Low temperature belt dryer for wooden biomass
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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 techno-logy 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 Produktsparten:
• Pellet industry
• Wood glazing
• Biomass to liquid (BTL)
• Wood products industry
• Pulp and paper industry
• Sawmills
• Biomass power plants
Low temperature belt dryer
for wooden biomass

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