



Dear Sirs,

We are so free to offer a complete up to date modern needle felt line and fully automated cutting and packing line. The mats produced on that line can be used in many applications such as automotive interior structural parts, geotextiles, etc... Due to a reconcentration of the activities of the group, this activity will be abandoned.

Procotex is worldwide famed for the preparation of flax fibers for the spinning mills (hackling, carding and combing) and trading of flax raw materials.

On top Procotex is leader in the recycling of all kinds of textile wastes and stocklots, especially Polypropylene, Polyester, Acryl and all kinds of natural fibres such as flax, jute, sisal, etc.... This year Procotex is realising again a major investment in this sector. Procotex is delivering to several industries more than 30.000 tons a year:

- Automotive industry:
 - o PP for thermoforming application
 - o All kinds of acoustic fibres, pure or blended
 - o Recycling of negative wastes of thermoforming processes
- Geotextile
- Drainage
- Mattrasindustry
- Regranulation industry

Procotex is well known for their creative customer tailor made solutions for their textile wastes.

Procotex realised in 2004 a turn over of 53.000.000 Euro, 23% more than 2003.

Feel free to visit our website: www.procotex.com.

Attached you find the complete description of the line with pictures. The line is still in production and can be visited. The felt line and the cutting and packing line can be sold separately. If you have any interest, please take contact.

Yours sincerely,

Frederic Douchy
Tel: 003256483838
Fax: 003256483891
Mob: 0032475416435
f.douchy@procotex.com

Head Office Address
8 Rue Théodor Klüber – B 7711 Dottignies
info@procotex.com
Rc Tournai 78058 Vat BE 453.139.458
Factory – Finance & Administration
☎ +32 (0) 56 48 38 38
☎ +32 (0) 56 48 43 51

OFFER OF A COMPLETE NEEDLE PUNCH FELT PRODUCTION MILL

1. Introduction

The complete felt production line has been specially conceived for the production of composite felt mats from a weight of 300 grams till 2.200 grams (+- 2cm thick). The line has been commissioned in March 1997 and was bought for producing one specific product: 50% Flax with 50% Polypropylene for automotive interior thermo-bonding applications. Since the line is working with natural fibres, especially attention went to:

- strong machines
- extreme high dust extraction capacity
- precise blending between two components
- extra devices for intimate blending
- complete integrated PLC control of the complete line

The raw material fibre can be treated with a liquid spray (anti-fungus, anti-static, flame-retardant, etc...).

Through means of the needle punching machines, additional backings can be fixed on both sides of the felt.

An edge trim recycles the cut edges directly on the line.

On top, the felts can be delivered in pre-cut sheets on a full automatic cutting, packing and pressing line where the measurements of the pieces can vary from 50 cm to 200 cm by 50 cm to 130 cm.

The capacity of the line is 1.400 kg input/hour. The needle looms have a stroke of 60 mm and a frequency of 1300 strokes/min.

The line is a standard needle punch line (two needle punch looms, each one single board downstroke needling) and can be used for all types of needle punched felts of any kind of fibres (as for instance Polypropylene, glass fibre, natural fibres, Polyester, Acrylic).

The line is still in production and has about 10.000 hours production (+- 2 years in three shifts).

2. Technical data of the mill

A. One complete felt line with two needle punch machines:



The line consists of:

- a. two feeding lines for the perfect blending of at least two components:
 - i. two long feeding belts with each a buffer of ± 1.000 kg.



- ii. two Vandommele openers: these hoppers are conceived for very strong fibres as flax, kenaph, jute, etc... These hoppers serve for any fibre.
 - iii. two fine openers Temafa FOEY model 0205: capacity 1000 kg per hour



- iv. two feeding towers Temafa type FSKZ

- b. Two progressive weighing belts for determining the perfect blending between two components: type Kukla
- c. Two spraying tunnels
 - i. One long tunnel for cleaning the natural fibre from shives and a spraying unit for adding liquid treatments, such as anti-fungus, fire-retardant or others: Type Vandommele
 - ii. One short tunnel with possibility of spraying liquid treatments: type Vandommele



- d. One spraying preparation lab unit
- e. Feeding to the blending rooms with transport belts (without air transport for avoiding filters and condensers)
- f. Two blending rooms: alternatively one is filled and one is emptied: TMB: 3 m width x 6 m long x 4,8 m high. Horizontal filling and vertical emptying.
- g. A unique metal elimination unit.
- h. One pulling drum for refining the blending to the intimate fibre



- i. One feeding cheminee fed through a walking condenser. The feeder gives the material through an opening roller to a 4,6 meter wide hopper: type Rolando
- j. Hopper type Rolando, made in casting iron.



- k. Cheminee feeder with auto regulating feeding: Rolando
- l. 1 Area Weight Measuring + Control System, Fehrer type E-PW
- m. Fehrer opener type Fehrer V21, 4,4 m width
- n. 1 Random Carding Machine, type Fehrer K12 (also called „airlay system“): 4,4 m width



- o. 1 Needle Puching machine, type Fehrer NL 9/S: 4,4 m width
- p. 1 Needle Punching machine, type Fehrer NL 9/S: 4,4 m width



- q. 1 Magnetic bar
- r. 2 Unwinding devices for adding backings to the felt



- s. 1 Mahlo feltweighing controller
- t. 1 Compensator with capacity of 60 m



u. 1 Cutting device for edges and multiple rolls (in total 7 cutting units)



v. 1 Winder



- w. 1 Belt for evacuating the rollers coming from the felt line
- x. Edge trimmer Laroche, 1 meter wide for recycling the edges directly on the line



B. One complete automatic cutting line

1 complete unwinding, cutting, stacking, packing and pressing unit:

- a. Four unwinders with edge correction device



- b. One belt punching machine size: 225 cm x 200 cm – Hydraulic power of 150 tons



- c. One complete packing line consisting of:
 - a. stacking unit in two directions with possibility to evacuate automatically punch wastes or bad pieces
 - b. automatic feeding of under and top pallet
 - c. automatic pressing, tying, evacuation

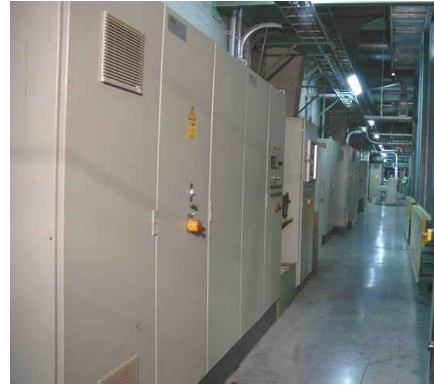


C. Others:

- 2 filters of each 50.000 m³ air capacity especially conceived for natural fibre dust + all piping



- All piping for dust extraction
- All electrical panels, included PLC's, included all the electrical wiring as existing. All equipment synchronised through a central overwhole PLC control.



D. Electrical power

The installed power is +- 280 KW.

The voltage is 380.

Hz: 50

E. Others

- View of the product on pallet

