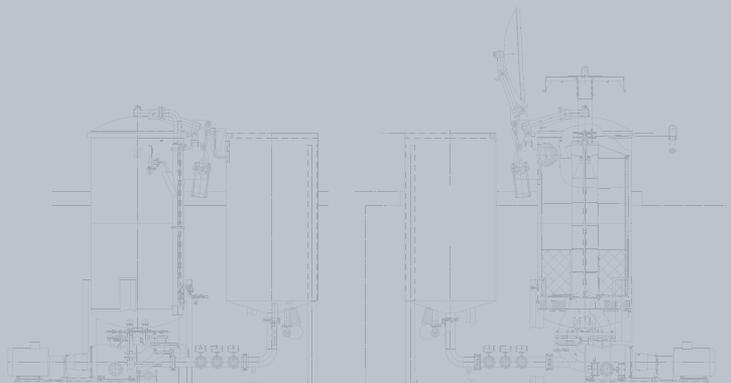


FIBRE TECH

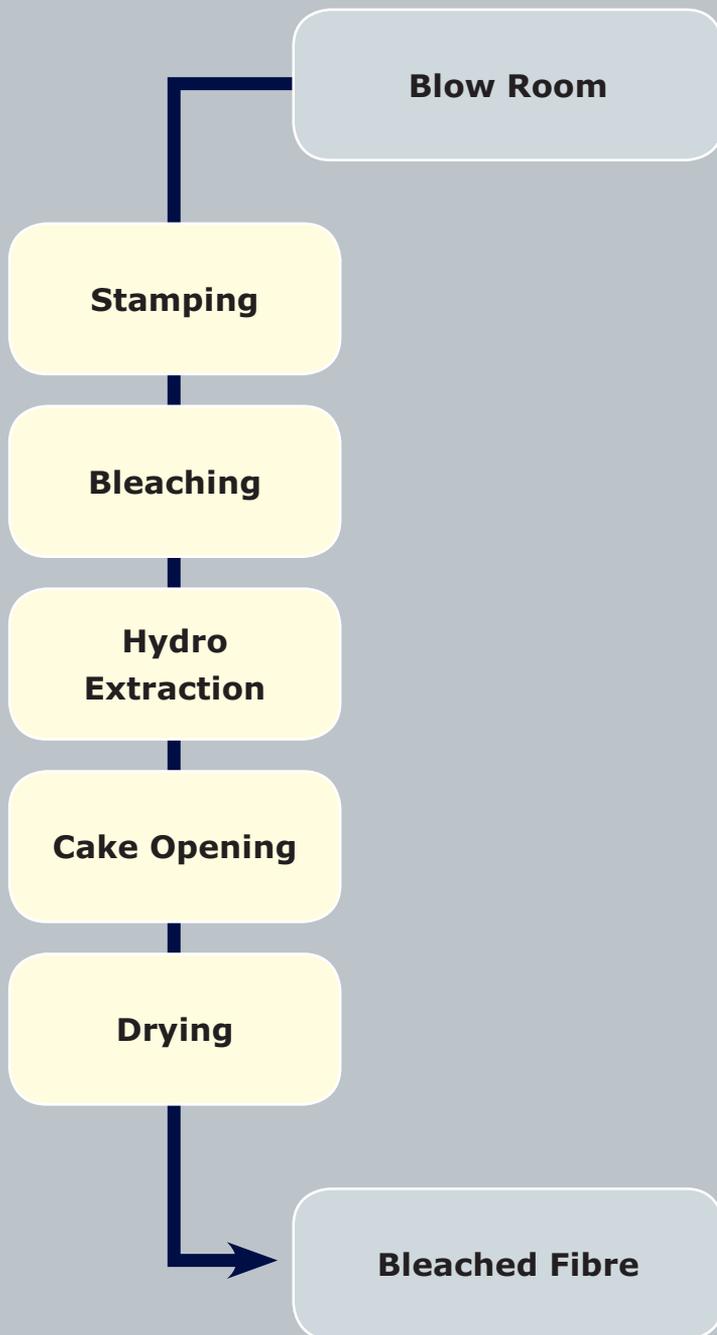


Finishing of Cotton Fibre



FINISHING LINE FOR COTTON FIBRE

Erbatech finishing equipment was developed in close cooperation with cotton fibre producers and meets highest standards in terms of machine quality and usability.



With a fibre finishing line you can turn low-cost or waste fibre material into a marketable item. As a second step a final medical or hygiene consumer product can be easily developed.

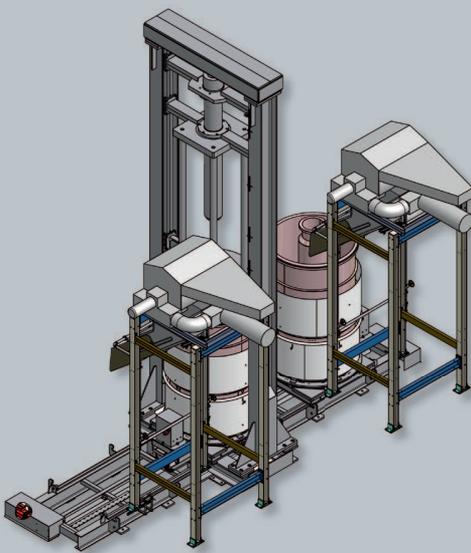
Erbatech acts as a supplier for individual components - or as the contractor for the complete finishing project. In both functions we can add our extensive knowledge and expertise.

CAKE FORMATION – STAMPING PRESS

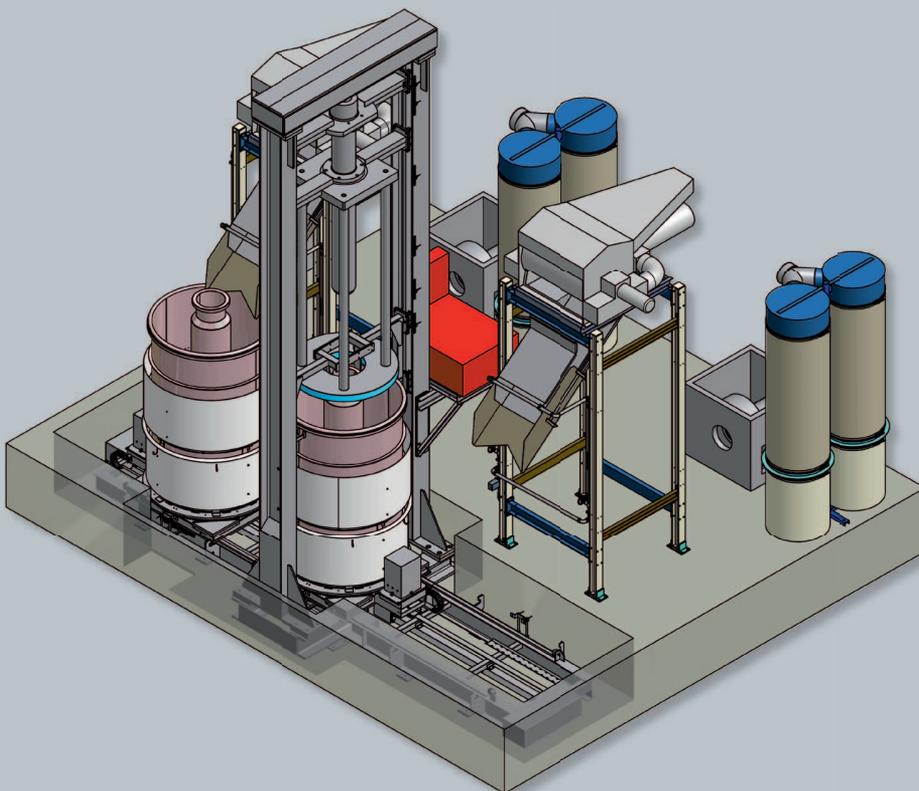
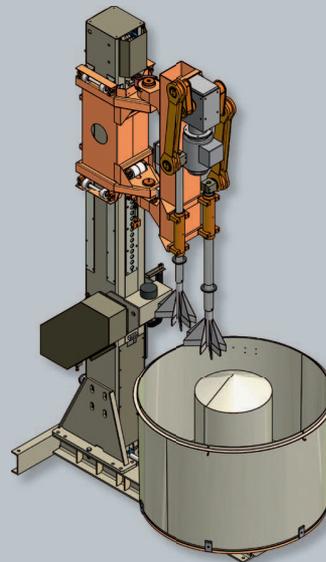
The cake formation in a stamping press is a process step which defines the cake density and characteristic. Stamping presses are supplied in two different configurations:

- Automatic hydraulic cake press
- Conventional stamping press

HYDRAULIC CAKE PRESS

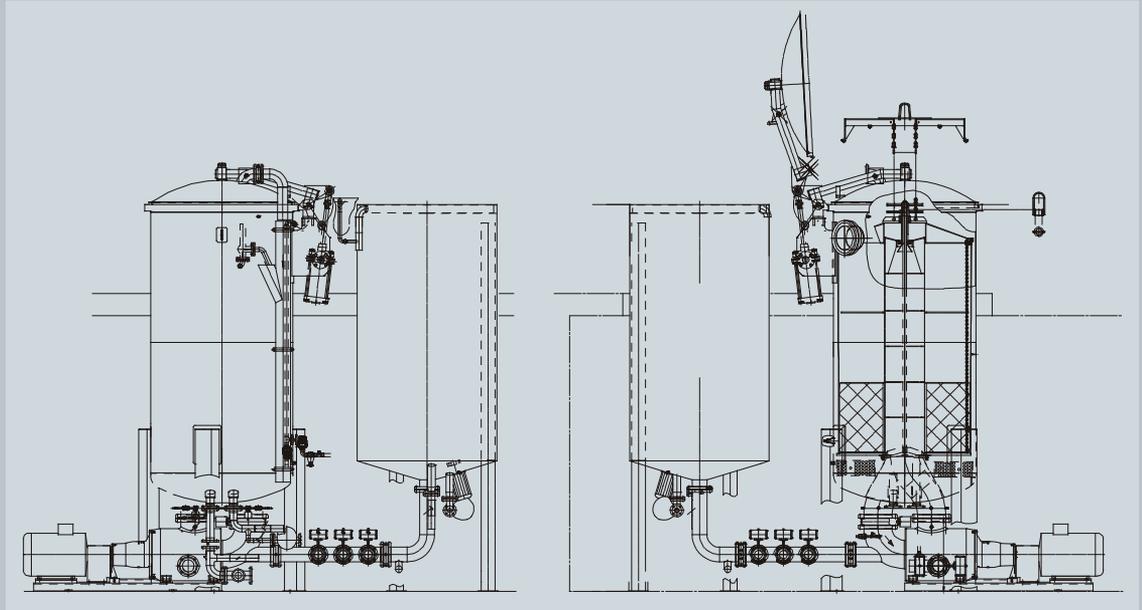


CONVENTIONAL STAMPING PRESS



AUTOMATIC BLEACHING MACHINE - TURBOSTAT

In cycles of 2 to 3 hours, the cakes are bleached (with hydrogen peroxide), rinsed and neutralized. The bleaching is controlled by an automatic process control.



OBERMAIER TURBOPUMP

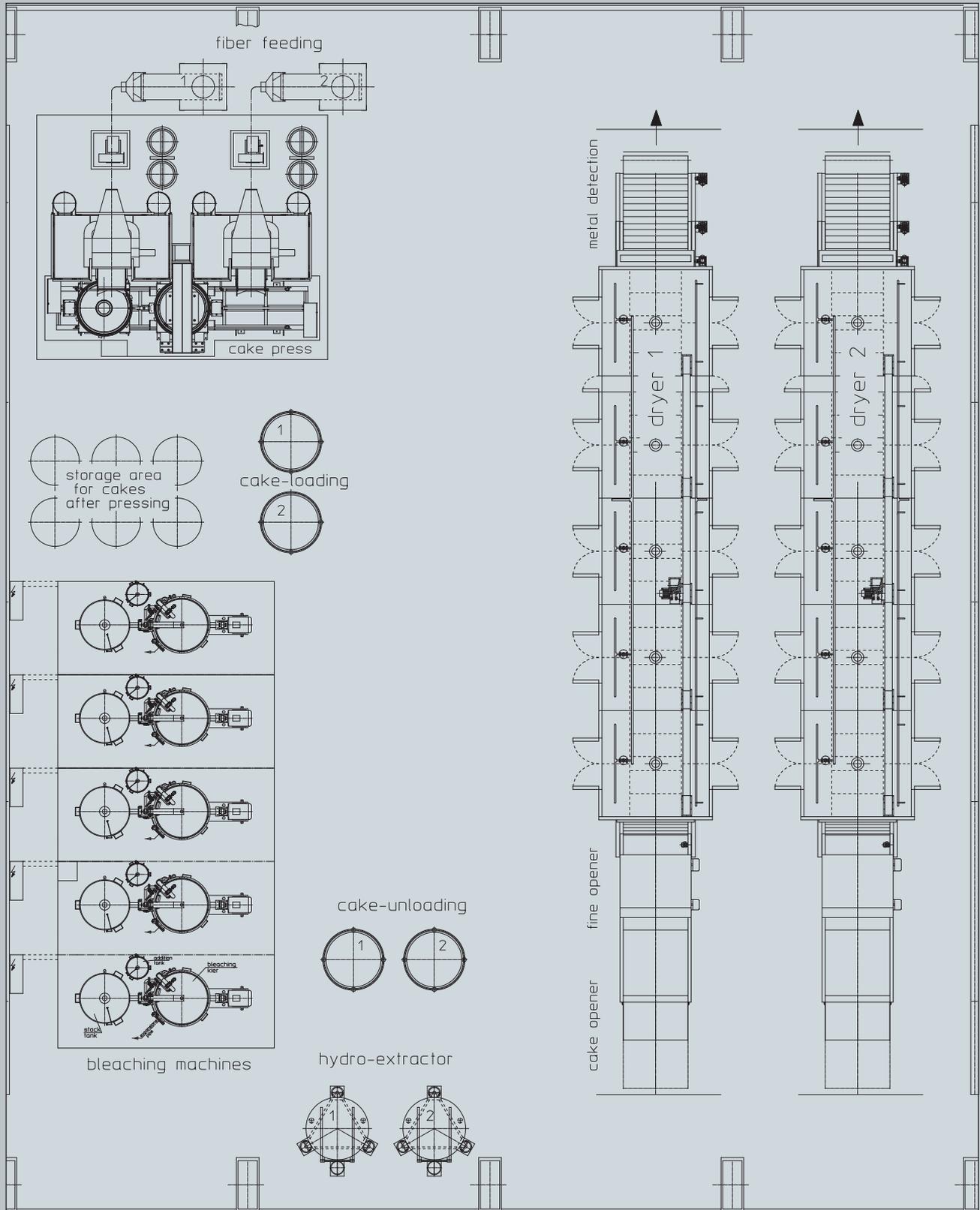
The core of all TURBOSTAT machines is the unique OBERMAIER TURBOPUMP. This reversible axial-flow pump offers almost constant characteristics at different speeds, making it suitable for any differential pressure that builds up between different materials.



Unnecessary reverse-flow valves and distributors are eliminated by this pump design, which leads to the shortest liquor ratios and lowest power consumptions among all competitors.

PLANT LAYOUT EXAMPLE

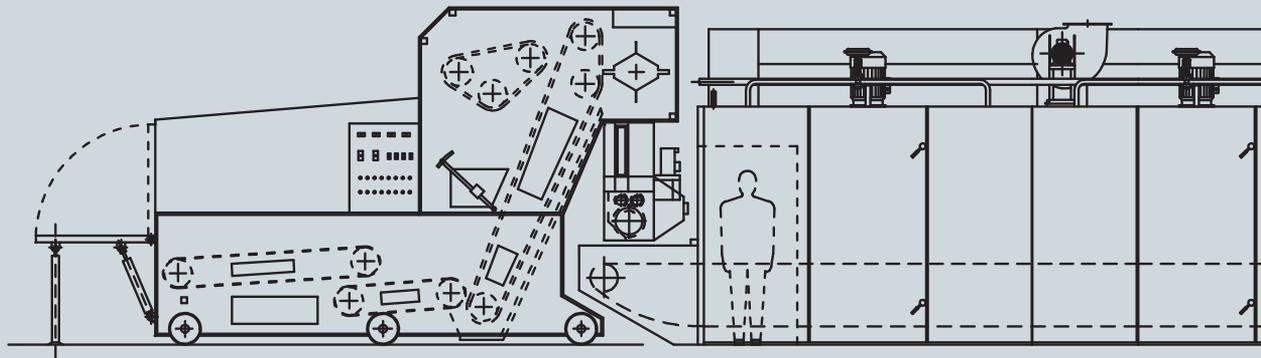
Floor space 1.200 m²



CAKE OPENING AND DRYING LINE

The quality and performance of the fibre drying depends largely on the cake opening process. The fibre needs to be spread evenly over the full width of the dryer. A fine opener fulfils the task to disentangle any lumps of fibre and forms a layer of even thickness and permeability.

Example: 3-Chambre Machine



Cake Opener

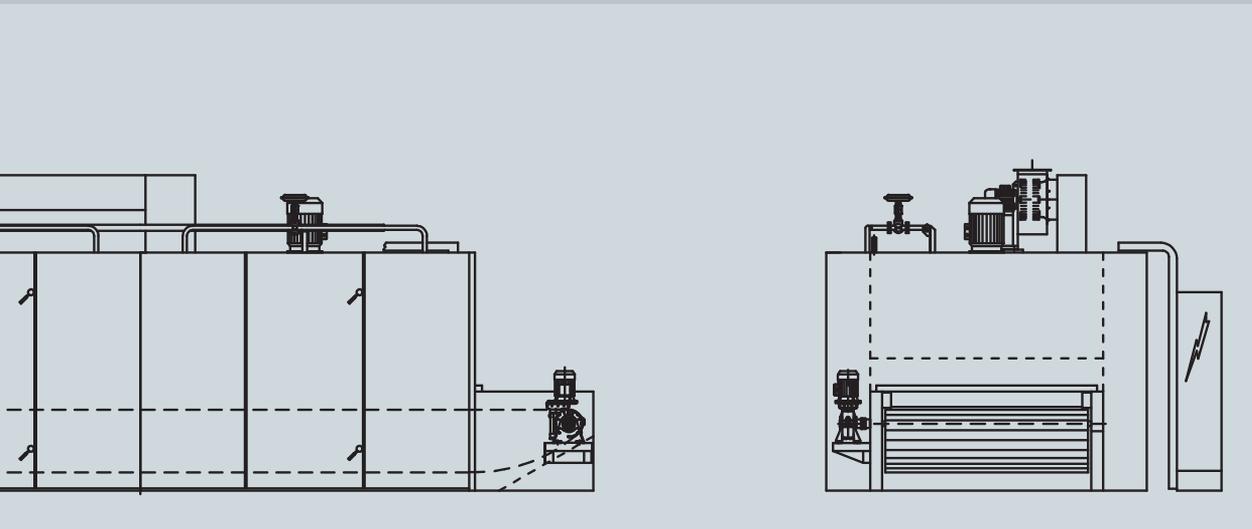
The cake is hydraulically lifted onto transport belts. The cakes are rasped away by the pinned hopper feeder belt.

Hopper Feeder

Passing through the hopper feeder, the fibre gets portioned for uniform fibre feeding into the wet-opener. Thereby, a voluminous and regular layer of single fibres (which stick together) is formed.

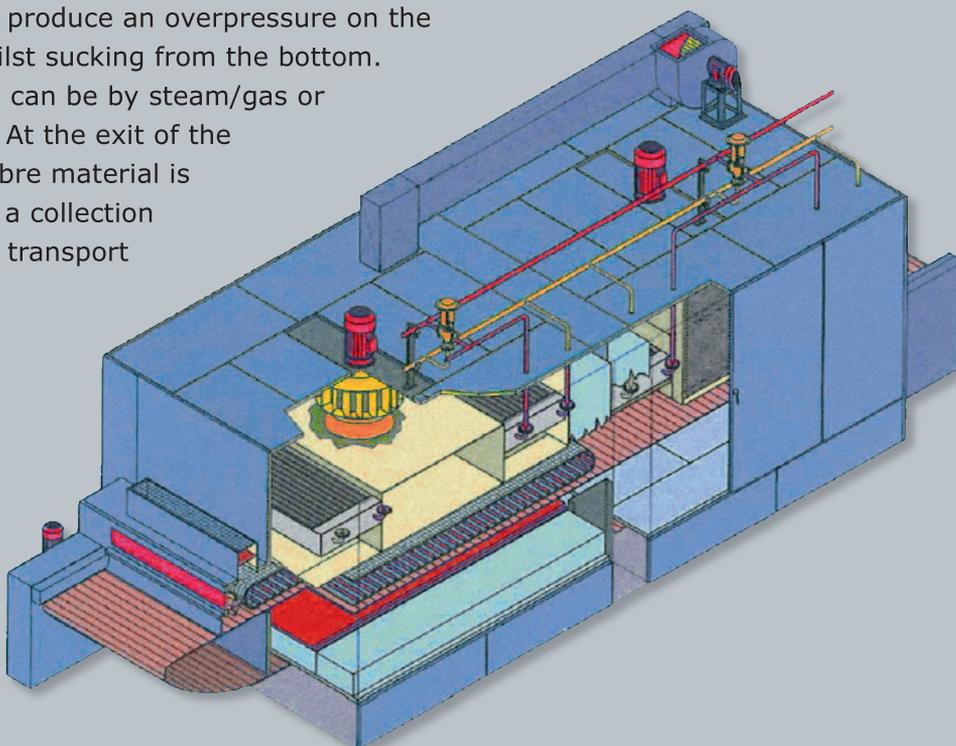


Two dryer types are available: a) belt dryers and b) drum dryers. Both dryer types work on the basis of penetration of heated air through the fibre layer by creating an overpressure/suction by means of fans. The controls are fully automatic and manage all functions and parameters of the machine.



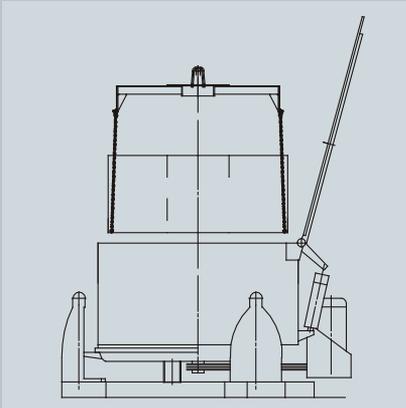
Suction Belt Dryer

The fibre layer on the belt is penetrated by hot air - thereby being continuously and gently dried. Strong fans produce an overpressure on the top side whilst sucking from the bottom. The heating can be by steam/gas or thermal oil. At the exit of the dryer, the fibre material is sucked into a collection pipe for the transport to the next production step.



HYDRO EXTRACTOR

A hydro-extractor works by spinning the fibre cake at high RPM in order to drive out the water by centrifugal force. Before hydro-extraction, the cake contains approx. 200 % water – after, the residual moisture is reduced to around 55%. Each centrifuging cycle takes about 20 minutes.



TECHNOLOGY SUPPORT

Erbatech has a textile technology team that can assist you in the different stages of project planning. Our experts can assist you regarding the selection of processes, machines and plant infrastructure.

OBERMAIER was founded in 1882. Since 2006 the company belongs to ERBATECH group, a well-known producer of finishing machinery.

In this combination, our customers benefit from a strong partner with responsive service and own manufacturing facilities.

ERBATECH's headquarter and production are located in Erbach, south of Frankfurt.



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