

Tampere, Nov. 2024

Arctic Biomaterials technical unit is selling its LFT and Compounding lines which can be purchased as one package or separately. Also, machines can be purchased separately. The line consists of up- and downstream equipment.

On the basis of enclosed document we offer you the following used ABM's LFT and compounding line.

The whole line was purchased from Coperion and it has been taken in to use February 2016. LFT line has been at limited use in the recent years and current usage hours is only appr.150h. Compounding primarily at R&D usage. The machinery in both production lines are in excellent condition.

You would now have an excellent opportunity to acquire State-of-the-art, Coperion and Protec equipment to support your needs with polymer compounds, at low price.

We welcome potential buyers to visit the line at ABM's facility in Finland.

For more information, please do not hesitate to contact:

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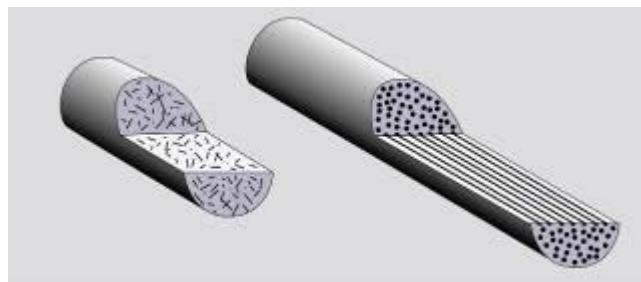
LFT Pultrusion System:

Process:	Reinforcing
Products:	Additives, Glass roving,
Throughput range:	20 - 150 kg/h depending on the recipe and process task.

General description

General description of the system

Reinforced polymers are typically manufactured using Pultrusion systems fitted with the relevant dosing and conveying mechanisms.



Comparison: **Short fiber granule** vs. **Pultrusion pellet (long fiber)**

At present, over 90% of the fibers used are glass. However, small amounts of carbon, steel or aramid fibers may also be used. In the majority of cases, polypropylene and polyamide 6/6.6 as well as up to approx. 10% polyethylene are processed as thermoplastics. However, polycarbonate, polyphenylene sulfide, LCP, polyamide 12, polyamide HT, PC, ABS or others may be used.

The thermoplastics supplied in pellet or powder form are dispensed from disposable containers or by tanker via silos into the system and mixed with stabilizers, lubricants, adhesion promoters and color pigments or pre-mixed batches. Treatment of the thermoplastic takes place in the Pultrusion extruder (on-site position).

The actual Pultrusion stage involves impregnating endless fibers made from various materials with thermoplastics and packing the strands obtained as a result according to customer specifications.

The fibers come from a creel and are fed via heated deflector bars to the fiber pre-heater and then via additional deflector bars to the impregnation tool. This tool is supplied with melted thermoplastic by conventional extruders with their usual ancillary components (drier, funnel, mixing mechanisms). The strands are then rounded by molding rollers and cooled with water and/or air. The strands are pulled from a discharge conveyor (puller, the driving force of the process) and then packaged.

The pellets are then usually fed by a pneumatic conveyor into a secondary dryer, fitted with sizing and sieving systems. After this, they are carried by a vacuum conveyor into the receiving hopper or finished product hopper at the logistics center for packaging.

Commercial part 1 LFT line (without extruder and dryair dryer)

- Protec Creel rack for 32 Bobbins
- Protec Fiber heating and tensioner
- Impregnation die (32 strands 1200TEX)
- Protec Water bath and forming roll unit
- Protec Puller
- Protec S7-Controller and switch cabinet

Commercial part 2 Compounding line

- Coperion ZSK26 extruder with Twin screw side feeder ZS-B 25
 - Die plate 3 x Ø 4.0 mm
- Water bath 5m
- Piovan crystalliser unit including conveying system to packing unit
 - is used as drying unit

Line capacity 100-150kg/h

Payment terms:

40% of the order value are payable as down payment on order confirmation

40% of the order value are payable before delivery

20% of the order value are payable against acceptance of the delivery at the latest 90 days after delivery received

Delivery period: 2 weeks from order

Pictures from the line & other equipment

Creel rack



Water bath



Heated Tensioner



Puller



Impregnation Die



ZSK26

