

*PRODUCT BROCHURE*

**Universal duct air filter  
DELBAG® MultiClean**

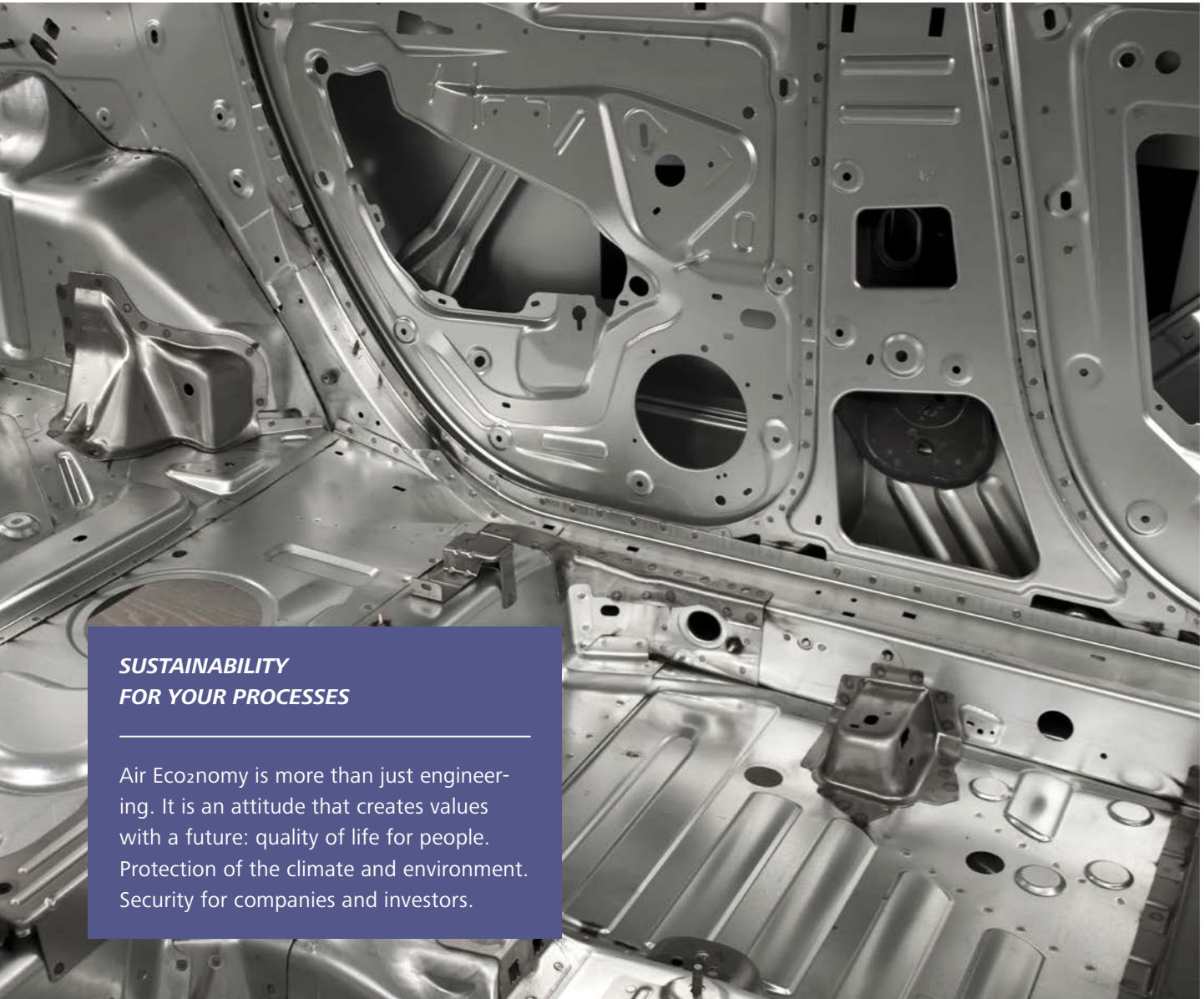
***One system, many solutions***



*SIMPLY COST EFFECTIVE – AND UNIVERSALLY APPLICABLE*

## ***The perfect solution for separation of dust, particulate matter and aerosols***

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### **SUSTAINABILITY FOR YOUR PROCESSES**

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Air Eco2nomy is more than just engineering. It is an attitude that creates values with a future: quality of life for people. Protection of the climate and environment. Security for companies and investors.

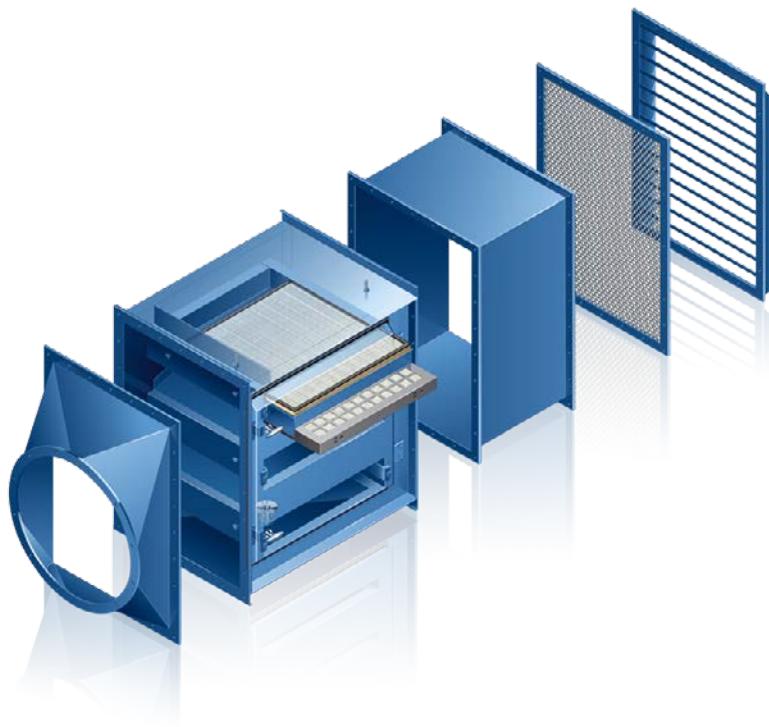
DELBAG® Air Filtration stands for competence and experience from more than 100 years of market leadership in air-filter technology. Under the motto Air Eco2nomy, we offer you comprehensively oriented solutions that set economic and ecological standards. The MultiClean universal duct-air filter system is a prime example of top-quality performance offered by DELBAG® Air Filtration.



The MultiClean system assures clean air in a great number and variety of application areas. It assures the effective separation of coarse, fine, and ultrafine dust – as well as filtration of oil and emulsion mists. To satisfy many and various requirements, according to specific application, DELBAG® Air Filtration has designed the MultiClean duct air filter system in a range of model Types: MultiClean KLG and KLH models. In addition to the two type series, a range of proven filter elements with filter classes G3 to H13.

The intelligent structural-design and utilization principle of MultiClean reduces both manufacturing costs and operating expenses. In addition, the system offers innovative user-oriented quality characteristics. These include sheet steel with powder-coat finish, or stainless steel, in addition to large-size service doors with permanently elastic seals and quick-release fasteners for the filter compartments in one- to four-stage filter configurations. For both regenerable and non-reusable filters, the cassette system assures fast and clean exchange of filter media. Measurement points for pressure drop are integrated in standard models. MultiClean is designed for indoor or outdoor installation, for ambient temperatures up to 160°C.

- One- to four-stage filter models, with regenerable or non-reusable filter elements
- Enclosures: in powder coated standard steel or in stainless steel
- Flanges in 610/610Euro modular grid dimensions
- Fittings (¾") for removal of separated liquids, provided in standard models
- Operation pressures:  
+ 1000 Pa / – 2000 Pa; reinforced model:  
+ 20000 Pa /– 50000 Pa
- Use of pressure-shock-resistant model as redundant final filter, downstream of dust-separation systems, with Pred up to 1.0bar



# Lean technology against heavily polluted air



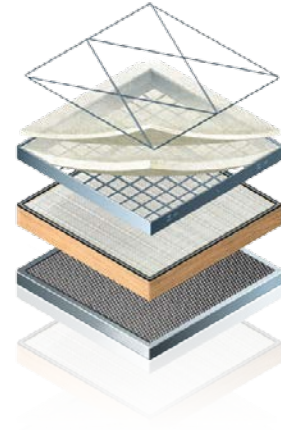
## MultiClean KLG

The model MultiClean KLG is especially designed for separation of coarse dust and aerosol. The structural design, in combination with high-quality filter media, is favorable to effective air flow, which makes this range especially efficient and cost-effective. The compact design considerably reduces space requirements – also when the system is used as supply-air filter. The MultiClean KLG can be fitted with filters up to class M5, with a maximum of 3 stages.



## MultiClean KLH

The MultiClean KLH also has a modular design. It is especially intended for filtration of fine dust and particulate matter. Up to 4 different filter stages can be used, extending to filter class H13. Practical quick-release fasteners allow for simple filter exchange and save valuable time in all service work. This system reliably protects staff, machines, and products from contamination.



## MultiCase cassette system

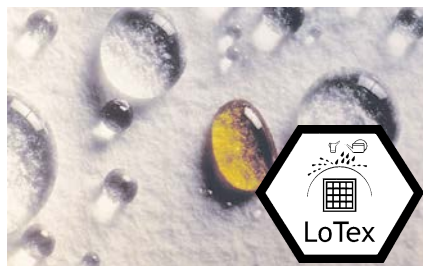
MultiClean universal duct-air filter systems are also designed to use the innovative MultiCase cassettes. This cassette system, developed by DELBAG® Air Filtration, likewise has a modular structural design. The cassettes can be fitted with various filter media, depending on the application.

## Accessory



DeltaTronic monitoring of pressure difference

## LoTex® technology



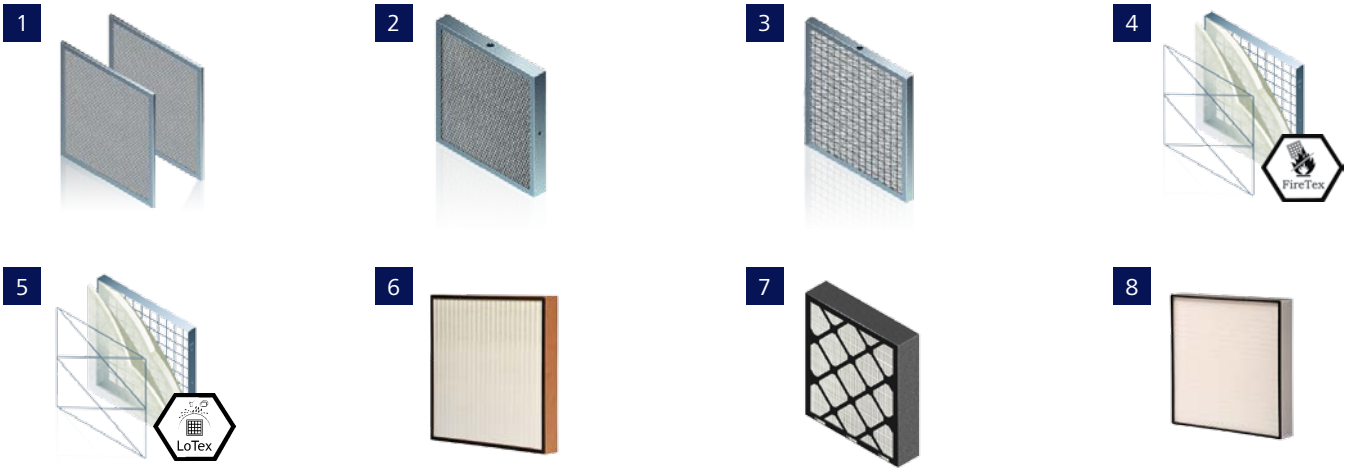
Filter pads for liquid aerosol and low energy consumption

## FireTex® technology



Filter pads with very good fire retardant features

# Filter media



## Coarse-dust filters

Supply-air filters in general ventilation systems, and pre-filters for downstream fine-dust filters

- 1 **Metal filters, expanded metal mesh**  
Multi-layer, expanded-mesh aluminum layers; robust U-profile frame; regenerable.
- 2 **Metal filters, woven mix**  
Woven metal made of aluminum or stainless steel, in a robust U-profile frame; regenerable
- 4 **Filter pads FireTex® ISO Coarse**  
Synthetic-fiber fleece with progressive depth structure; regenerable

## Fine-dust filters

Supply air, recirculating air, and final filters in ventilation and air-conditioning systems, for high air purity; pre-filters for down-stream HEPA filters.

- 4 **Filter pads FireTex® ePM10**  
Synthetic-fiber fleece with progressive depth structure; not regenerable
- 6 **ePM1 filter cells**  
Pleated micro-glass-fiber fleece, in wooden or metal frames; not regenerable

## HEPA filters

Final filters in air-treatment systems with very high air purity; for cleanroom systems

- 8 **E11 – H13 HEPA filters**  
Pleated micro-glass-fiber fleece, in wooden or metal frames; not regenerable

## Aerosol separators

As pre- or final filters, depending on choice of media, for all oil and emulsion mists, in extract air and recirculating-air operating modes.

- 1 **Metal filters, expanded metal mesh**  
Multi-layer, expanded-mesh aluminum layers; robust U-profile frame; regenerable
- 2 **Metal filters, woven mix**  
Woven metal made of aluminum or stainless steel, in a robust U-profile frame; regenerable
- 3 **Metal filters, woven mixture**  
High-quality woven mixture in a robust U-profile frame; regenerable
- 5 **Filter pads LoTex® ePM10**  
Synthetic-fiber fleece with progressive depth structure; not regenerable
- 7 **ePM1 filter cells**  
Pleated micro-glass-fiber fleece, oleo- and hydrophobic, in plastic frame; not regenerable.



# Technical Specifications

Size		1/1	2/1	3/1	4/1	5/1	6/1	7/1	1/2	2/2	3/2	4/2	5/2	6/2	7/2
Width, interior size	mm	610	610	610	610	610	610	610	1,220	1,220	1,220	1,220	1,220	1,220	1,220
Height, interior size	mm	305	610	915	1,220	1,525	1,830	2,135	305	610	915	1,220	1,525	1,830	2,135
Length	mm	915	915	915	915	915	915	915	915	915	915	915	915	915	915
Filter compartments	ea.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Space needed at the side to change filters	mm	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Service doors	ea.	1	1	1	2	2	2	3	1	1	1	2	2	2	3

### Weight without filters installed

Type KLG	kg	38	56	76	94	111	131	142	57	82	109	134	158	185	204
Type KLH	kg	40	60	82	102	121	143	156	61	90	121	150	178	209	232

### Pressure-shock resistant reinforced version

Type KLG	kg	68	101	137	170	200	236	256	103	148	196	241	284	333	367
Type KLH	kg	72	108	148	184	218	257	281	110	162	218	270	320	376	418

Filters available (selection)		1/1	2/1	3/1	4/1	5/1	6/1	7/1	1/2	2/2	3/2	4/2	5/2	6/2	7/2
<b>Type KLG – MultiCase* or metal filters</b>															
No. of slide-in filter units	ea.	1	2	3	4	5	6	7	2	4	6	8	10	12	14
<b>Type KLH – MultiCase* and/or filter cells/HEPA filters</b>															
No. of slide-in filter units	ea.	1/2	2/4	3/6	4/8	5/10	6/12	7/14	2/4	4/8	6/12	8/16	10/20	12/24	14/28

\*MultiCase filters with various filter pads; up to 3 layers are possible.

Max, air flow		1/1	2/1	3/1	4/1	5/1	6/1	7/1	1/2	2/2	3/2	4/2	5/2	6/2	7/2
MultiCase with	mm	610	610	610	610	610	610	610	1,220	1,220	1,220	1,220	1,220	1,220	1,220
Filter pads, G4–M5	m³/h	2,500	5,000	7,500	10,000	12,500	15,000	17,500	5,000	10,000	15,000	20,000	25,000	30,000	35,000
Metal filters, G2–M5	m³/h	3,500	7,000	10,500	14,000	17,500	21,000	24,500	7,000	14,000	21,000	28,000	35,000	42,000	49,000
Filter cells, F7–F9	m³/h	2,800	5,600	8,400	11,200	14,000	16,800	19,600	5,600	11,200	16,800	22,400	28,000	33,600	39,200
HEPA filter E11	m³/h	1,300	2,600	3,900	5,200	6,500	7,800	9,100	2,600	5,200	7,800	10,400	13,000	15,600	18,200
HEPA filter H13	m³/h	1,300	2,600	3,900	5,200	6,500	7,800	9,100	2,600	5,200	7,800	10,400	13,000	15,600	18,200

Pipe connection, branch piece, socket, spigot		1/1	2/1	3/1	4/1	5/1	6/1	7/1	1/2	2/2	3/2	4/2	5/2	6/2	7/2
Nominal diameter DN, DIN 2641*	mm	200	300	400	400	500	500	500	300	400	500	600	700	700	800
Nominal diameter DN, DIN 2641*	mm	250	400	500	500	600	600	700	400	500	600	700	800	900	1.000
Fitting length	mm	225	300	400	400	500	600	700	300	400	600	700	800	900	1.000
Weight	kg	10	15	24	32	41	60	77	15	32	55	70	88	106	125

**Pressure-shock resistant reinforced version**

Type KLG/KLH	kg	20	30	48	64	82	120	154	30	64	110	140	176	212	250
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\*The nominal DN width depends on the air flow. The air speed in the suction fittings should not exceed 17 m/s.

Air duct		1/1	2/1	3/1	4/1	5/1	6/1	7/1	1/2	2/2	3/2	4/2	5/2	6/2	7/2
Weight*	kg	14	19	23	27	32	36	40	23	27	32	36	40	45	49

\* Air duct length 500 mm

Weather protection grille with protection grid		1/1	2/1	3/1	4/1	5/1	6/1	7/1	1/2	2/2	3/2	4/2	5/2	6/2	7/2
Width	mm	710	710	710	710	710	710	710	1,320	1,320	1,320	1,320	1,320	1,320	1,320
Height	mm	405	710	1,015	1,320	1,625	1,930	2,235	405	710	1,015	1,320	1,625	1,930	2,235
Length	mm	105	105	105	105	105	105	105	105	105	105	105	105	105	105
Weight	kg	6	10	13	18	23	28	31	9	15	23	31	39	46	53

Protection grille		1/1	2/1	3/1	4/1	5/1	6/1	7/1	1/2	2/2	3/2	4/2	5/2	6/2	7/2
Width	mm	710	710	710	710	710	710	710	1,320	1,320	1,320	1,320	1,320	1,320	1,320
Height	mm	405	710	1,015	1,320	1,625	1,930	2,235	405	710	1,015	1,320	1,625	1,930	2,235
Length	mm	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Weight	kg	3	4	6	8	9	11	13	5	8	11	14	17	20	22

***DELBAG® Air Filtration is a dynamic globally active company  
within air treatment - filter technology - air quality.***

**Our local consultant and service teams gladly take their time to develop ideas and solutions together with our clients – creatively and professionally.**

