

# ProJet mega

The filter for volume flows up to 2 Million m<sup>3</sup>/h



**Mighty solutions** for tiny particles.



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Technical modifications reserved  
09.08-300 FD

# ProJet mega

ProJet mega is the solution for modern process filters up to 2 Mio m<sup>3</sup>/h. ProJet mega is standardized and based on prefabricated components of modular design. All units are in an optimal way adjusted. Our standards and “made by Intensiv-Filter” guarantee highest precision and facile and uncomplicated installations. Additionally the customized modules reduce the time for installation.

The process cycle is fully evaluated at the time of project planning, implemented during development and guaranteed with the running plant.

The cleaning system of Intensiv-Filter is combined with the most modern filtermedia allows the use of filter bags of 8m and longer. The reduced amount of space satisfies the demands of large filter systems.

## Your advantages:

### Reliability and Safety

- ProJet mega is standardised and “Made by Intensiv-Filter”
- ProJet mega is designed according to all worldwide standards and regulations
- ProJet mega combines prefabricated components and modular design

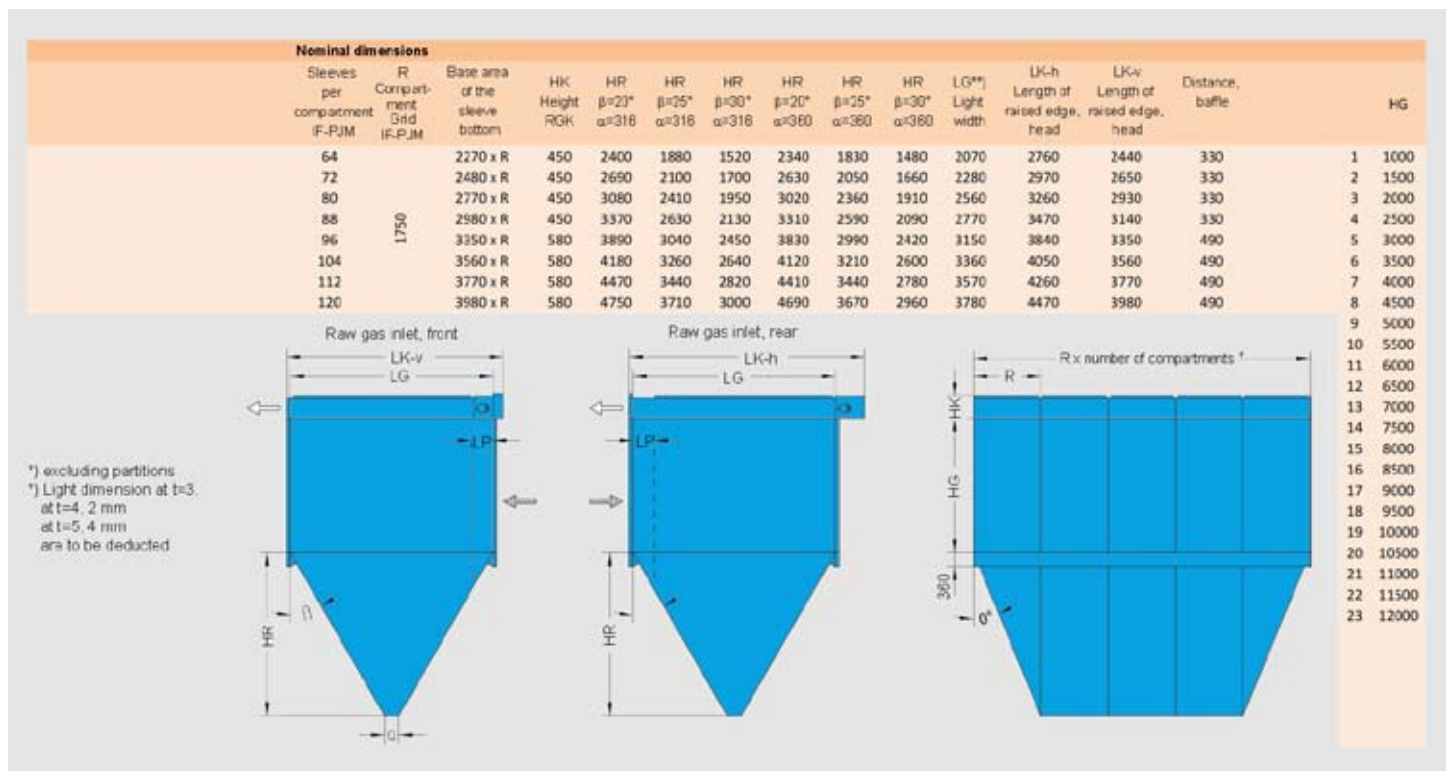
### Future-oriented technologies

- ProJet mega can easily be adapted to all the local standards, systems and processes
- ProJet mega offers possibilities for on-site fabrication
- ProJet mega is engineered for the option of modifications at a later stage

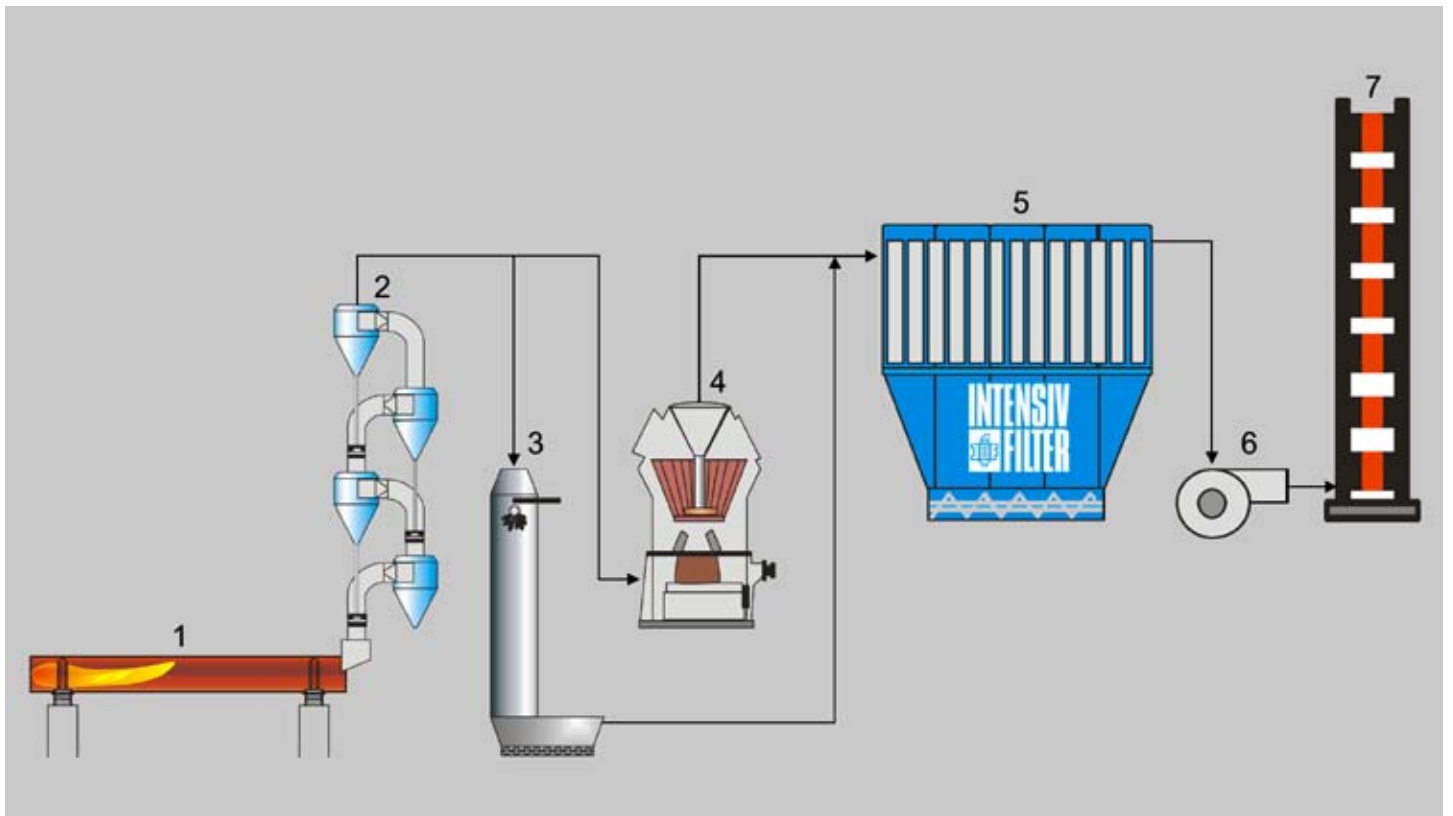
### Cost reduction

- ProJet mega requires less space for installation
- ProJet mega is designed to reduce transport costs
- ProJet mega minimises installation costs

## Dimensions ProJet mega



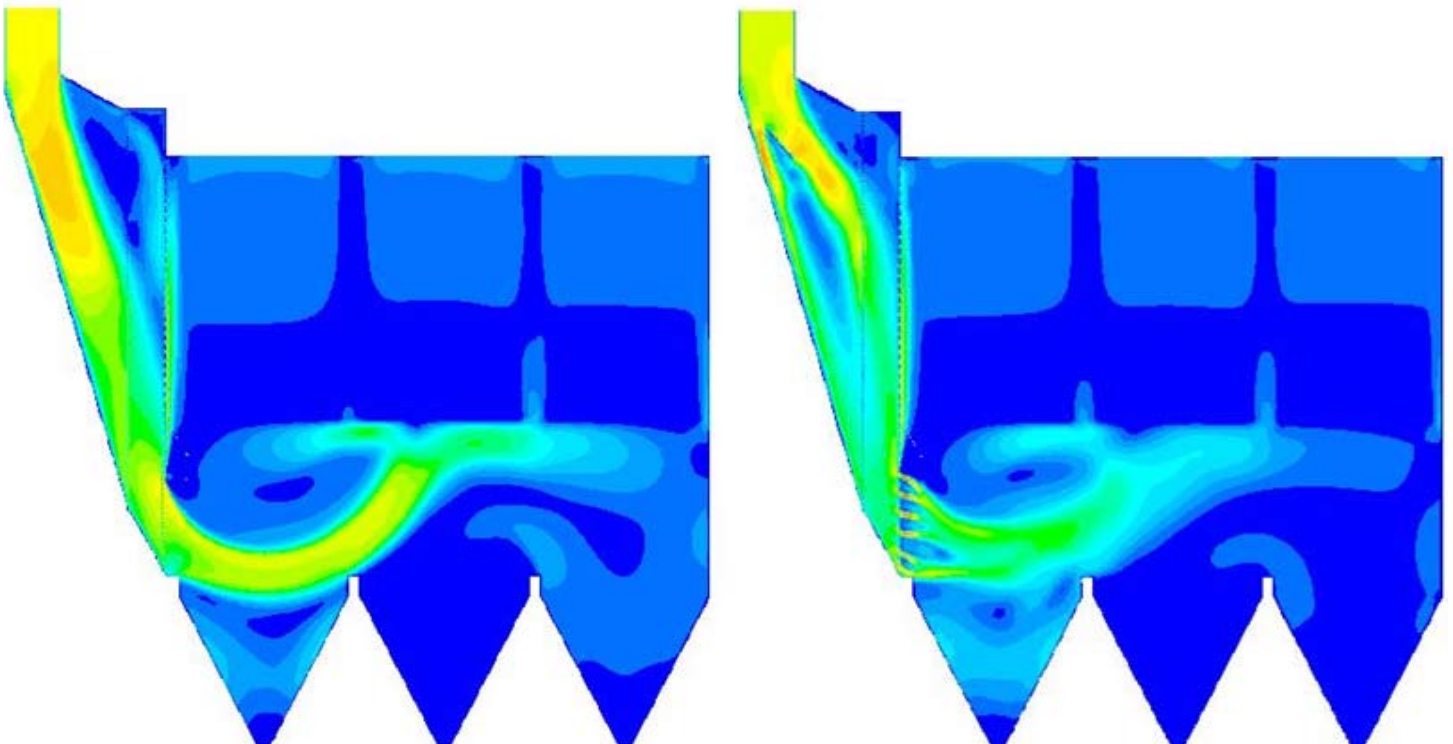
## Example of using the ProJet mega - for dedusting of a rotary kiln



- |                      |                 |
|----------------------|-----------------|
| 1 Rotary Kiln        | 4 Raw Mill      |
| 2 Cyclone Preheater  | 5 ProJet mega   |
| 3 Conditioning Tower | 6 Fan           |
|                      | 7 Exhaust stack |

## Improvements developed from Flow Simulations

Computer Fluid Dynamics Simulation for the conversion of an electrostatic precipitator into a Bag Filter system using the existing housing





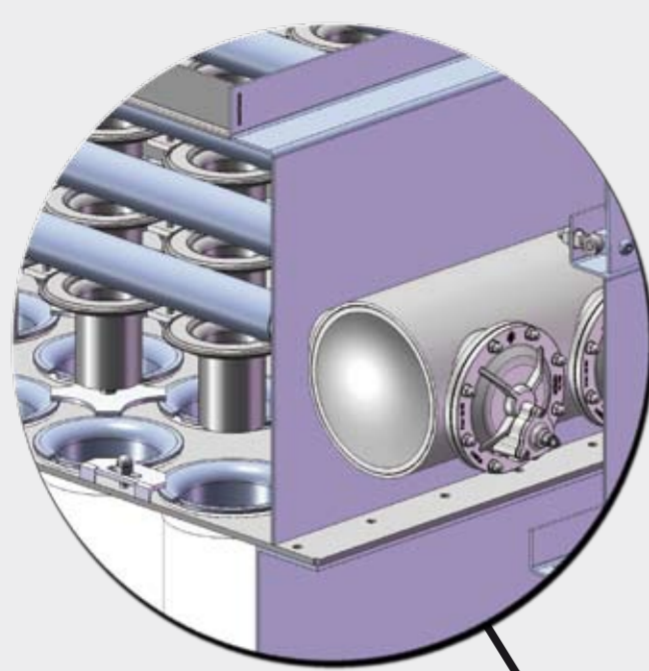
# ProJet mega

The filter for volume flows up to 2 Million m<sup>3</sup>/h



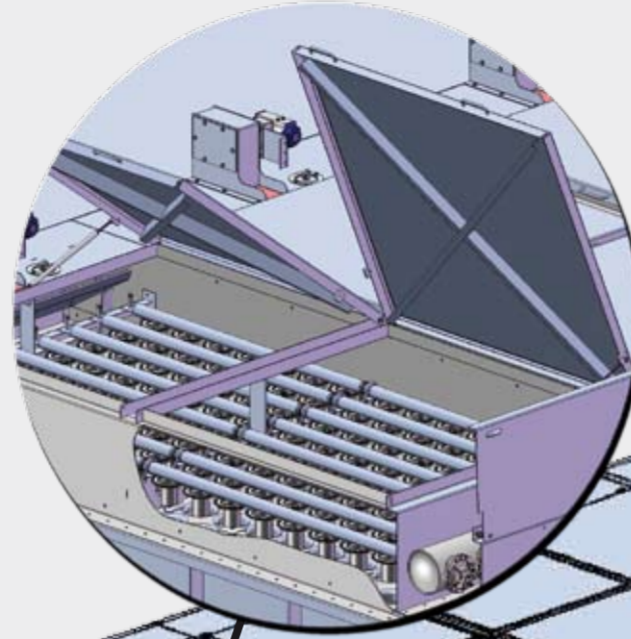
## Reliable and safe

- All components are of an optimised design
- Completely standardised
- Highly reliable clean and dirty gas dampers with pneumatic operation
- Highest precision „Made by Intensiv-Filter“



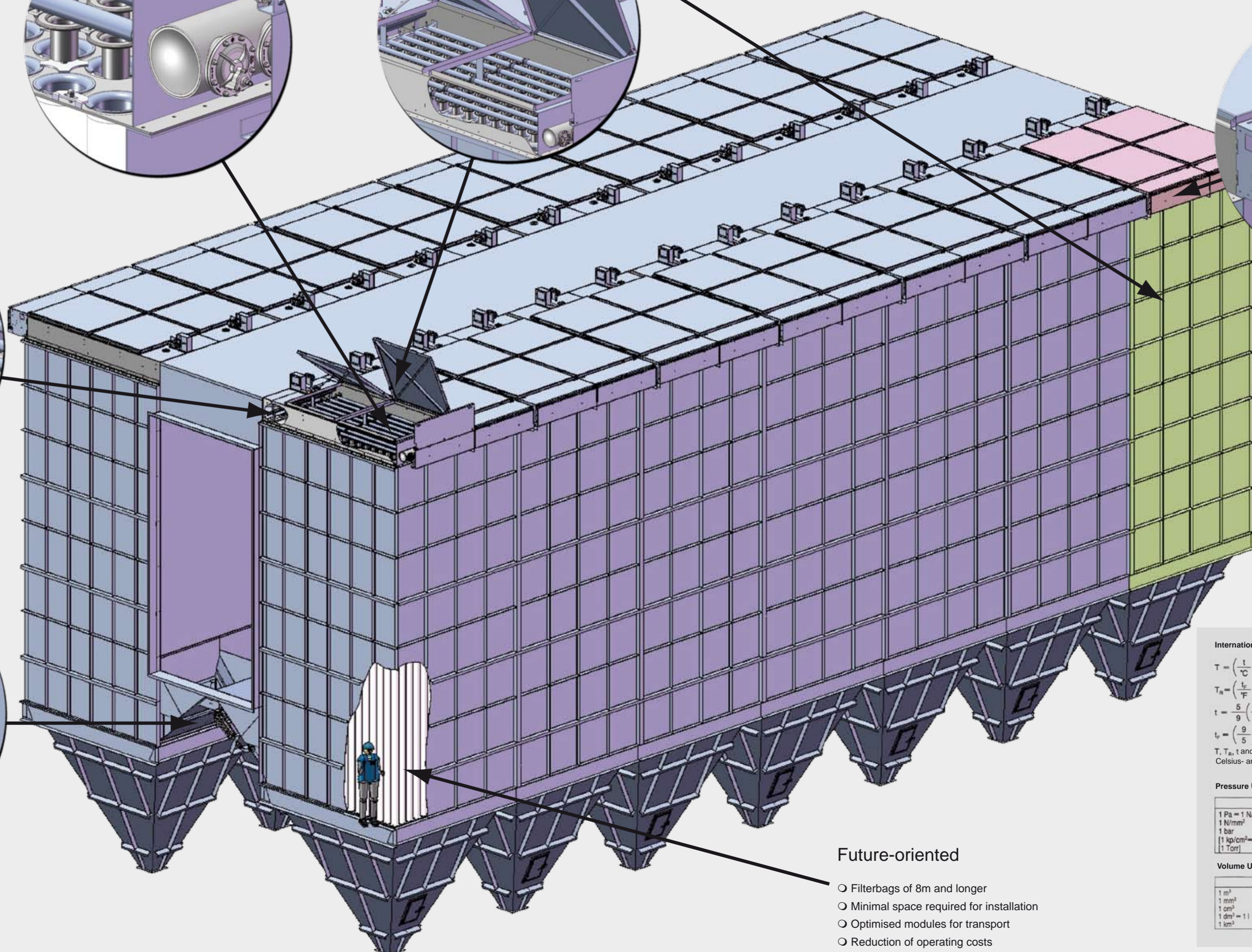
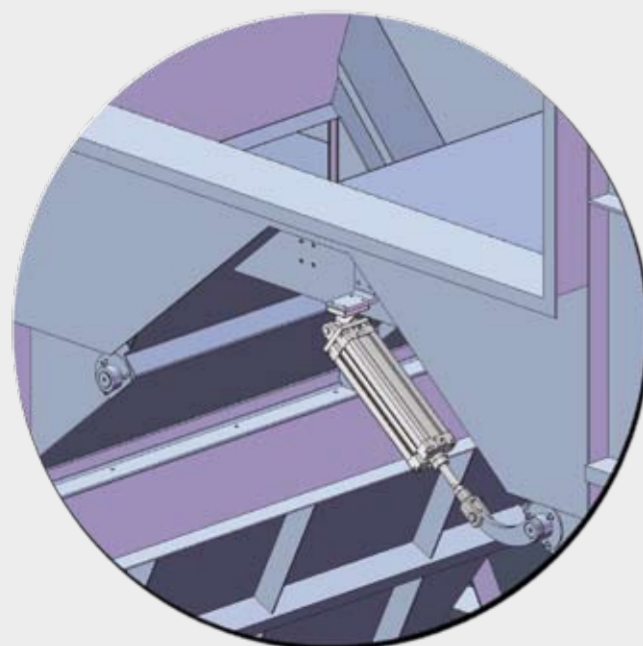
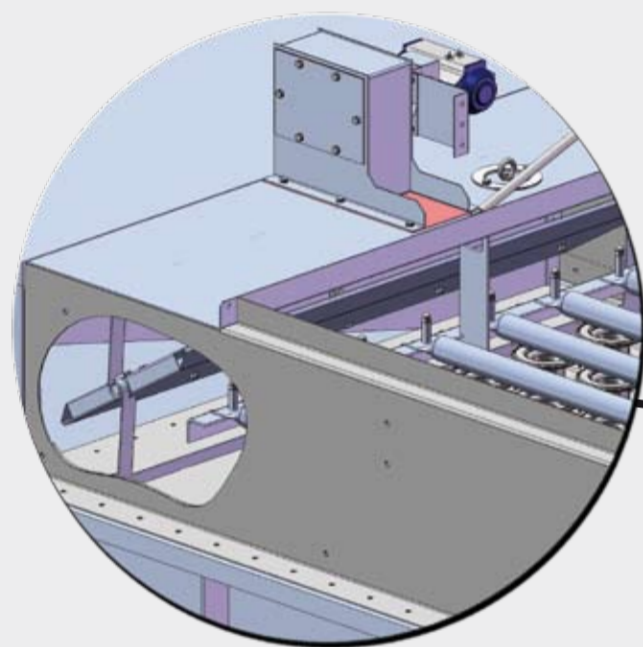
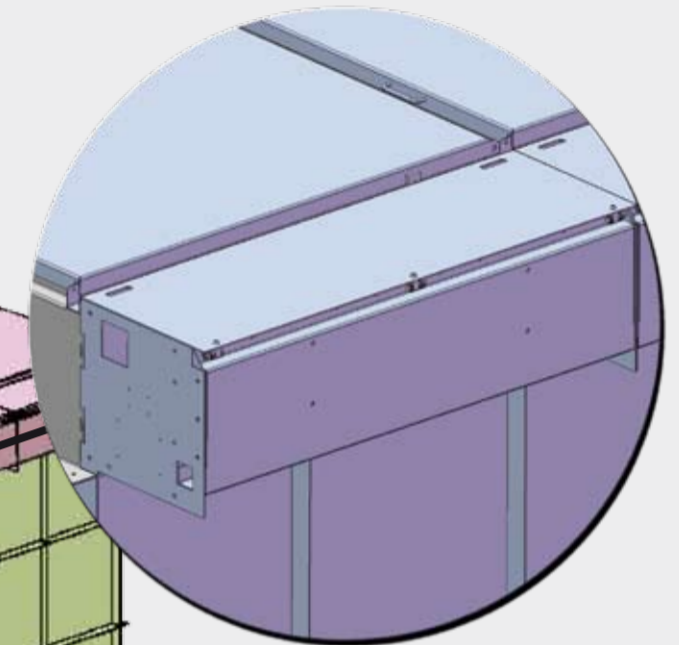
## Easy to maintain

- Cleaning system is easily accessible via large top doors
- Compartments can be taken off-line whilst filter operational
- No „down time“ required for maintenance



## Protected

- High-value components such as valve blocks and control systems are protected within enclosures



## Future-oriented

- Filterbags of 8m and longer
- Minimal space required for installation
- Optimised modules for transport
- Reduction of operating costs

### Internationally Temperature Units

$$T = \left( \frac{t}{^{\circ}\text{C}} + 273,15 \right) \text{K} = \frac{5}{9} \cdot \frac{T_{\text{Rank}}}{\text{Rank}} \text{K}$$

$$T_{\text{Rank}} = \left( \frac{t}{^{\circ}\text{C}} + 459,67 \right) \text{Rank} = \frac{9}{5} \cdot \frac{T}{\text{K}} \text{Rank}$$

$$t = \frac{5}{9} \left( \frac{T}{\text{K}} - 273,15 \right) ^{\circ}\text{C} = \left( \frac{T}{\text{K}} - 273,15 \right) ^{\circ}\text{C}$$

$$t_{\text{F}} = \left( \frac{9}{5} \cdot \frac{t}{^{\circ}\text{C}} + 32 \right) ^{\circ}\text{F} = \left( \frac{T_{\text{Rank}}}{\text{Rank}} - 459,67 \right) ^{\circ}\text{F}$$

$T, T_{\text{Rank}}, t$  and  $t_{\text{F}}$  are the Temperatures in the Kelvin-, Rankine-, Celsius- and Fahrenheit-Scale

### Pressure Units

|                               | Pa                | N/mm <sup>2</sup>          | bar                       | [kp/cm <sup>2</sup> ]     | [Torr]                |
|-------------------------------|-------------------|----------------------------|---------------------------|---------------------------|-----------------------|
| 1 Pa = 1 N/m <sup>2</sup>     | = 1               | 10 <sup>-6</sup>           | 10 <sup>-5</sup>          | 1,02 · 10 <sup>-5</sup>   | 0,0075                |
| 1 N/mm <sup>2</sup>           | = 10 <sup>6</sup> | = 1                        | 10                        | 10,2                      | 7,5 · 10 <sup>3</sup> |
| 1 bar                         | = 10 <sup>5</sup> | = 0,1                      | = 1                       | = 1,02                    | = 750                 |
| [1 kp/cm <sup>2</sup> = 1 at] | = 98100           | = 9,81 · 10 <sup>-2</sup>  | = 0,981                   | = 1                       | = 736                 |
| [1 Torr]                      | = 133             | = 0,133 · 10 <sup>-3</sup> | = 1,33 · 10 <sup>-3</sup> | = 1,36 · 10 <sup>-3</sup> | = 1                   |

### Volume Units

|                         | m <sup>3</sup>     | mm <sup>3</sup>    | cm <sup>3</sup>    | dm <sup>3</sup> [l] | km <sup>3</sup>     |
|-------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|
| 1 m <sup>3</sup>        | = 1                | 10 <sup>9</sup>    | 10 <sup>6</sup>    | 10 <sup>3</sup>     | 10 <sup>9</sup>     |
| 1 mm <sup>3</sup>       | = 10 <sup>-9</sup> | = 1                | 10 <sup>-3</sup>   | 10 <sup>-6</sup>    | 10 <sup>-18</sup>   |
| 1 cm <sup>3</sup>       | = 10 <sup>-6</sup> | = 10 <sup>-9</sup> | = 1                | = 10 <sup>-3</sup>  | = 10 <sup>-15</sup> |
| 1 dm <sup>3</sup> = 1 l | = 10 <sup>-3</sup> | = 10 <sup>-6</sup> | = 10 <sup>-3</sup> | = 1                 | = 10 <sup>-9</sup>  |
| 1 km <sup>3</sup>       | = 10 <sup>9</sup>  | = 10 <sup>18</sup> | = 10 <sup>15</sup> | = 10 <sup>12</sup>  | = 1                 |