

## **PET / new flakes or regenerated materials EXTRUSION LINE**

The plant was used in fully continuous operation which means 24 / 7 for 350 days per year. Bulk materials of all types (PET bottle flakes, resins / granule chips, regrinds of various types of materials and agglomerates) were used as input material from the European market, but also from all over the world.

The regenerated fibers produced were between 3 den and 25 den and could be used for many different applications, such as automotive, geotextiles, technical textiles and all general textile sectors – always in 100% recycled fibers.

Predominantly the line was producing a high quality black staple fiber !

### **Main components of the production line are:**

- I I. Drying of raw materials
- I II. Extrusion/Filtration
- I III. Spinning process
- I IV. Fiber take-off
- I V. Drawing/fixing
- I VI. Crimping
- I VII. Drying / fixing of the fiber
- I VIII. Cutting process
- I IX. Bale press

### **Plant features:**

- • Capacity: 35 - 40 tons/day per titer range (3 den to 25 den)
- • Scope of the plant: See enclosed
- • The plant operates in a 2-step process
- • the plant consists of two spinning lines (line C and line D) and one finishing line incl. bale press (semi-automatic baling press)
- • The plant consists of CE conform machine parts

- The plant complies with the safety regulations of the EU
- • Necessary operating personnel: 6-7 operators per shift (depending on company organization and qualification of the employees)
- • Accessories: spinneret packages + spinnerets, cutting wheels, auxiliary/packaging material
- • The plant is as much automated as possible
- • The equipment is running under Siemens S 7
- • Energy screening / monitoring through „EnEffCo“ system
- • All existing technical documentation will be handed over
- • Process data: as the plant was operated by ourselves, we can provide all necessary process data

The plant has been extended and modernized several times to meet the high quality demands on the fiber market, see following new acquisition:

- a) 5x SCHOLZ dosing systems - 2013
- b) 4x extruder screws (line C) - 2014
- c) 24x spinning pumps (line C) -2015
- d) 25x spinning pumps (line D) - 2016
- e) Motor + gear extruder (line D) - 2016
- f) 1x EREMA screen changer (line C) - 2017
- g) Reel drive unit (line C) - 2019
- h) Additional suction unit (line C) - 2019
- i) Reel drive unit (line D) - 2020
- j) 1x motor extruder (line C) - 2020
- k) 1x heating-cooling circuit for stretching units - 2017
- l) Conversion of all equipment of the finishing line to individual drives from SIEMENS - 2015
- m) Dryer belt drive - 2018

n) Conversion of balers (new control system, control cabinets, control panels, insertion shield with fiber distribution, condenser) - 2016

o) Overhaul of the hydraulic unit of the baler - 2018

p) Conversion to doctor systems on roller mills and fixers - 2016/2018.

**FAQ:**

1) Plant capacity: 1400 - 1650 kg/h depending on the fiber types which were produced

2) Equipment list (only the bigger ones)

3) See annexes "Block diagram

4) Plant dimensions (space requirement) (L x W x H) a. Spinning section: 20x30x18m

b. Finishing line: 18x120x10m

5) The plant consists of CE compliant machine parts

6) Necessary operators: 6-7 operators (depending on the company organization and qualification of the employees)

7) Complete equipment (itemized list of components) of the offer can be sent by catalog

8) existing auxiliary as well as packaging materials are also included

9) Production know-how and process data can be provided





