LIGNO

LIGNO
sepas+

EXHAUST SYSTEMS WITH MAXIMUM EFFICIENCY
DUE TO INDIVIDUAL ADAPTATION

LIGNO EXTRACTION TECHNOLOGY

NEW STANDARDS FOR HANDICRAFT AND INDUSTRY

The new sepas+ exhaust system has a central pipeline with the highly efficient Scheuch activation system. The air extracted by the individual machines is transported to a filtration plant together with the dust and chips. The single-pipe system is easy to adapt in the event of modifications to or expansion of the machinery. The high-performance Scheuch LIGNO pulse filter with efficient continuous cleaning ensures a residual dust content of less than 0.1 mg/m^3.

HIGHLY FLEXIBLE DUE TO MACHINERY ADAPTATION

To implement changes and expansions, only the short piping from the extracting machine to the main extraction pipe needs to be changed or re-laid – without having to change the dimensions of the main piping. Thanks to the high flexibility of the single-pipe system with its ability to adapt quickly and easily, productivity of the operation can be increased.

ENERGY RECOVERY

An automatic mixing control ensures that heat recovered from the extracted air is put to best use. The control meters the volume of return air according to the outside temperature. This is fed back to the workshop with optimal flow and little draught.

GREATER COMFORT AND SAFETY

The extraction plant is controlled by a touch panel. This allows it to be adapted to the respective requirements and optimal extraction to be achieved. With respect to fire a nd explosion protection, the entire range of dedusting and material conveying plants is ATEX-certified f rom c ollection at the production machine right up to depositing in the silo. This provides legal security for the operator in terms of risk evaluation, as well as in terms of the determination and limitation of security zones within explosion protection documents. ATEX-certification and the H3 symbol guarantee operational safety and high availability of the exhaust system.

sepas+: exhaust system with low energy consumption due to flexible extraction.

INDIVIDUAL SOLUTIONS

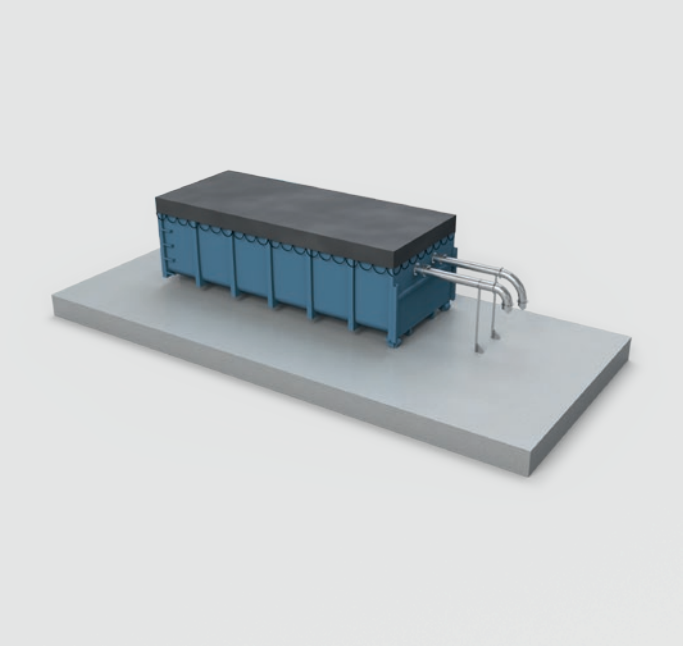
FOR TRANSPORT AND STORAGE

CONVEYING AND RING-PIPE SYSTEM

The material is transported using a ring-pipe conveyance system. The fan blows the separated material in the conveyance pipe in the direction of the storage location. The recycled air is fed back towards the fan. With this type of conveyance, the air is guided in a circular motion and no dust escapes.

CONTAINER FILLED WITH COMPRESSED AIR

The open container is fitted with a combination of filter/cover tarps. No explosive pressure can build up due to the open construction. No particular constructive measures are therefore necessary (decompression & decoupling measures). Only fire protection measures are to be observed in accordance with regional regulations.



Container filled with compressed air

SILO – PRESSURE-FREE FILLING VIA ROTARY VALVE

The material separated in the cyclone is introduced into the silo via a rotary valve without being subject to pressure. The rotary valve performs the role of fire and explosion decoupling.

Silo – pressure-free filling via rotary valve

Silo with axial fill

Thanks to the special Scheuch filling process combined with the explosion protection concepts developed by Scheuch, fewer pressure relief surfaces are required in the silo. Practical, tried-and-tested flame profiles are also available for both lateral and upward decompression. This presents a practical, cost-effective solution for nearly all application cases. Reports produced specifically for these application cases complement Scheuch's range of services.

SILO WITH AXIAL FILL

The material is introduced into the silo directly via a non-return flap using a compressed air conveyance pipe. The conveyed air is fed back again via a pressure relief vent which acts as an explosion decoupling mechanism like the non-return flap.

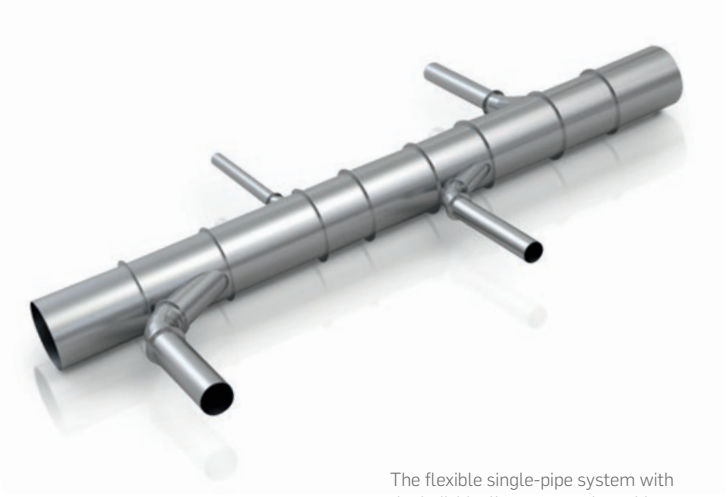
THE HIGHEST LEVEL OF FLEXIBILITY

THANKS TO THE INNOVATIVE SINGLE-PIPE SYSTEM

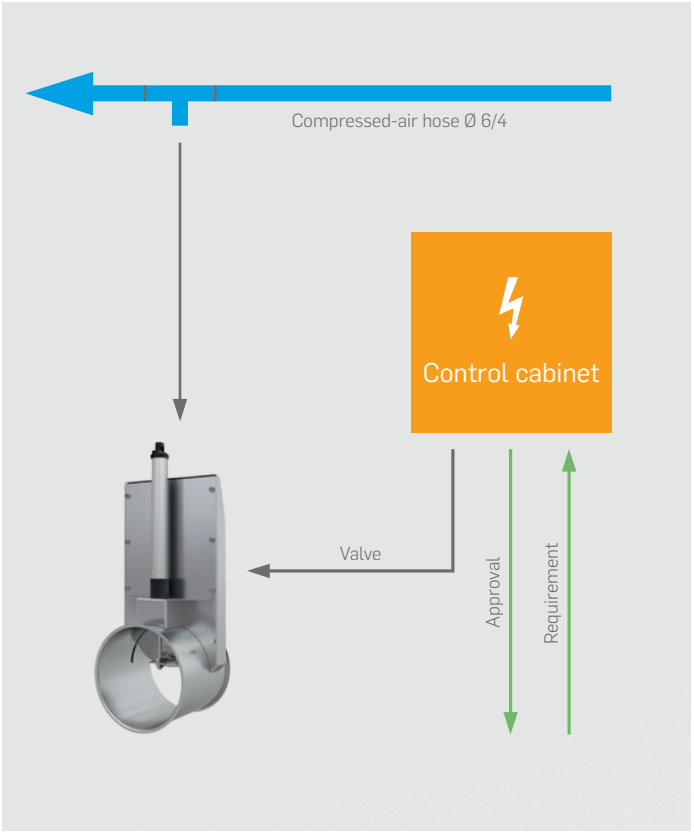
A clear advantage of the innovative sepas+ system is the high level of flexibility for the customer. The installed plant cannot be regarded as static and must adapt to the ever changing requirements. Thanks to the single-pipe system, adaptations can be made to the machinery very easily. To implement changes and expansions, only the short piping from the extracting machine to the main extraction pipe needs to be changed or relaid, without having to change the dimensions of the main piping.

SYSTEM NETWORKING

Adaptations can be made very easily to the controls on site via the touch panel. The conveying system, which can also be adjusted, perfectly complements the plant's optimal adaptability for the customer.



The flexible single-pipe system with the individually connected machines means that sepas+ adaptations are easy to implement.



VARIABLE ADJUSTMENT

WITH CONSTANT PERFORMANCE

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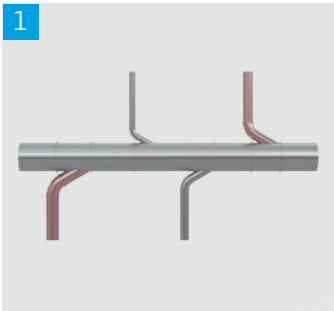

Single-pipe system

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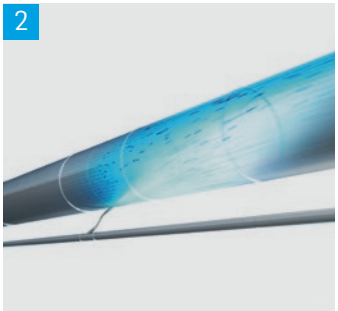

Scheuch activation

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Compressed air
gate valve

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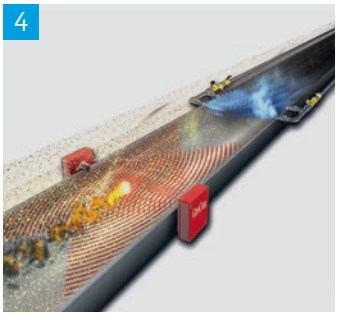

Integrated spark
extinguisher

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Scheuch
pulse cleaning

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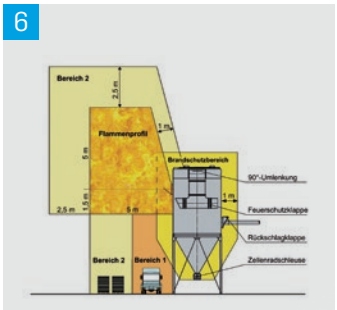

Practice-oriented fire and
explosion protection

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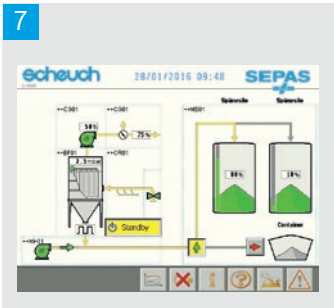
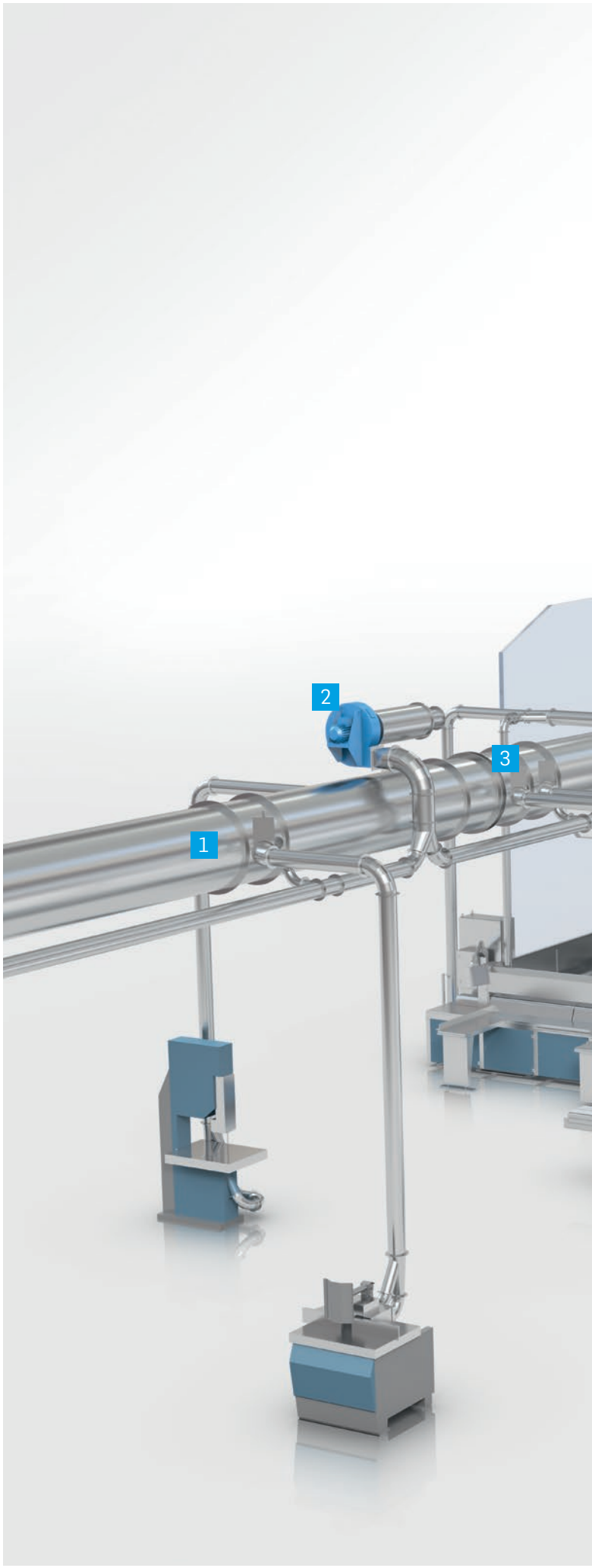
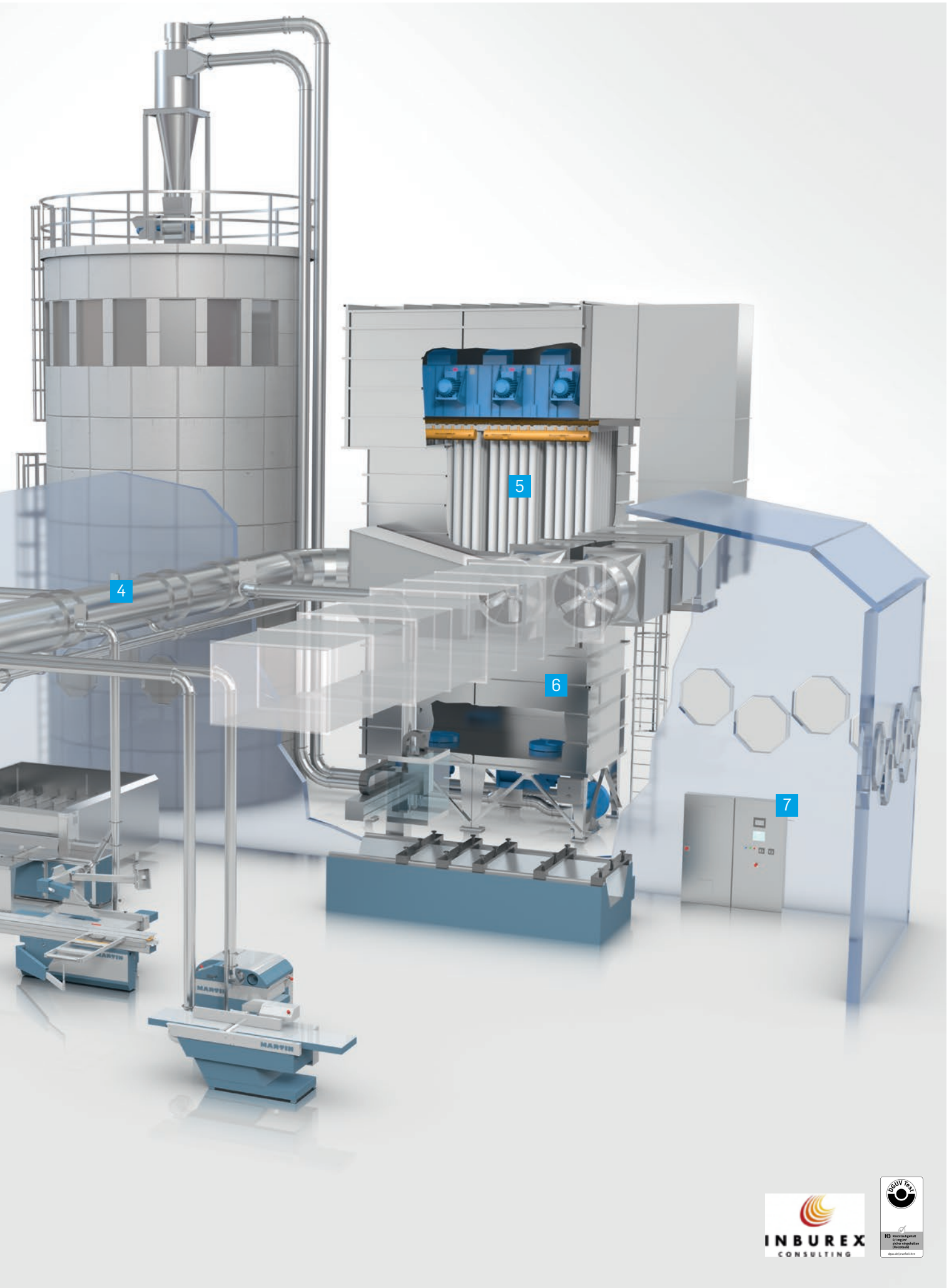


Operation via a
touch panel

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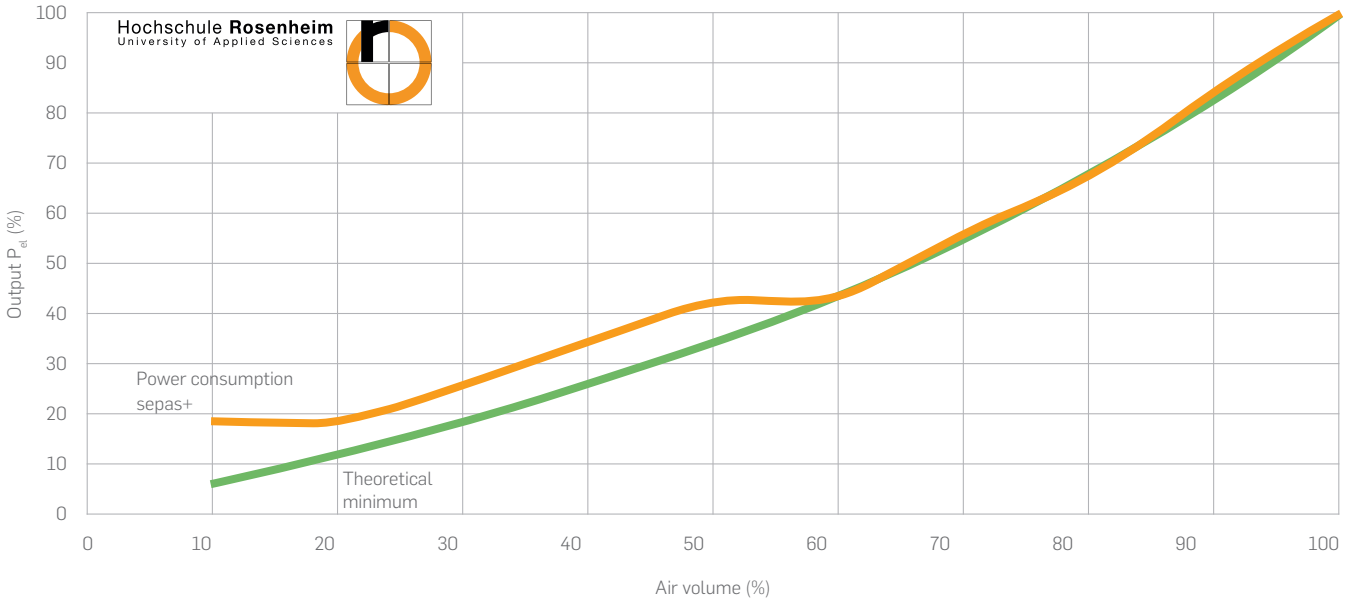
SAFE AND ENERGY EFFICIENT

sepas+ REDUCES YOUR COSTS

LOWER ENERGY CONSUMPTION

The sepas+ system scores points in the first instance due to its high energy efficiency, which is a direct result of the variable air volume responding to changes in machine capacity. This means that the extraction output is constantly being adapted to the current capacity of the processing machines, which therefore optimises energy consumption or keeps it at a low level.

Testing and calculation by the faculty of Wood Technology at Rosenheim University of Applied Sciences confirms that the sepas+ system works close to the "theoretical minimum energy".



THE HIGHEST LEVEL OF SAFETY

With respect to fire and explosion protection, the entire range of dedusting and material conveying plants is ATEX-certified from collection at the production machine right up to depositing in the silo. This provides legal security for the operator in terms of risk evaluation, and the determination and limitation of security zones within explosion protection documents. The H3 test mark on the range of ligno filters ensures that the residual dust content is reliably below the value of 0.1 mg/Nm³ and that constant monitoring takes place, which reduces costs of initial measurements taken on site or those associated with recurring measurements. ATEX-certification and the H3 symbol guarantee maximum operational safety and therefore the highest availability of the exhaust system.

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