

Low temperature belt dryer for wooden biomass



drying technology

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STELA Laxhuber GmbH

We are an internationally orientated company that has been successful in its activities in the drying of biomass products on belt dryers - we were active in this sector from the beginning and have had a defining impact on the development of technology with low-calorific heat for this sector. Today we are market leader with more than 140 low-temperature belt dryers in operation worldwide.

Technical specifications

- Output ranges of up to 50 t water evaporation/h realized
- Total output of the lines for sawdust drying corresponds to an annual production of 5,000,000 t pellets
- Total water capacities of 5.3 million tons per year thus far
- Own production facilities with continuous quality control by qualified and trained STELA employees

Bandtrockner finden Anwendung in den verschiedensten Industriezweigen und Produktparten:

- Pellet industry
- Wood glazing
- Biomass to liquid (BTL)
- Wood products industry
- Pulp and paper industry
- Sawmills
- Biomass power plants

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In addition to conventional (wooden) biomass, STELA belt dryers can also dry the following products:
Coal pellets, pulp, straw, garden waste, pomace and much more.



bark



sawdust



wood shavings



wood chips



OSB-Strands

Heat sources

The greatest benefit of the belt dryer is its use of low-temperature heat sources, which are frequently available as waste heat.

- It makes sense to use heat sources with low temperatures from 30°C in the belt dryer
- With the use of multi-stage heating circuits, various heat sources can be combined in the belt dryer

Conventional (typical) heat sources include (are):

- Hot water from cogeneration
- Hot water from flue gas condensation
- Low-pressure steam
- Waste heat from paper production

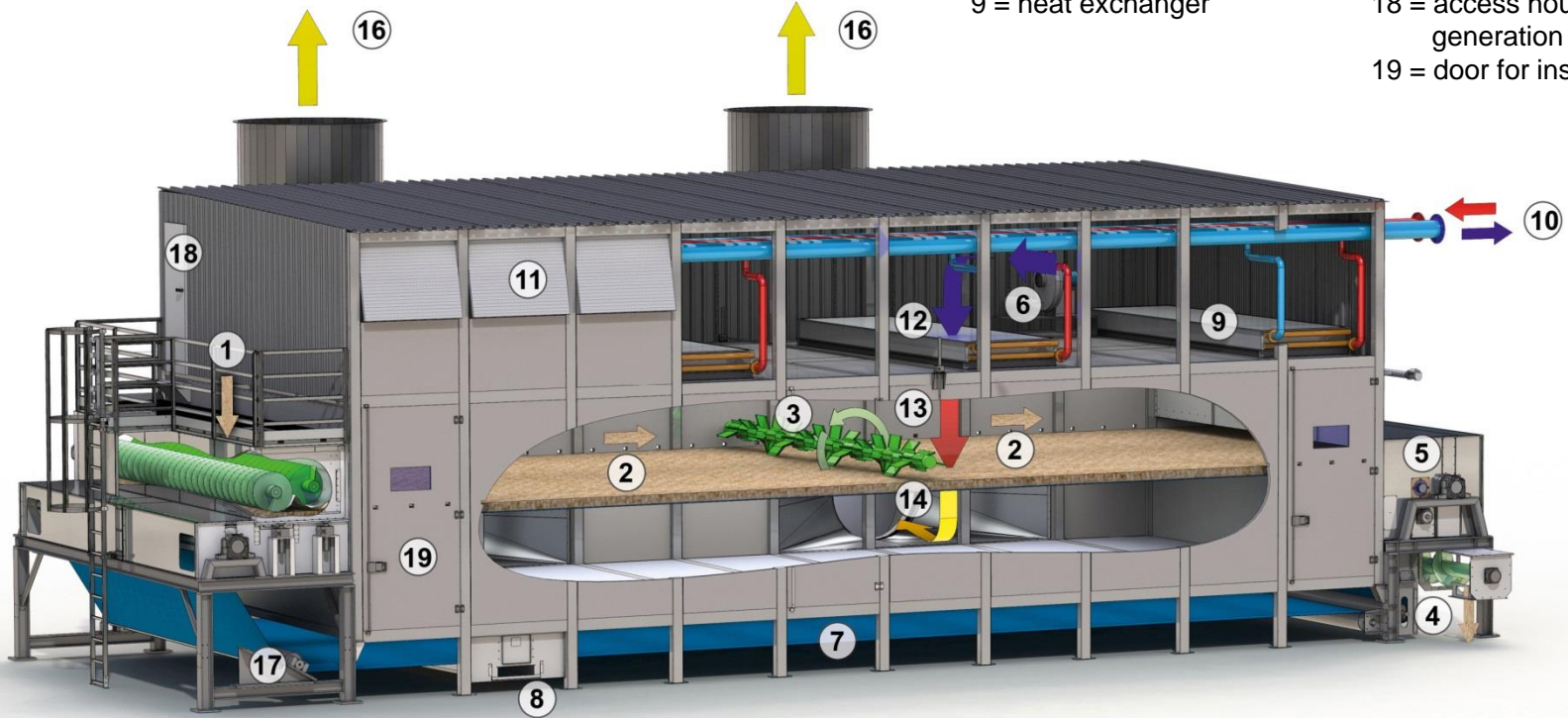


Construction Characteristic features of our dryer lines

- Product turning device for an uniform final moisture and energy-saving ventilation of the product
- Multivent system with multiple directly coupled, low-noise radial fans for continuous air distribution with minimal pressure loss and noise emissions
- Guaranteed low dust emission values in accordance with the German Pollution Control Act (BImSchG)
- Modular line system, which can be easily expanded at a later time
- Low thermal and electrical consumption values by optimally synchronized components
- Design in three various belt widths for individual adaptation according to customer requirements
- Inspection doors for easy access to dryer inside
- Insulated dryer body
- A closed construction enables outdoor installation at temperatures down to -40°C and beyond.

Construction

- | | |
|----------------------------------|---|
| 1 = feeding station | 10 = heat supply |
| 2 = product layer | 11 = fresh air intake |
| 3 = turning device | 12 = fresh air |
| 4 = discharge screw | 13 = heated air |
| 5 = belt cleaning system (dry) | 14 = exhaust air |
| 6 = fan for belt cleaning system | 15 = exhaust air fan |
| 7 = web belt | 16 = exit air |
| 8 = belt cleaning system (wet) | 17 = belt alignment |
| 9 = heat exchanger | 18 = access housing for heat generation |
| | 19 = door for inspection |



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Quality – Made in Germany

The core of our philosophy is own production. In order to react flexibly to customer requests, meet with customer lead time best we offer our wide range of production. Our production process begins with the raw material, which is processed with CNC-controlled machine tools. A particular feature of the production is the low-weld construction, which enables a long construction type of the drying lines. The materials which are used are stainless steel, aluminum and galvanized material - which makes subsequent painting as anti-corrosion protection entirely unnecessary.

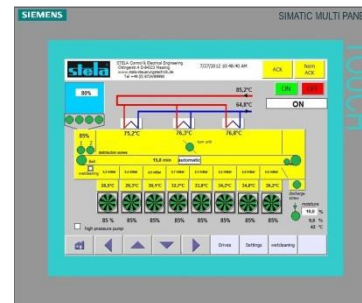
Service is a major emphasis at our company. Since our customers are production operations, shut-downs cost money. Problems are solved by a mobile service team - whether by telephone or on-site visits. This is an additional advantage of our production depth: necessary spare parts can be provided immediately.



Control technology

With our own control and electrical department, we can flexibly address customer requirements. With the highest quality claim, we offer you a broadly diversified portfolio of electrical engineering, automation technology, process visualization, maintenance, switchgear construction and electronic MSR assembly from one location. Based on our ambition quality standards,....

Our services include: Set-up and wiring of EMC-appropriate switchgears; power distribution; low-voltage distribution up to 3200 A; measurement, regulating and control cabinets; PLC and PLS cabinets, control and display panels; production in accordance with DIN/VDE, EN; equipment of the lines according to ATEX; tailored implementation of customer requests; conversion and expansion of switchgears; compensation systems...



Worldwide references



Projct: Södra Cell
Sweden
Type: BT 1/6200-49,5
Product: bark



Project: Graanul Invest
Estonia
Type: 2x BT 1/6200-30
Product: sawdust

Worldwide references



Project: BIOENER
Uruguay
Type: BT 1/6200-48
Product: sawdust, wood chips



Project: Arauco
Chile
Type: BT 1/6200-61,5
Product: bark

Worldwide references



Project: Mondi Frantschach GmbH
Austria
Type: BT 1/6200-42
Product: bark



Project: RWE/German Pellets
Germany
Type: BT 1/6200-48
Product: sawdust

Worldwide references



Project: Natures Flame
New Zealand
Type: BT 1/6200-52,5
Product: sawdust



Project: Ruderatshofen Futtertrocknung e.G.
Germany
Type: BT 1/6200-33
Product: wood chips, bark, gras, straw

Worldwide references



Project: Stelmet
Poland
Type: BT 1/6200-30 and BT 1/6200-24
Product: sawdust



Project: Pfeifer Holz GmbH
Germany
Type: 4x BT 1/6200-36
Product: sawdust

Worldwide references



Project: German Pellets
Germany
Type: 2x BT 1/6200-22,5
Product: sawdust



Project: Imal
Italy
Type: BT 1/6200-43,5
Product: OSB-Strands



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STELA Laxhuber GmbH | Oettinger Str. 2 | D-84323 Massing
Tel. +49 (0) 8724/899-0 | E-Mail: sales@stela.de | www.stela.de