



### Industrial Filters by DANGO & DIENENTHAL

DANGO & DIENENTHAL has been a reliable partner for the filtration of liquids in nearly all ranges of industry for about 70 years. Then and now, our customers' steadily increasing requirements have stimulated our enthusiasm for innovation. Qualified engineers and modern production also ensure continuous development of our product range.

Filters are always individually dimensioned for the given operating conditions. This results in satisfied customers.

Our filter systems are especially appreciated by long-standing clients because of:

- · reliable filtration of solids
- trouble-free operation
- · minimal cost of operation and maintenance

Our "Made in Germany" filters meet a very high performance and quality standard.

In the following you will find a short description of our automatic and manual filter systems for solid/liquid separation.





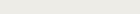
## The New Definition of Purity for Your Medium

## **Our Filter Systems Protect:**



**Cooling Water** 







**Sinter and Scale Separation** 

Sea Water and Ballast Water



**Emulsions** 

Oils



**Process Water** 



**Mussel / Mussel Larvae Separation** 



**Plate Heat Exchangers** 



**Spray Nozzles** 



**Piping Systems** 



**Mechanical Seals** 



**Pumps** 



**Micro Filtration** 



## **Continuous Filtration – Day and Night**



### Legend



Inline Design



**Continuous Filtration** 



**High-Speed Cleaning** 



100% Cleaning of the Filter Element



**Fine Filtration Possible** 



**Low Wear, Without Moving Parts** 



**Energy-Saving Operation** 

# Filterautomat (DDF)











#### Good, better, DDF



The Filterautomat is distinguished by an extremely robust design and an excellent backflushing performance. The complete filter area is cleaned by a rotating filter drum.

flow rate	5 m <sup>3</sup> /h to 10,500 m <sup>3</sup> /h
filter fineness	≥ 5 µm
operating pressure	0.8 to 63 bar
flange	DN 50 to DN 1000
automatic backwash	$\checkmark$
filter housing	cast iron, steel, stainless steel



## Backwash Drum Filter (RTF)













The Backwash Drum Filter is based on the Filterautomat's filtration and backwash principle. However, a more individual choice of materials for more demanding mediums can be realized.

flow rate	80 m³/h to 4,000 m³/h
filter fineness	≥ 5 µm
operating pressure	1.5 to 63 bar
flange	DN 100 to DN 1000
automatic backwash	$\checkmark$
filter housing	steel, stainless steel, GRP

## Backwash Drum Filter S (RTF-S)









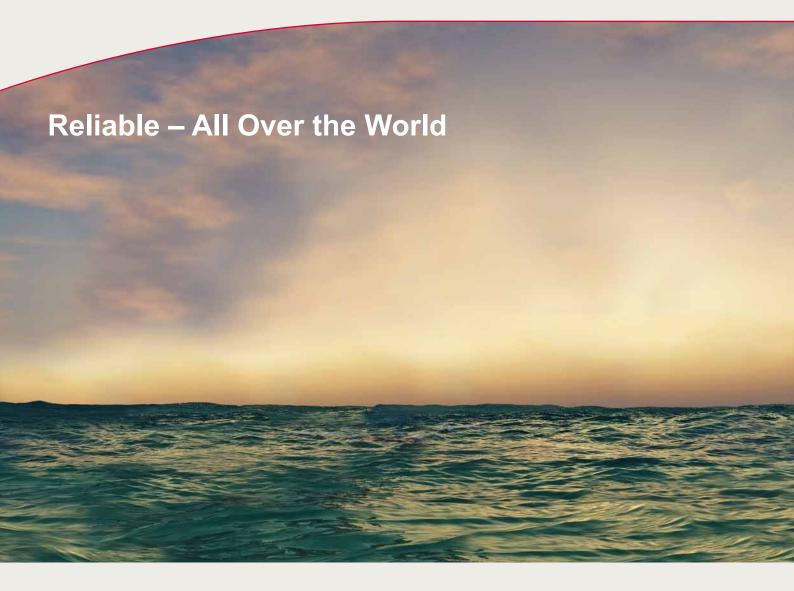


## Successful technology in new design

The Backwash Drum Filter S is distinguished by an excellent backwash performance and a compact design. An individual choice of materials for more demanding mediums can be realized.

flow rate	3 m³/h to 100 m³/h
filter fineness	≥ 5 µm
operating pressure	1.5 to 63 bar
flange	DN 40 to DN 100
automatic backwash	$\checkmark$
filter housing	steel, stainless steel, GRP





### **JET Filter** (JET)













#### Filtration in any position

Inline filter without moving inner parts. The patented design allows for nearly all materials, flow rates, and mounting positions.



### **JET Filter S** (JET-S)











#### Small and fine

More compact, ready-mounted backwash filter for low flow rates. Universally applicable for practically all application areas.

flow rate	1 m <sup>3</sup> /h to 25 m <sup>3</sup> /h
filter fineness	≥ 50 µm
operating pressure	1.5 to 10 bar
threaded connection	R 2"
automatic/manual backwash	$\checkmark$
filter housing	stainless steel, plastic



# Separator (SPR)













### Spinning around

A turbo disc in the filter inlet makes the volume flow rotate. Particles are thus separated by centrifugal forces.

flow rate	2 m <sup>3</sup> /h to 250 m <sup>3</sup> /h
filter fineness	≥ 5 µm
operating pressure	2 to 63 bar
flange	DN 50 to DN 200
filter housing	steel, stainless steel, plastic

# Multi-Separator (M)









### Well packaged

The housing of the Multi-Separator integrates several Separators. Therefore larger flow rates can be effectively filtered.

flow rate	120 m <sup>3</sup> /h to 3,000 m <sup>3</sup> /h
filter fineness	≥ 5 µm
operation pressure	2 to 63 bar
flange	DN 150 to DN 700
filter housing	steel, stainless steel





## Single Filter (EF)



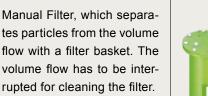






### Quite simple

tes particles from the volume flow with a filter basket. The volume flow has to be interrupted for cleaning the filter.











### One on standby

A switch-over unit enables one filter to be in operation, while the other is on standby. This allows continuous operation without interruption for cleaning.

flow rate	5 m <sup>3</sup> /h to 10,000 m <sup>3</sup> /h
filter fineness	≥ 10 µm
operating pressure	0 to 63 bar
flange	DN 15 to DN 1000
manual backwash	$\checkmark$
filter housing	cast iron, steel, stainless steel, glass-fibre-reinforced plastic (GRP)

flow rate	5 m³/h to 10,000 m³/h
filter fineness	≥ 10 µm
operating pressure	0 to 63 bar
flange	DN 15 to DN 500
manual backwash	$\checkmark$
filter housing	cast iron, steel, stainless steel



# Bag Filter (EFBS)







### Everything in a bag

Manual Filter with a filter bag made of different materials, e.g. nylon or needle-felt. A large filtration area and a filtration fineness of  $\geq$  1  $\mu$ m characterize this filter.

flow rate	0 m <sup>3</sup> /h to 60 m <sup>3</sup> /h
filter fineness	≥ 1 µm
operating pressure	0 to 63 bar
flange	DN 50 to DN 100
manual backwash	$\checkmark$
filter housing	steel, stainless steel

# Multi-Bag Filter (EFBM)





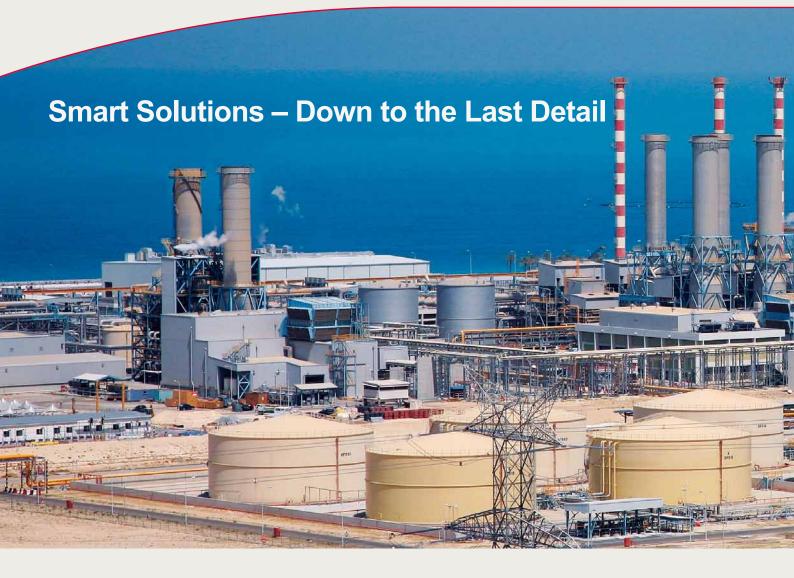


### Extensive filtration area

In the Multi-Bag Filter several filter bags are integrated in the housing. This allows for higher flow rates or longer operating time.

flow rate	60 m <sup>3</sup> /h to 360 m <sup>3</sup> /h
filter fineness	≥ 1 µm
operating pressure	0 to 63 bar
flange	DN 100 to DN 500
manual backwash	$\checkmark$
filter housing	steel, stainless steel





### **Plate Filter** (PLF)











#### Powerful coarse filtration

Massive inline filter with diagonally positioned sieve plate. Manual or automatic backwashing is optionally available.

flow rate	5 m <sup>3</sup> /h to 2,500 m <sup>3</sup> /h
filter fineness	≥ 500 µm
operating pressure	0.3 to 25 bar
flange	DN 80 to DN 500
manual/automatic backwash	$\checkmark$
filter housing	cast iron, glass-fibre-reinforced plastic (GRP)

### **Sludge Dewatering** Device (SCHLAMMCON)





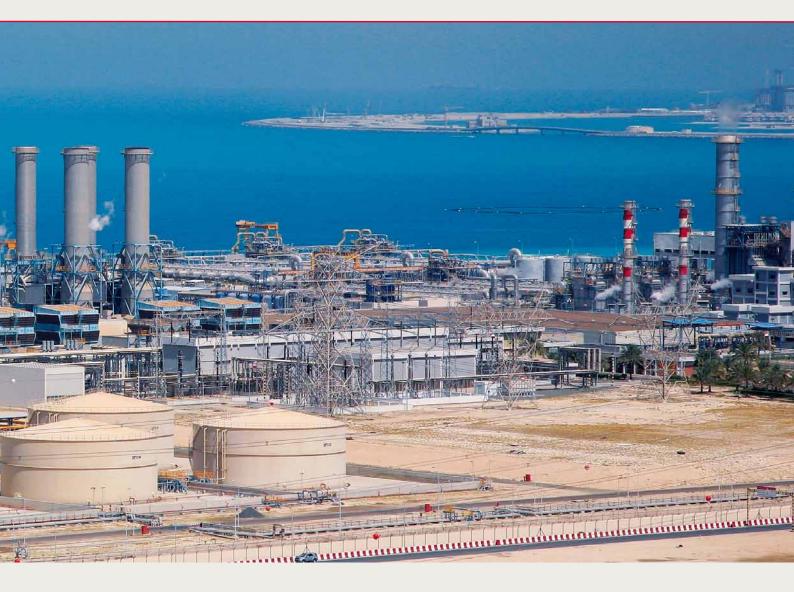




### **Completely different**

Coarse particles are retained inside the Schlammcon by a box-type filter fleece. The bottom of the Schlammcon can be opened for disposal of the filter fleece including contents very simply. This system can also be combined with our automatic filters.

volume	1 m³
filter fineness	≥ 5 µm
manual exchange	$\checkmark$
filter housing	steel, stainless steel



### **Backflushing** Cartridge Filter (RKF)









#### **Great!**

The principal item in the Backflushing Cartridge Filter is a rotary disc, in which the filter cartridges are integrated. This design is applicable for large flow rates because the cartridges are automatically cleaned one after the other.

flow rate	2,000 m <sup>3</sup> /h to 10,000 m <sup>3</sup> /h
filter fineness	≥ 50 µm
operating pressure	1.5 to 25 bar
flange	DN 80 to DN 1800
automatic backwash	$\checkmark$
filter housing	steel, stainless steel

### Combi Filter (DCF)









#### Safe in combination

The Combi Filter is a combination of Separator and Cartridge Filter. In the first step coarse particles are separated by centrifugal forces. In the next step filter elements remove the fine parts from the volume flow.

flow rate	5 m³/h to 2,000 m³/h
filter fineness	≥ 30 µm
operating pressure	2 to 25 bar
flange	DN 50 to DN 700
automatic backwash	$\checkmark$
filter housing	steel, stainless steel



## **Products**

#### **Automatic Filters**

- Filterautomat
- Backwash Drum Filter
- Backwash Drum Filter S
- JET Filter
- JET Filter S
- Plate Filter

### **Hydrocyclones**

- Separator
- Multi-Separator

#### **Manual Filters**

- Single Filter
- **Duplex Filter**
- Bag Filter
- Multi-Bag Filter
- Sludge Dewatering Device

### **Miscellaneous**

- Backflushing Cartridge Filter
- Combi Filter



### CERTIFICATE OF APPROVAL

This is to certify that the Quality Management System of:

DANGO & DIENENTHAL Maschinenbau GmbH DANGO & DIENENTHAL Filtertechnik GmbH Hagener Str. 103, 57072 Siegen Germany

DANGO & DIENENTHAL

has been approved by Lloyd's Register Quality Assurance to the following Quality Management System Standards:

ISO 9001:2008

The Quality Management System is applicable to:

Design, manufacturing and service of machines for forging and handling technology, technology for ferro alloy plants, skimming technique and filter technique and manufacturing of machines for tapping technology and measuring technology.

Bartan Register Quality Assurance GmbH of: Lloyd's Register Quality Assurance Limited

