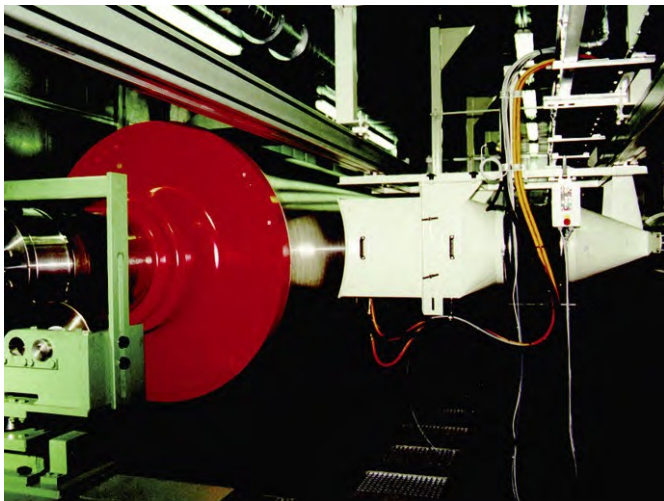


## THE TASK

To efficiently collect the overspray in thermal spraying processes, it is necessary to install an adequate extraction system. The extraction ensures a uniform quality of the required material characteristics of your components. Hazardous substances in different concentrations are created and must be treated based on their chemical composition, temperature and velocity. Consideration must be given to the production processes specific to the product, affecting the manner of collection, separation and extraction, as well as protective measures affecting personnel with respect to environmental quality. Managing air quality can often be very complex because of the presence of extremely fine, explosive, harmful or toxic dust.

## THE SOLUTION

Keller relies on many years of experience and skill in extraction and separation during thermal spraying processes. Our technology has proven itself in a variety of projects. The modular design of our filtration systems and their components enable us to recommend the best solutions for your requirements.



## THE KELLER ADVANTAGE

Our long-standing experience demonstrates that a reliable, trouble-free and environmentally-sound operation can be ensured with our system solutions.

High efficiency                      Consistent air flow

Compact design                      System solutions

Reliable references

**What that means for you:** fully engineered systems utilizing the latest process technologies

### ADVANTAGE: HIGH AVAILABILITY

Extremely long service life when using our SINBRAN® filtration technology. Keller guarantees 20,000 operating hours and high availability ensuring economical operation.

**What that means for you:** fewer spare parts and lower disposal costs, as well as reduced production downtimes and maintenance.

### ADVANTAGE: CONSTANT AIR FLOW

Constant air flow through uniform surface filtration is achieved with compressed air pulse de-dusting during operation.

**What that means for you:** consistent operating conditions despite large volumes of dust.

### ADVANTAGE: COMPACT DESIGN

Modular, compact design for optimal extraction efficiency.

**What that means for you:** optimized investment costs and minimized space requirements.

### ADVANTAGE: SYSTEM SOLUTIONS

Project planning solutions for specific collection and separation technology, ductwork, noise insulation, advanced fire and explosion protection methods, and comprehensive service.

**What that means for you:** experienced Keller contacts - no warranty issues

## TECHNICAL INFORMATION

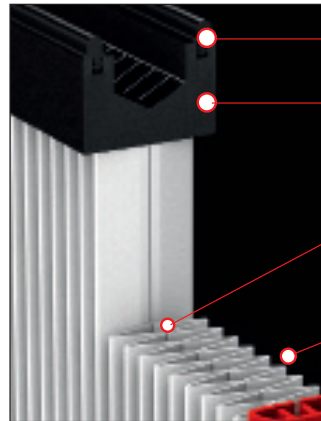
Standard connections	installation on the dirty air side or on the clean air side
Standard lengths	850, 950, 1260, 1500 mm
Extra size	on request

### KLR-Filter® elements: powerful and energy-efficient

KLR-Filter® elements are proven effective for a variety of applications. Due to their pleated design, they ensure a large filtration surface while maintaining a compact construction (i.e. they increase surface area without increasing the collector's size).

High separation efficiencies are achieved at a very small pressure loss. Since each fold is attached separately, the filter elements no longer require a support body, reducing the weight of each element.

Additional options are available with the KLR-Filter® design, which allows optimal filtration for a diverse range of applications at a reduced cost.

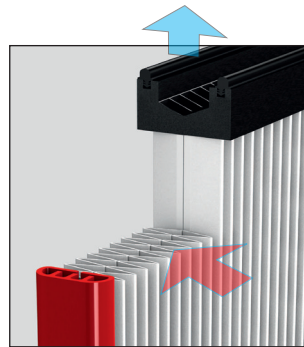


Head gasket

Solid head construction

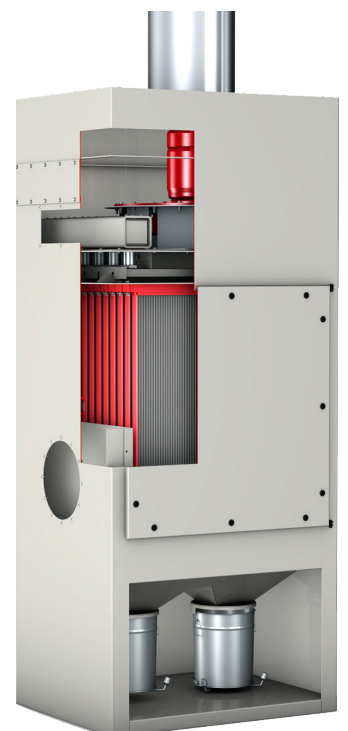
High rigidity created by pleated filter material that forms separate filter chambers

Trouble-free flow of recirculated air due to high separation efficiency



### Advantages

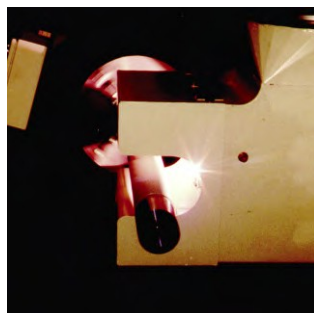
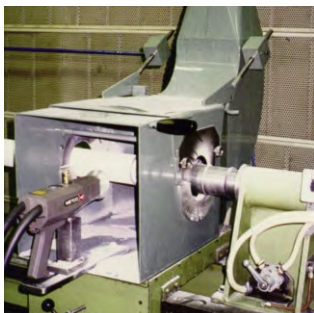
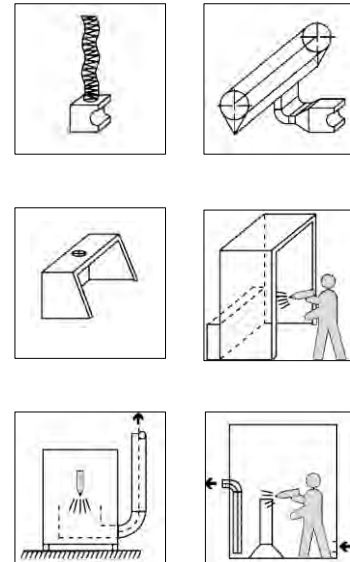
- 2-3 fold filter surface compared to filter bags → ensures compact filter construction
- Low filter resistance → low energy consumption
- High separation efficiency
- Self-supporting construction → no support bodies required
- Installation possible on the dirty and clean air side
- Easy and quick assembly and disassembly
- Long service life → 20,000 operating hours (max. 3 years)
- Easily cleaner
- Various filter options available: PTFE membrane, antistatic, and/or silicone-free
- Temperature resistant up to 160 °F, as an option up to 230°F



## COLLECTION

The type of collection is determined by the thermal spraying process and the size of the part. All excess material should ideally be extracted at the source. This reduces the extraction flow volume to a minimum. Production processes are confined mainly to closed booths equipped with extraction systems to prevent dust from escaping, to protect machinery, and for quality assurance purposes, as well as for noise insulation and maintaining the ambient air temperature. Keller offers all types of collection methods appropriate for the production process - from extraction hoods to booths. With properly designed systems, minimal air volume is required for extraction, which reduces investment and operating costs.

Benefit from our experience!



## SAMPLE INSTALLATIONS

