

Wood Pelleting Plants

Bespoke from 300 kg/h
to 8,000 kg/h per press



Wood Pellets: The Best-Selling and High-Quality Product



For decades KAHL pelleting plants have been applied successfully for compacting organic products of different particle sizes, moisture contents, and bulk densities.

We are constantly developing our machines in order to improve their capacities and economic efficiency. KAHL pelleting presses are particularly appropriate for products which are difficult to pellet.

Our services:

- Consultation, assistance in obtaining approval, engineering, commissioning, installation, and after-sales service.
- KAHL supply turn-key plants for the recycling sector.
- Product tests can be carried out in the KAHL pilot plant.

Possible applications of the KAHL pelleting press:

- Wood waste:
 - Wood shavings
 - Wood chips
 - Sawdust
 - Wood and sanding dust
- Straw:
 - Miscanthus
 - Bagasse
- Other biomasses.



KAHL pan grinder mill: wood grinding (wet and dry)

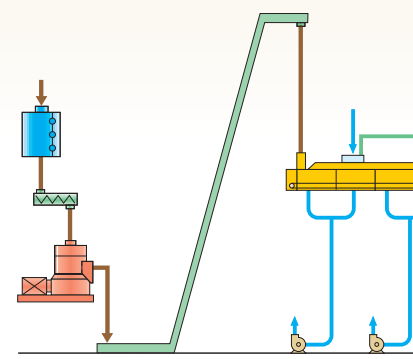
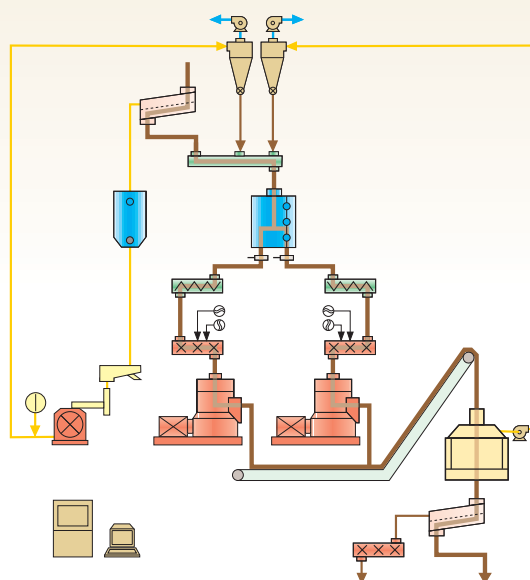
- Capacity range from a few hundred kg up to 40 t/h and more
- No ATEX problems
- Low energy consumption
- No noise protection measures.

KAHL Wood Pelleting Plants

Amandus Kahl offer pelleting presses with a drive power from 3 kW to 500 kW. In total, 11 different sizes are available.

The production capacities of most plants range between 1.5 and 8 t/h.

Smaller plants work efficiently, too. Larger plants of up to 40 t/h are provided for industrial production of pellets.



Pan grinder mill

Quality Can Be Recognised at First Glance!



High pellet quality
= **high bulk density**

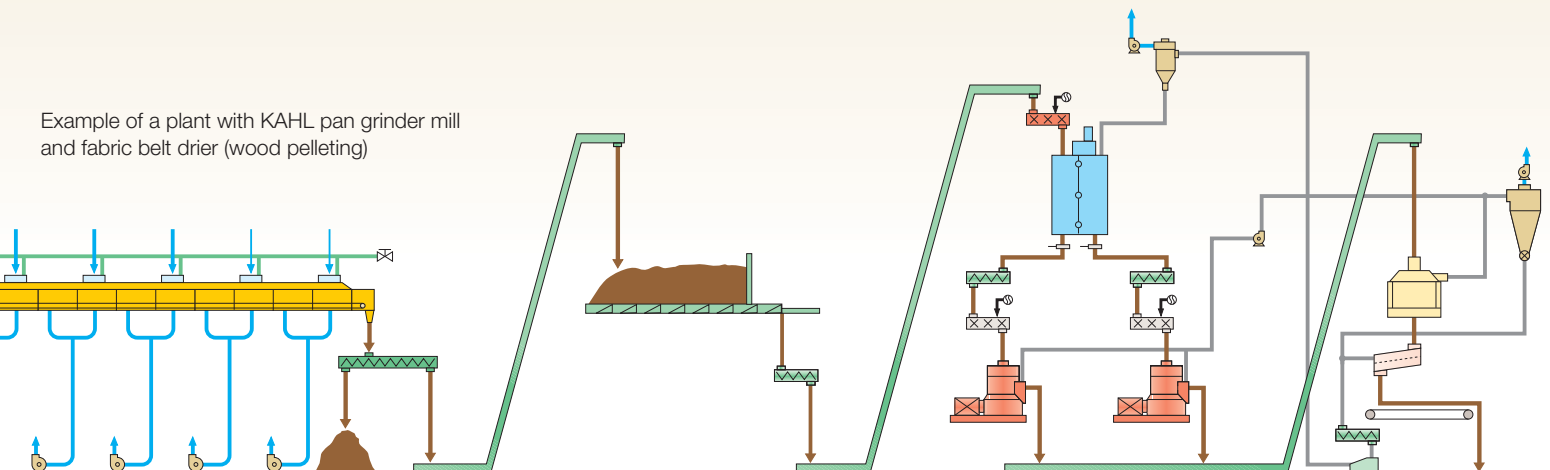
High bulk density
= **better combustibility**

Due to the great variety of input products and the different plant sizes available, we plan and calculate KAHL plants according to the requirement of the customer considering the capacity and the local conditions.

There is, for example, the small pelleting plant for only 300 kg/h for the cabinetmaker's workshop pelleting its own dry wood waste. Such a plant only works 4 hours a day and still is economically efficient.

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Example of a plant with KAHL pan grinder mill and fabric belt drier (wood pelleting)



Drying plant
with KAHL fabric belt driers

Pelleting and cooling plant

High-Capacity Presses from KAHL

The product is pressed through a die by pan grinder rollers, formed into endless strands, and then cut to the desired particle length by means of knives.

Prerequisites for optimum operation are continuous product feeding into the press and a homogeneous, sufficiently pre-crushed product. Due to the large volume reduction when compacting wood and wood shavings, particularly sawdust from about 100 to 650 kg/m³, the capacity of the machine, i.e. the press interior, must be as large as possible.

Further requirements made by the wood industry are a robust machine construction and a high availability of the plant.



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Input Products for Wood Pelleting Plants

Depending on the input product, which can be dry wood shavings, wet sawdust, wood chips or even whole tree trunks, different process steps are required.

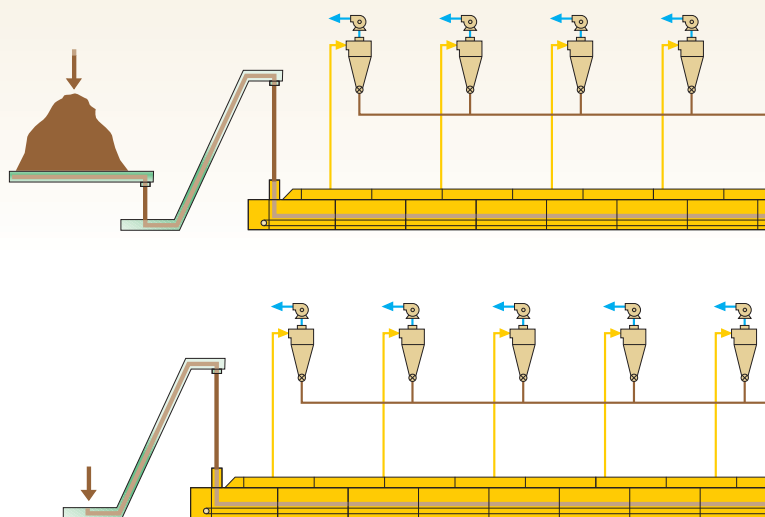
Directly before the pelleting press, we need a product with a granular size of

approx. 4 mm and a residual moisture content of approx. 10 %.

This means tree trunks require the maximum process steps: debarking, wet chipping, drying, dry grinding, pre-conditioning, pelleting, cooling, storing or loading.

If wet sawdust is available, for example, drying will be the first process step.

In case of dry, pre-crushed product, the actual pelleting plant starting with pre-conditioning will be sufficient.



Drying plant

We Adjust to a Better Quality



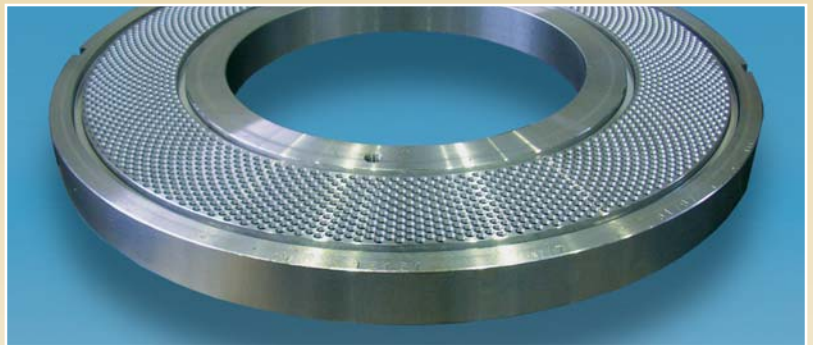
Pan grinder head with guide plates
for exact product distribution.



We bear up against high demands on quality!
Large bearings
= long service lives.
Long service lives
= less wear costs.

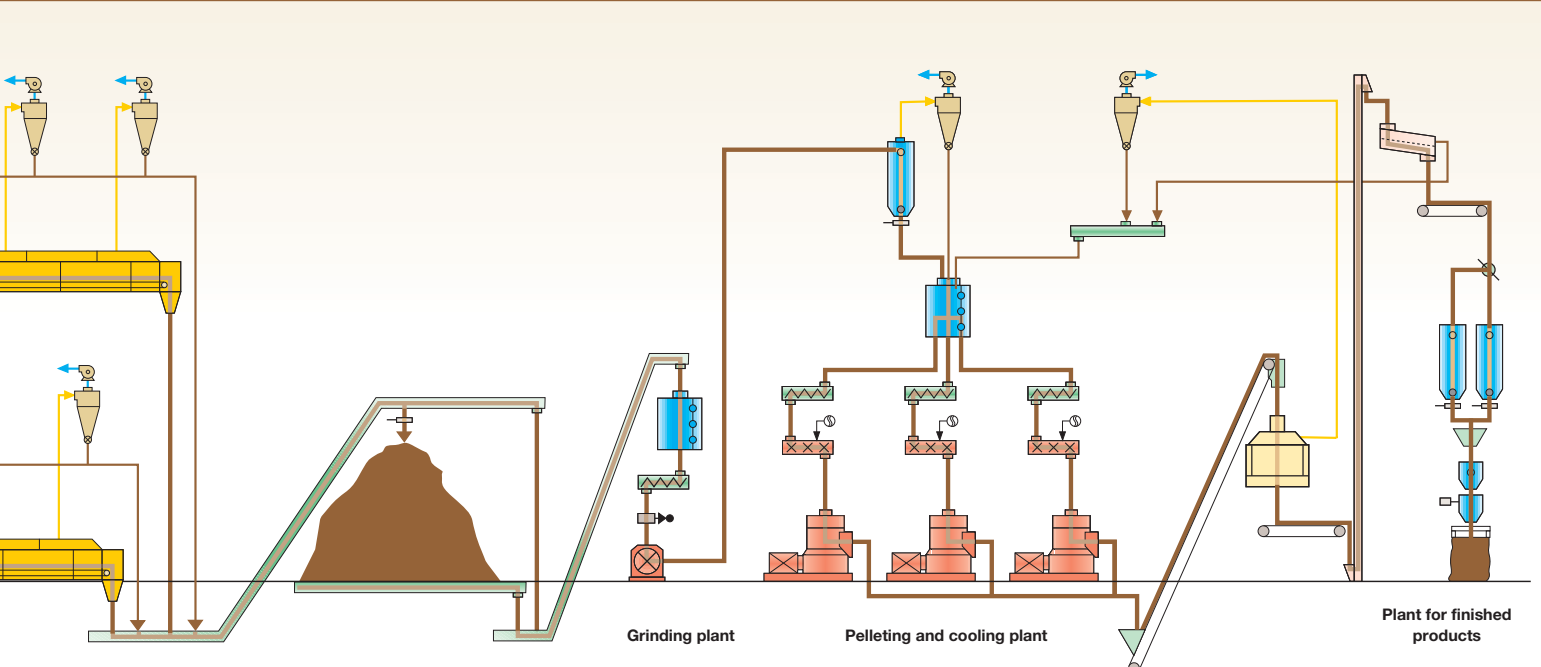


Cutting device
for smooth edges
and less fines.



Pan grinder head stop
for optimum
adjustment of
rollers and die.

We serve with top quality!
Good pellet quality, long service
lives and fast die change ensure the
productivity of the KAHL plants.



Bespoke Plants for High-Quality Products



Our own production line guarantees quality

All main machines of the pelleting plant, i.e. pan grinder mills, hammer mills, belt driers, pelleting presses and coolers, are produced in our factory at Reinbek near Hamburg.

Here we also have our own pilot plant for carrying out pelleting tests with the most different products.

KAHL Fabric belt driers

Normally, an industrial pelleting plant is equipped with one or several driers and ideally works round the clock, up to 8,000 operating hours per year. KAHL Belt driers can be operated with the most different forms of thermal energy: Hot water, steam, gas, oil or wood can be used as energy source.

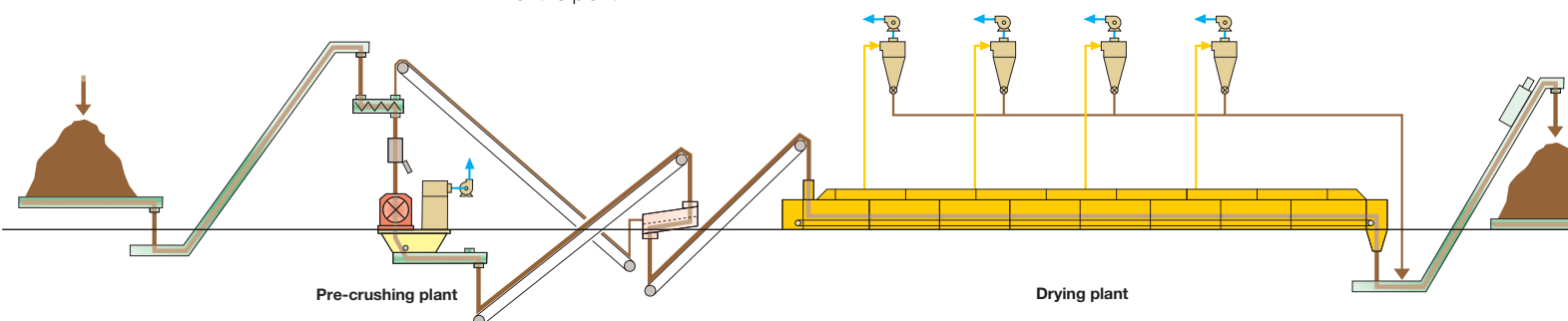
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Competence for Industrial Wood Pelleting Plants

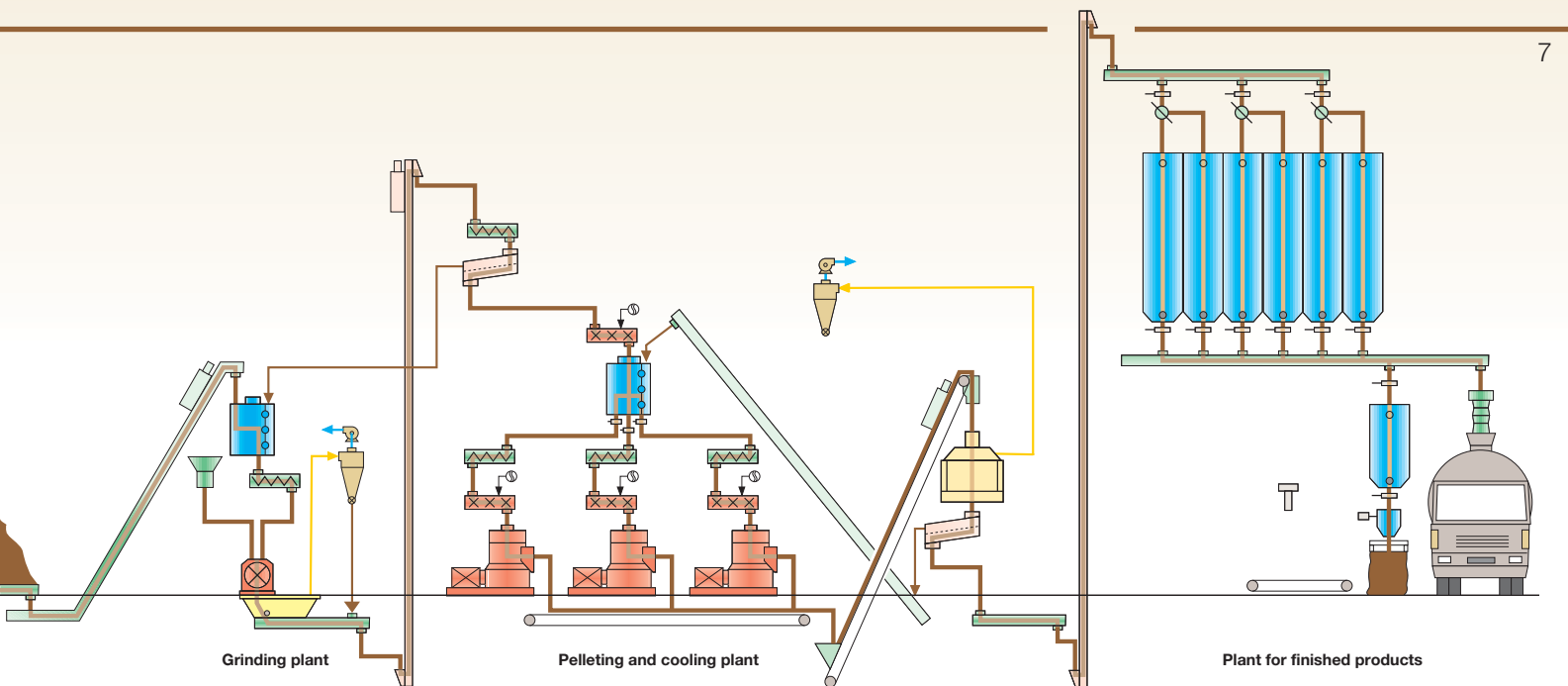
Since 1925 AMANDUS KAHL have built pelleting plants. We attend to our customers with maintenance and service during the complete service life of the plant.

These are generally several decades during which our technical after-sales service is locally available for our customers.

Thanks to the state-of-the-art control and regulation technique, we use all possibilities for remote maintenance of our plants via modem and internet.



Presses from KAHL: Construction of Heavy Machinery Pays Off



KAHL as Partner of the Recycling Industry



KAHL Pelleting presses are extremely suitable for compacting a large variety of products.

Pelleting of renewable raw materials for energy recovery has been a topic for KAHL for more than 30 years, since we already received corresponding research assignments after the energy crisis in the 1970's. Straw and dried forage pelleting plants have formed part of our delivery programme since then, too. So, we can rely on long-standing experience.

Heavy machinery pays off when it comes to processing of these

products. The result is a high operational safety and availability for continuous operation of the plant.

Possible applications of the KAHL pelleting press:

- Wood waste
 - Sawdust
 - Wood and sanding dust
 - Straw
 - Agricultural biomass
 - Waste paper
 - Municipal and industrial waste
 - Waste tyres
 - Sewage sludge
 - Plastic waste
- and many more ...



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