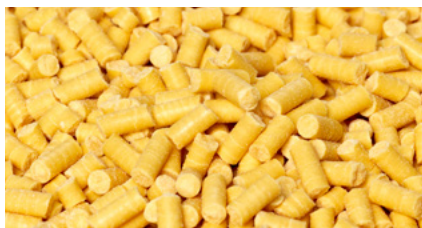
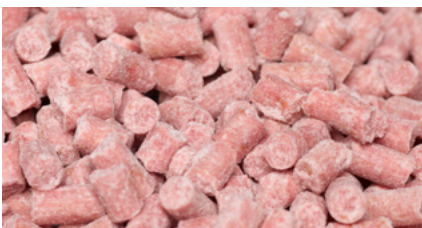


PELLET MILLS

FOOD INDUSTRY





AMANDUS KAHL ACCOMPANIES YOU

on your way to the right decision



AMANDUS KAHL looks back on around 100 years of expertise in manufacturing flat die pellet mills.

The food industry is a key sector for the KAHL Group. KAHL, SCHULE, NEUHAUS NEOTEC, HEINEN and DEVEX supply machines and plants for many different fields of the food industry, including the production of instant products, coffee processing and the production of food extracts. AMANDUS KAHL has been manufacturing flat die pellet mills since the mid-1920s and thus looks back on around 100 years of expertise in the design and manufacture of pellet mills. Owing to the special arrangement of the pelleting elements in the machines of the O-series, pellets can be produced even from particularly moist and pasty products. KAHL pellet mills are characterised by sophisticated technology and quality "Made in Germany". The machine repertoire for the food sector currently comprises 6 types of pellet mills with different sizes that meet our customers' requirements.



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INSTANT PRODUCTS

For uniform dosing and a constant
flavour experience

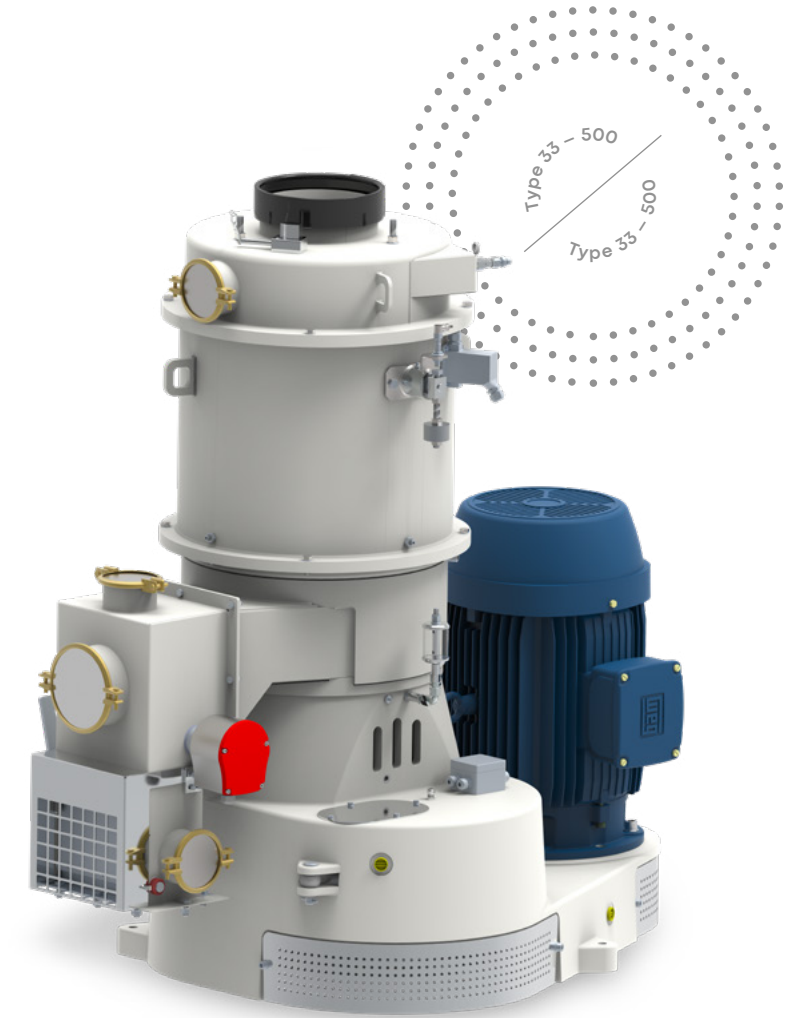


The requirements in the food industry are high. This applies especially to the hygiene standards. It is equally important to ensure uniform mixtures. The use of pellets in the manufacture of end products ensures uniform taste and consistency through reliable dosing. With the fluidized bed technology, KAHL also serves the food industry at the highest level. Processes such as spray granulation, agglomeration, coating or encapsulation, for example, improve the solubility of products or enable the encapsulation of active ingredients.

**Do you have questions
regarding the AMANDUS
KAHL fluidized bed
technology?**

We will be happy to
answer them and can be
reached here:

info@akahl.de
+49 (0)4221 859-0
akahl.com



Main fields of application of pelleting

- Instant products such as sauce powder,
tea, coffee, soup powder, fruit powder
- Additives
- Vitamin mixtures



↑ Sauce powder



↑ Strawberry powder



↑ Cheese powder



↑ Pea protein isolate



TEA & COFFEE

In all variations



↑ Hibiscus pellets



↑ Rooibos tea



↑ Coffee chaff

Hibiscus pellets are used as a natural colourant in the food industry. By-products such as coffee chaff can be compacted and subsequently used as raw components in the feed industry. KAHL and NEUHAUS NEOTEC are an internationally successful team in the coffee and tea industry. NEUHAUS NEOTEC is renowned worldwide for high-quality green coffee centres and efficient roasters and is your top partner when it comes to cocoa and nut processing.



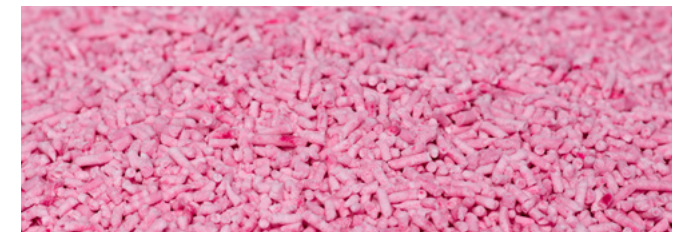
More information on coffee processing
by NEUHAUS NEOTEC

ADDITIVES

For uniform dosing of vitamins, thickeners and flavourings



↑ Vitamin mixture



↑ Dextrose

Granules produced with KAHL pellet mills ensure uniform mixing ratios and constant quality. AMANDUS KAHL customers benefit from high quality machines, flexibility, and know-how. In cooperation with DEVEX, a specialist for extraction plants, the KAHL Group not only provides broad expertise in pelleting, but also in the extraction of various types of additives.

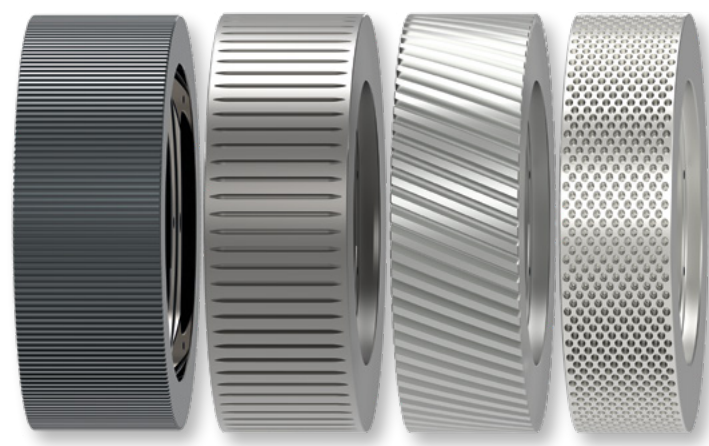


More information on the process
technology by DEVEX

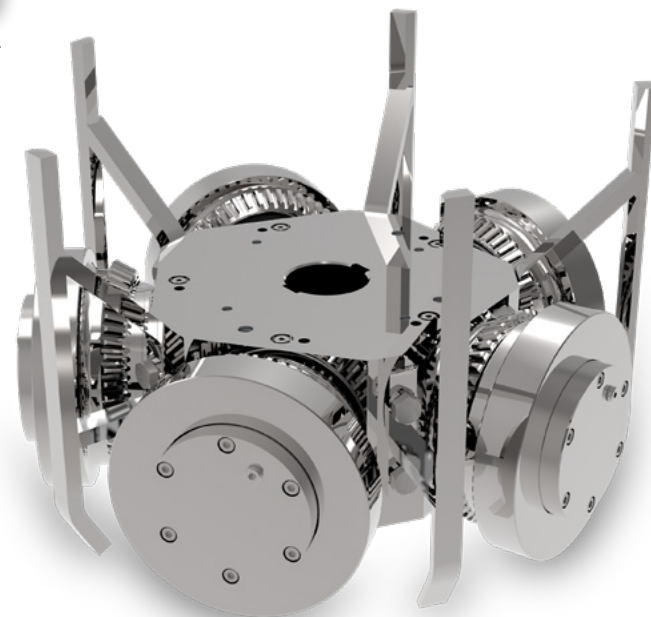


PAN GRINDER ROLLERS AND DIES

Depending on the field of application, different hardening processes are required, all of which are carried out in KAHL's own hardening shop for pan grinder roller and die production



↑ Different pan grinder roller designs



↑ Pan grinder head on flat die



Put an end to loss lubrication and unwanted substances in your food. Due to the axial face seals used by KAHL, lubricants do not penetrate into the pellets during production.

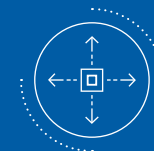


ADVANTAGES OF KAHL FLAT DIES



Advantages offered by the machine

- Sturdy design
- Long service life and low wear
- Low consumption of operating materials
- Low operating costs
- Fast and easy die change
- Low space requirement and footprint
- Low noise and low vibration
- Large pelleting chamber for products with low bulk density
- Large pan grinder rollers with low circumferential speed
- Adjustable roller gap due to hydraulic system and thus easier machine start
- Product feeding by gravity
- Low maintenance – remote diagnosis possible



Advantages for the products to be pelleted

- Depending on the product, direct pelleting without fine grinding
- Highest flexibility in pelleting due to large variety of pelleting tools
- High pellet quality



Advantages offered by AMANDUS KAHL

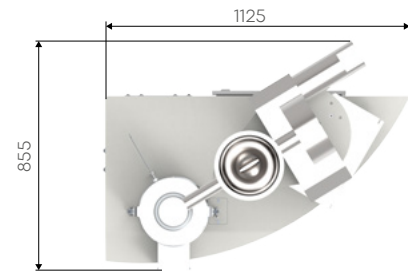
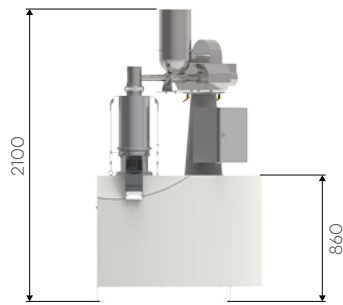
- High vertical range of manufacture
- Long-term service also after commissioning
- 6 different pellet mill sizes
- Product-specific design adaptations



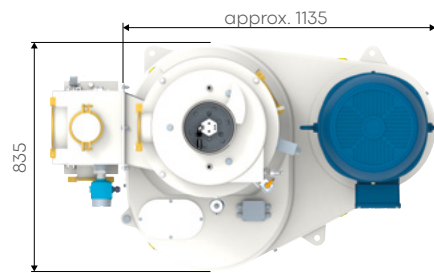
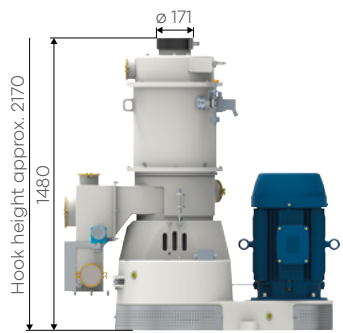
PELLET MILLS

Food industry

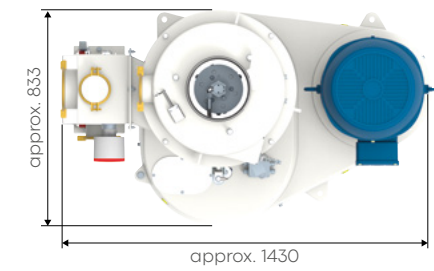
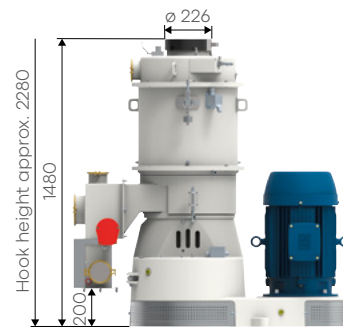
Type	14-175
Die diameter mm	175
Roller diameter/width mm	130/up to 27
Number of rollers	2
Drive motor kW/min-1	3



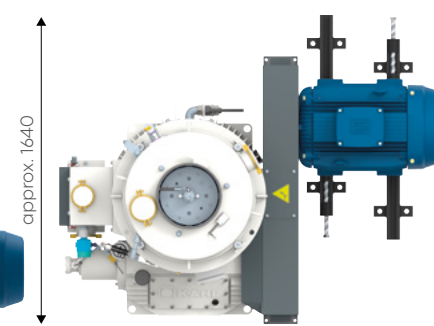
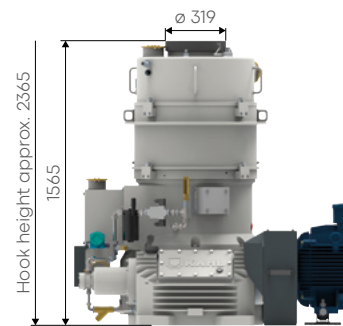
Type	33-390
Die diameter mm	390
Roller diameter/width mm	230/up to 75
Number of rollers	2
Drive motor kW/min-1	15-30/1500



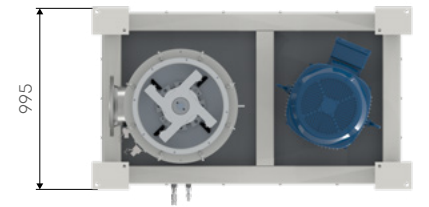
Type	33-500
Die diameter mm	500
Roller diameter/width mm	230/up to 75
Number of rollers	3
Drive motor kW/min-1	15-30/1500



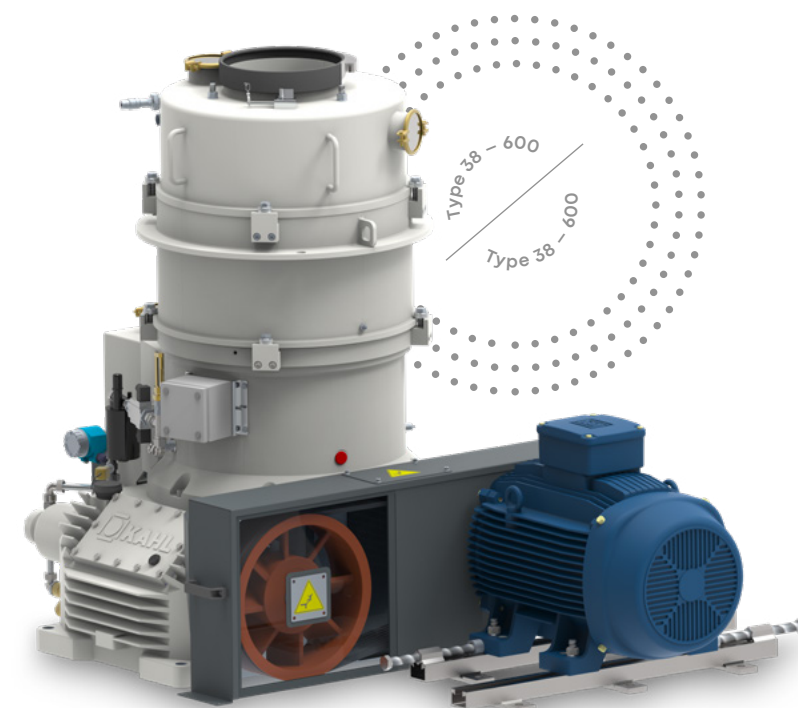
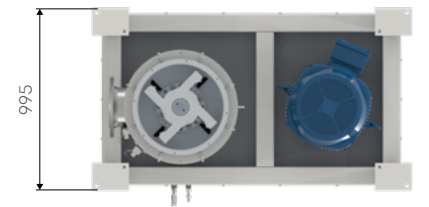
Type	38-600
Die diameter mm	600
Roller diameter/width mm	280/up to 100
Number of rollers	3-4
Drive motor kW/min-1	55-90/1500



Type	24-390
Die diameter mm	390
Roller diameter/width mm	230/up to 75
Number of rollers	2
Drive motor kW/min-1	36/1500



Type	25-500
Die diameter mm	500
Roller diameter/width mm	230/up to 75
Number of rollers	4
Drive motor kW/min-1	36/1500



Do you have questions regarding the KAHL technology?

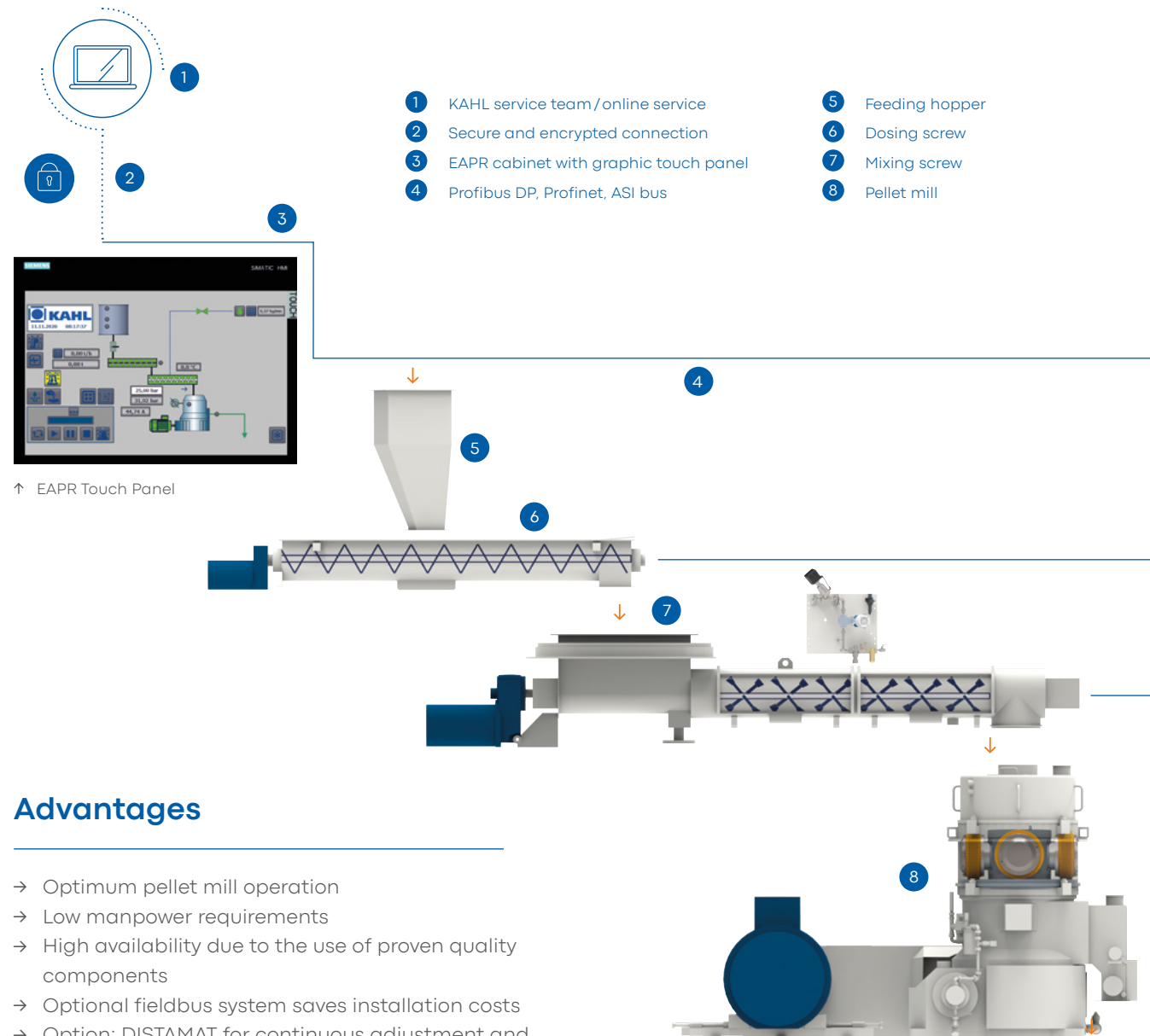
We will be happy to answer them and can be reached here:

info@akahl.de
+49 (0)40 727 71-0
akahl.com



AUTOMATION

Electronic automatic pellet mill regulation (EAPR)



Advantages

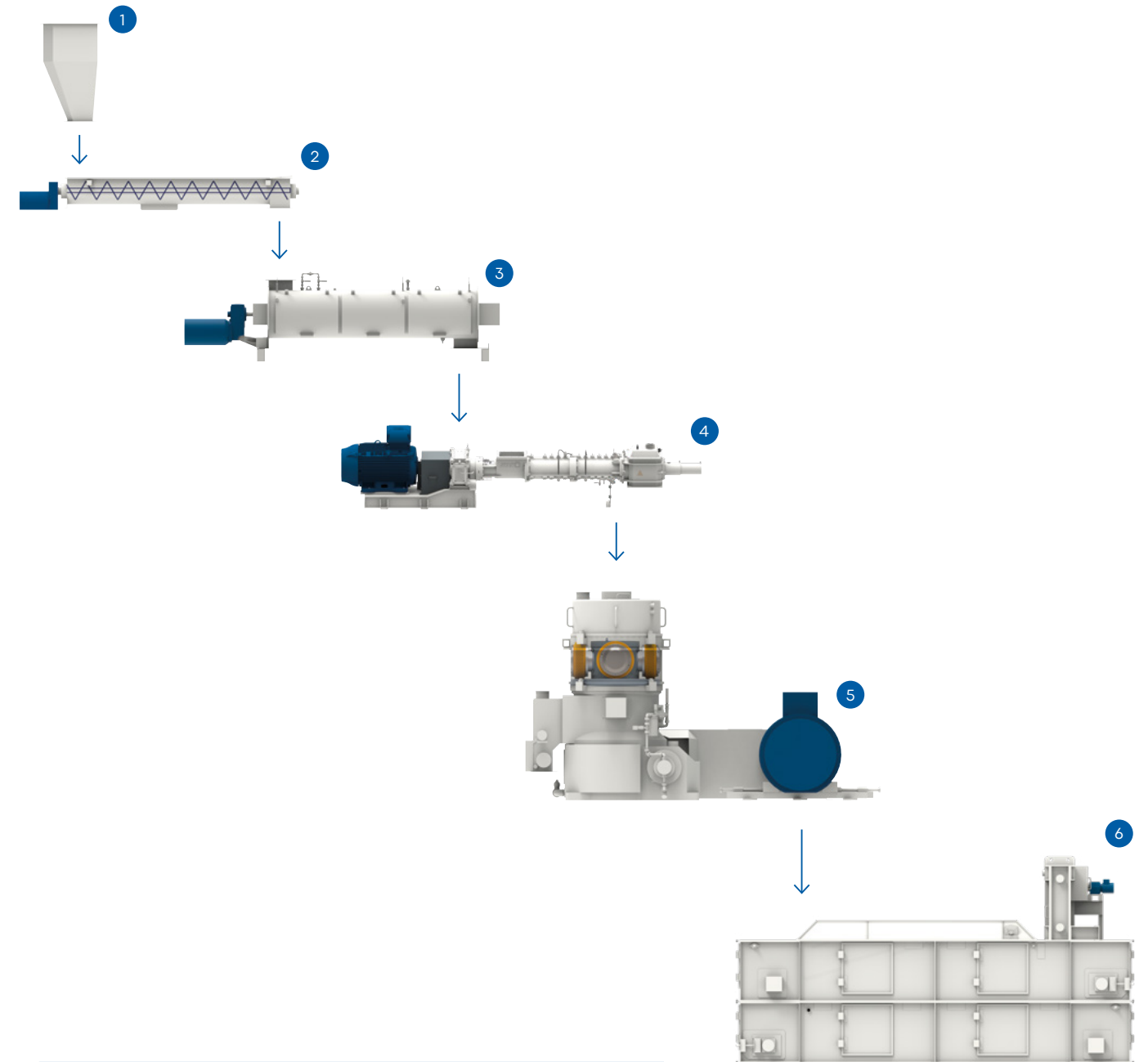
- Optimum pellet mill operation
- Low manpower requirements
- High availability due to the use of proven quality components
- Optional fieldbus system saves installation costs
- Option: DISTAMAT for continuous adjustment and control of the roller gap

Switch and control plants for all plant sizes are programmed by AMANDUS KAHL and installed in the respective hardware product. Our electronics engineers develop customised user software to ensure a high level of operational reliability.

The control system EAPR ensures optimum, automatic operation of the flat die pellet mills made by KAHL. The EAPR controls and regulates all relevant process parameters.

PLANTS

Food pelleting plants



- 1 Prebin
- 2 Dosing screw
- 3 Mixing conditioner
- 4 Expander
- 5 Pellet mill
- 6 Belt cooler



PRODUCT EXAMPLES

Special designs



↑ Special granules for drink flavouring straws



↑ Chocolate sprinkles



↑
Learn more about our granulation
machines or compacting plants
for use in the food industry.



REFERENCES

Plants



↑ Sugar factory Euskirchen, © Pfeifer & Langen



↑ Pellet mill in a food processing plant



Visit our online shop
shop.akahl.de

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