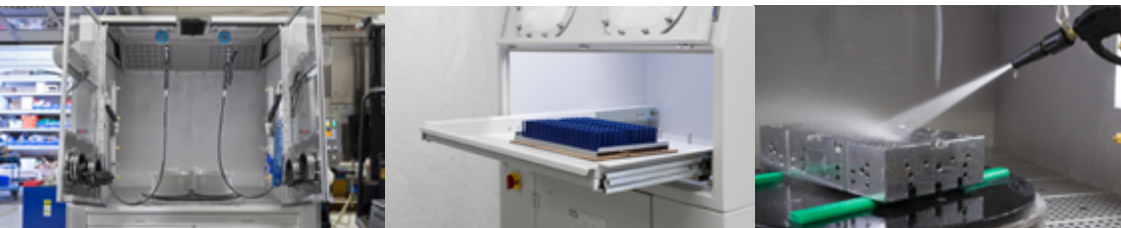


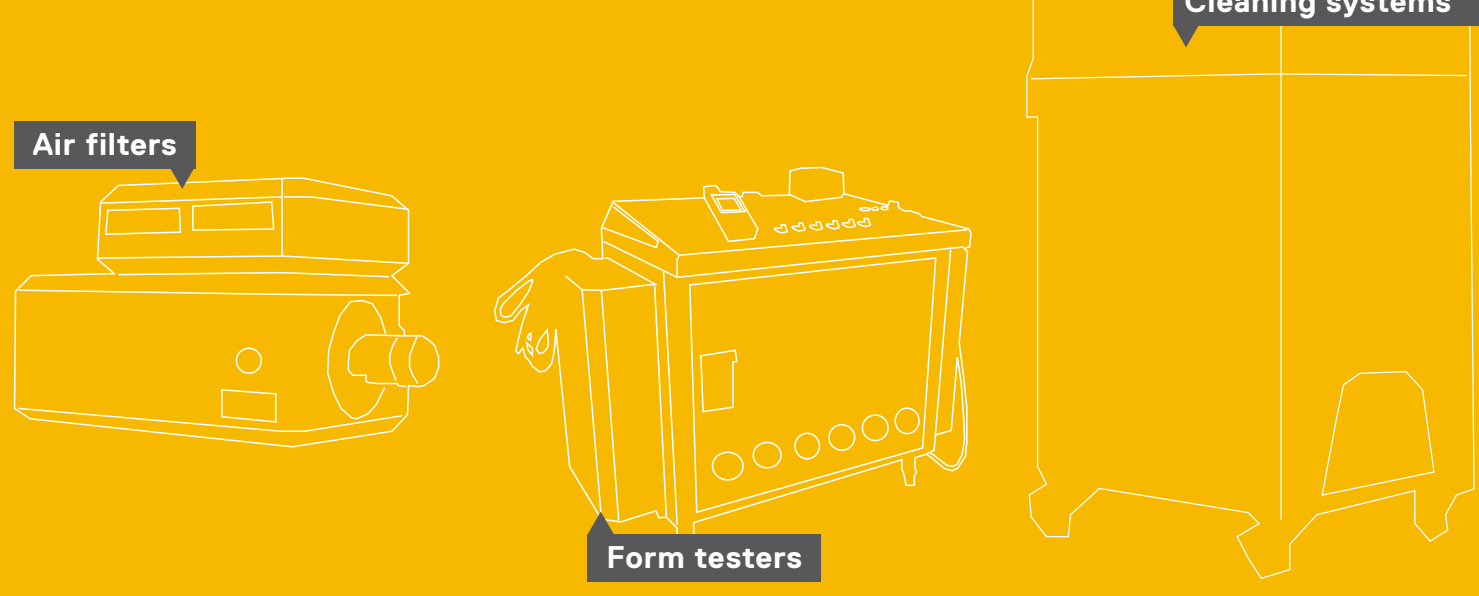
# Krumm-tec Cleaning Solutions for industrial applications

*Cleaning, Filtering, Testing*



# CUSTOMIZED CLEANING SOLUTIONS

**Cleaning solutions for industrial applications**  
For prototypes, cooling channels or even lab rooms –  
Krumm-tec specializes in various cleaning processes



## 1 CLEANING MEDIUM



LIQUID



SOLID



GASEOUS

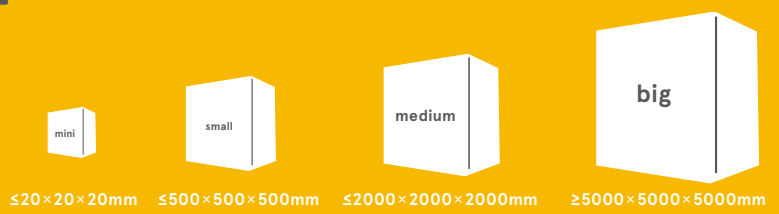
## 3 CLEANING PROCESSES

- |                |                  |                 |
|----------------|------------------|-----------------|
| · PURGE        | · DEDUST         | · ULTRASONIC    |
| · DEGREASE     | · EXTRACTION     | · CAUSTIC SODA  |
| · BLAST        | · COMPRESSED AIR | · STEAM         |
| · ICE BLASTING | · DISINFECT      | · HIGH PRESSURE |

## 2 PART

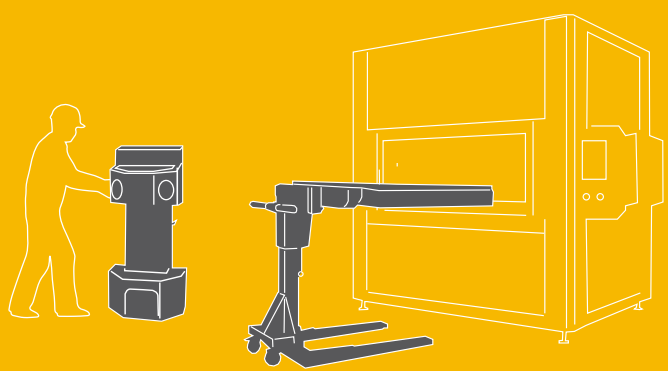
- Possible materials:**
- Electronic components
  - Prototypes (FDM, PolyJet, SLA,...)
  - Plastics
  - Air filters
  - Metal
  - and many more

## 4 WORK SPACE



## 5 OPERATION AND FEED

- Manual or automatic operation
- Feed via loader, crane or assembly line



# CLEANING SYSTEMS

**Cleaning and surface treatment –  
with fluid, solid or gaseous media**

## **Cleaning cabins – if required explosionproof.**

Depending on the type and degree of soiling, we offer a variety of cleaning media and processes: water-based cleanser, alcohols, granules or dry ice – ultra sonic, high pressure, compressed air and many more. All Krumm-tec systems are available as explosionproof models.

Krumm-tec has been working with leading companies in the 3D-print, automotive and aerospace industries for the past years.



## CleanMatic Series

- ✓ For aqueous solutions and solvents
- 30–80° degrees
- Blasting, oscillation, rotation and ultra sonic

### DIMENSIONS

700×450×550 to 1900×1650×2400 mm

### PART SIZE

280×335×280 to 1050×920×640 mm



Clean Matic 2150



Clean Matic 4150



Clean Matic 4150 Premium



Clean Matic 6150



Clean Matic 8150

## CleanLine

### MODULAR CLEANING SYSTEM

- Exhaust air fan system
- Targeted airflows
- Explosionproof
- Rinsing and basin systems
- Ultra sonic bath systems

Dimensions and part size  
Customized



# AIR FILTER SYSTEMS

Extraction and filtration of fine dust particles

## Mechanical

### Air filters LRF

Extraction and filtration of emulsions and fine dust particles

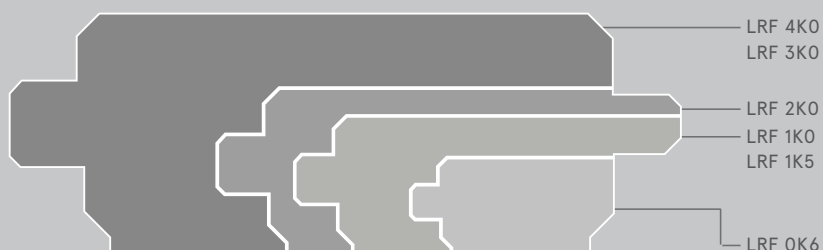


Our mechanical air filter systems can be used to extract and filter: fine dust particles, vapors and gases of cleaning solvents, emulsion mist, welding fumes and many more.

▽ FINE FILTRATION

⊞ RE-CIRCULATION

🔊 SILENT OPERATION



## Electrostatic

### Air filters LRF/E

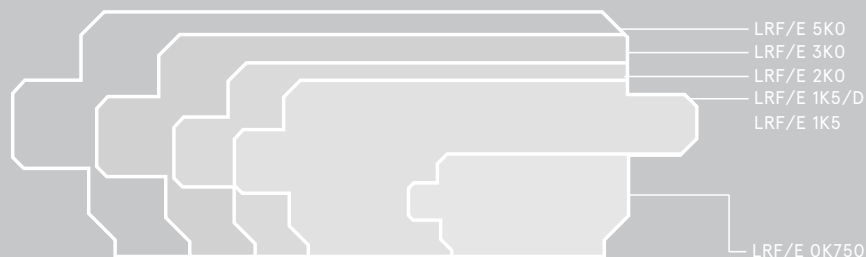
Extraction and filtration of oil mists

Our electrostatic air filter systems can be used to separate aerosols out of media with an oil content of minimum 9% of non-flammable crude gas. Extraction and filtration of oil, emulsion and minimal lubrication mist.

🔄 CIRCULATION SYSTEM

🌊 EXTRACTION OF MACHINES

👉 COST-EFFECTIVE



# MOULD TESTING UNITS

## Cleaning of injection moulds

Form testers are used to clean and rinse injection moulds, as well as measure pressure and flow – all this up to six cooling channels simultaneously. For the different requirements, our form testers can be heated or cooled. The testers are equipped with a hydraulic control system to open and close the core pulls and various digital documentation and evaluation devices, such as a SD card or a notebook.



### CLEANING

Clean, filter and rinse cooling channels



### TEMPERATURE

Heating and cooling of the medium



### HYDRAULICS

For opening and closing the core pulls



### PRESSING

Leakage control



### PH-VALUE

Monitoring the pH-value



### FLOW RATE

Flow rate measurement



### DOCUMENTATION

Documenting the flow rates on various data carriers



### NOTEBOOK

Documenting the flow rate

### FPG 1000

- 1 channel
- Cleaning pressure 2–4 bar
- Volume flow 18 l/min
- Tank capacity 30 l



### FPG 2000

- 2 channels
- Cleaning pressure 2–4 bar
- Volume flow 18 l/min
- Tank capacity 60 l



### FPG 3000

- 4 channels
- Cleaning pressure 2–4 bar
- Volume flow 18 l/min
- Tank capacity 80 l



### FPG 4000

- 6 channels
- Cleaning pressure 2–4 bar
- Volume flow 18 l/min
- Tank capacity 100 l





## Cleaning systems

### CLEANING AND SURFACE TREATMENT

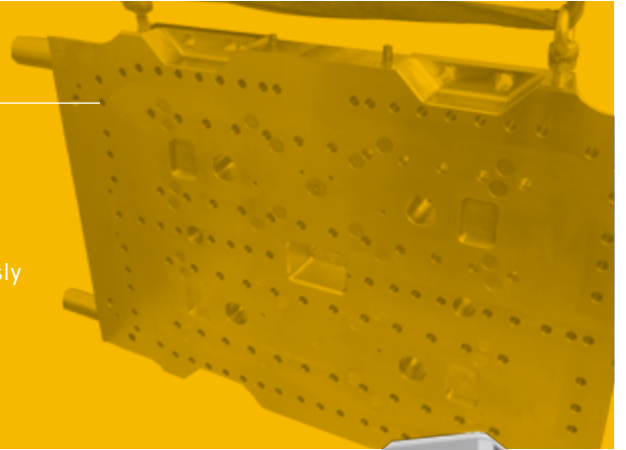
- Manual or automatic cleaning
- Suitable for plastics, metal, filters etc.
- Equipped with crane, rotary plate or basin
- Variety of media and processes
- Explosionproof if required



## Mould testing units

### CLEANING OF INJECTION MOULDS

- Cleaning of cooling channels
- Up to 6 channels simultaneously
- Pressure and flow metering
- Leakage checking
- Digital evaluation



## Air filter systems

### FILTRATION AND EXTRACTION OF DUST PARTICLES

- Filtration of particles
- Filtration of oil mists
- Re-circulation possible
- Self-cleaning effect



Krumm-tec  
Industrielle Reinigungsanlagen und Luftfiltertechnik  
Ersteiner Straße 37  
D-79346 Endingen

info@krumm-tec.com  
krumm-tec.com



Cleaning technologies