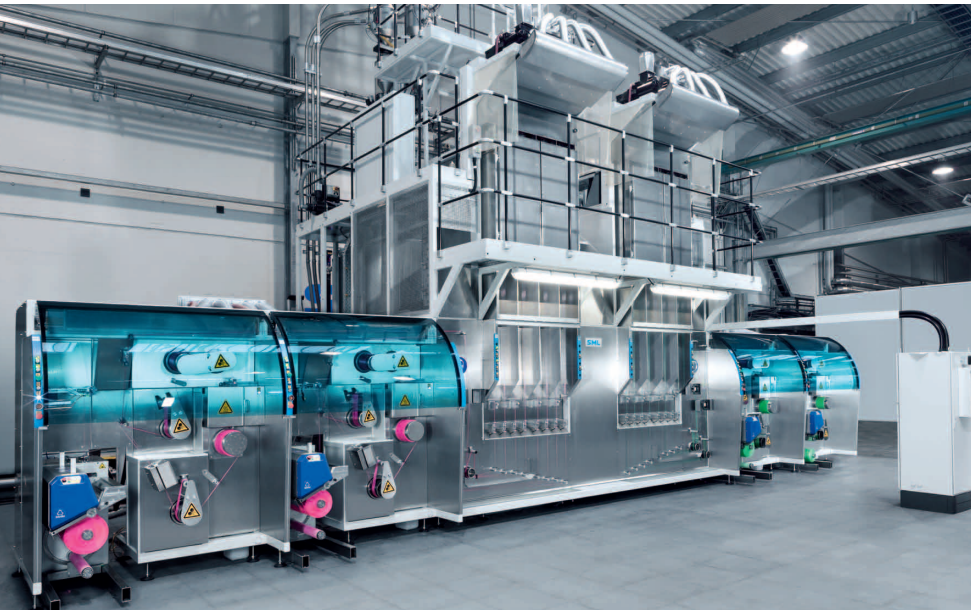


SPINNING LINES

AUSTROFIL BCF MONOCOLOUR 'TWIN' ▶



Polypropylene multifilament spinning technology for high output and flexibility

BCF yarns are used mainly in carpets as pile yarn, for upholstery and furnishings. AUSTROFIL BCF monocolour twin extruder lines offers following advantages:

- The flexibility derived from the simultaneous production of two differing yarn titer.
- The ease of operation provided by a separate texturing and cooling point for each yarn.
- A patented SML texturing unit for top crimp contraction and low shrinkage.
- Ingenious texturing design, which means that no lamellas are needed.
- Cooling of the texturised, compact plug for as long as 15 seconds.
- The avoidance of impurities through structural separation of the spinning, stretching, texturing and winding sections.
- Electronics protected and conditioned inside an e-container.

The spinning line is equipped with 2 extruders and two electrically heated spinning beams. Short melt distribution avoids unnecessary long exposure of the melt to heat. The spinning pumps for each module can be started individually. Two quenching units, each with separate controls, are mounted. Below the air quenching, spin finish is applied to the filaments. The drawing and texturing units are stretching the yarn at a standard ratio of 1:2,5. Texturing occurs at speeds

of up to 3,200 m/min, the yarns being opened in the crimper unit and then compressed by hot pressurised air into a plug with rectangular profile. This plug is subsequently wound around the cooling drum in multiple turns, drawn off and wound up.

A wide titer range can be produced without changes to any of the components of the patented texturing unit, while the ingenious design of the crimper means that steel or ceramic lamellas are avoided. In addition, outstanding levels of cooling efficiency after texturing result in maximum bulk and minimum shrinkage.

Two independent arranged extruders permit the simultaneous production of two yarns with different specifications, like titer and number of filaments. Between the two yarns it is possible to run separate granules, adjustments in extrusion, spinning, quenching, spin finish application, stretching, texturing and processing speeds.

The size of the extruders and the modern control unit facilitate rapid colour and product changes. Moreover, the lines are ideally suited for the production of small lots. Two spinnerets per yarn ensure perfect cooling conditions which result in high output and excellent yarn quality.

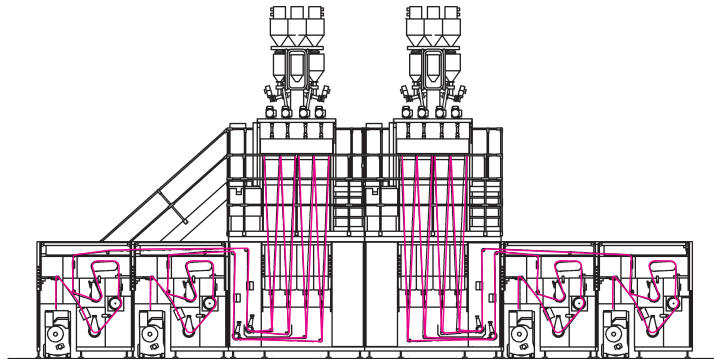
Simple operation and handling from the floor level is possible. The low overall height of the line facilitates installation in production halls with low ceiling heights.

SPINNING LINES

AUSTROFIL BCF MONOCOLOUR 'TWIN' ▶

product

Applications:	carpets, rugs, upholstery, door and window seals
Raw material:	polypropylene homopolymer MFR (230/2.16) (ISO 1133), 23 - 27g/10min
Titer range:	1200 - 5000dtex
Output capacity:	up to 320 kg/h



line configuration

RAW MATERIAL HANDLING

Resin hopper with suction feeder
Dosing and mixing device: optional

EXTRUSION

Number of extruders: 2
Extruder diameter: 75mm
L/D ratio: 28
Max. screw speed: 160rpm
Nominal motor rating: 38kW

MELT FILTRATION

incl. static mixer, optional continuous melt filtration with SML screen belt

SPINNING BEAM

Number of spinning pumps: 8
Number of spinning packages: 16

QUENCHING

2 units

STRETCHING AND TEXTURISING

Number of stretching/
texturing units: 4
Godets per unit: 4 (total 3 duos)
Threads per unit: 2
Draw ratio: infinitely variable
Texturing: incl. patented SML texturing system

WINDING

Number of winder heads: 4
Threads per winder: 2
Core inner diameter: 73mm
Length of shaft: 600mm
Bobbin diameter: max. 300mm (320mm) (depending on winder type)
Traverse length: 250mm (depending on winder type)
Mechanical winding speed: max. 3500 m/min

COMPRESSED AIR SUPPLY

Compressor pressure: 10bar
Average air consumption: 700 Nm³/h
Peak consumption: 1200 Nm³/h

WATER CHILLER

Cooling capacity: approx. 180 000 kcal/h

ELECTRICAL INSTALLATION

Average power consumption: approx. 144kW
Connected load: 370kW

SPACE REQUIRED

Floor space: 12,5 x 7,2m
Overall height: approx. 8m (depending on dosing unit)