# Rental Filtration Equipment FUNDABAC® | CONTIBAC®

Efficient solutions for small-scale testing and validation





# RENTALI FILTRATION

# This is DrM

### **Customized solutions**

Each solid-liquid separation system is tailor made to the specific application parameters of our clients. We view every application as a challenge to satisfy our clients, regardless if the application is straight forward or complex.

### **Application comprehension**

Every solid-liquid separation application is unique. DrM's comprehension of all of the applications begins with a discussion with the client and is followed by a request that the client complete an application questionnaire to the best of its ability. Following a review of the information submitted by the client, DrM application specialists may suggest that onsite testing and/or piloting be carried out. This hands-on work ultimately gives both DrM and its clients the confidence that the process is scalable. It also puts DrM in a position to submit a technical/commercial proposal that it will stand behind.

### **Quality above all**

DrM's Quality System is ISO 9001 certified for the design and manufacture plants. We are dedicated to continually improving the efficiency and the effectiveness of our quality management system. All of our products follow a rigid quality control program that employs the most current testing and inspection methods prior to shipment.

# **Filtration Options**

During selection, sizing and validation of process equipment laboratory and pilot testing are indispensable bench tools. In filtration processes they provide important data on flow, pressure, filtrate quality, residual moisture, washing yield, filter aid demand and other parameters. The insight gained serves the process engineer and plant designer for sound planning and specification of the full-scale production equipment. After the execution of significant pilot tests the determination of a performance or process guarantee is normally possible.

Rental filtration equipment type FUNDABAC® & CONTIBAC® are available in various sizes from laboratory and pilot scale up to industrial production.

SCALE FILTER AREA (m²)		FILTER E	MODE OF	
	SIZE (mm)	QUANTITY	OPERATION	
Laboratory	0.012-0.048	Ø 30 <sup>(1)</sup>	1	manual
Pilot Unit	0.16-0.32	Ø 75 <sup>(2)</sup>	1	manual / automatic
Semi Industrial	1.0-3.0	Ø 75 <sup>(2)</sup>	4-7	manual / automatic
Production	4.5-50	Ø 75 <sup>(2)</sup>	14-78	automatic

 $<sup>^{\</sup>mbox{\scriptsize (1)}}$  1:2.5 reduced FUNDABAC® Filter element

Besides stainless steel (316L) various plastics (PP, PVDF) as well as corrosion resistant coatings are available as materials of construction. Normally the units are fitted with heating jackets as well as heel volume filtration (HVF) devices. Most of the units can be operated as CONTIBAC® thickeners alternatively when assembling the conical bottom. A suitable feed pump can be supplied for the majority of the units, if desired.

The rental equipment complies with applicable pressure equipment directives and is certified accordingly (PED, ASME). Various plants are available with ATEX approval for use in a potentially explosive atmosphere.

 $<sup>^{(2)}</sup>$  regular FUNDABAC $^{\otimes}$  Filter element

# **Unit Specifications**

CRITERI	IA	LAB FILTER TSD	MONO-CANDLE TEST FILTER	MULTI-CANDLE TEST FILTER	MULTI-CANDLE PRODUCTION FILTER
Duty / Scale		Laboratory	Pilot testing	Semi industrial / Small batch	Industrial / Production
Filter Area (m²)		0.012-0.048	0.16-0.32	1.0-3.0	4.0-50
Ethan dament	Size (mm)	Ø 30	Ø 75	Ø 75	Ø 75
Filter element	Quantity	1	1	3-6	> 10
Element geometry industrial scale	vs.	similar reduced	identical	identical	identical
Mode of operation		manual	manual / automatic	manual / automatic	automatic
Space required	Area (m²)	0.3	1-2	2-6	7-20
approx.	Height (m)	0.7	1.9-2.5	2.5-5	4-7.5
Empty Weight app	rox. (kg)	10	200-1000	600-3000	2500-11000
Fill Volume approx. (It)		1	20-60	150-500	800-6700
Batch Volume approx. (It)		> 3	> 50	> 300	> 1000
Cake Volume approx. (It)		0.35	5-30	40-100	150-1200
Materials of constr	ruction	SS 316L, PVDF	SS 316L, Hastelloy® ,PP / PVDF, HALAR®	SS 316L, HRL	SS 316L
Heel Volume Filtrat Washing	tion / Spray	no	yes	yes	yes
Heating jacket		yes	yes	yes	yes
Operating Pressure	e (barg)	20 (metal) 5 (plastic)	6-10 (up to 60)	6-10	6-10
Pump Flow		~ 10 lt/min	1-2 m³/h	5-15 m <sup>3</sup> /h	case dependent
Process gas Press	ure	min 4 barg	min 4 barg	min 4 barg	min 4 barg
Power supply		no	yes / no	yes	yes
Sanitary version (S	TERIBAC®)	yes	yes	no	no
CONTIBAC® RX		no	no	yes	no
Suitable for Ex-Zoi	ne	yes	yes	yes	yes
Estimated rental d	uration	few days	2-6 weeks	1-3 months	several months
Duration of instruc Start-up approx.	tion /	none	1-3 days	3-5 days	1-2 weeks
Number of units av	ailable	20	25	8	3

The selection options / combinations are limited. DrM reserves the right to change the data without prior notice.

# **Unit options**



LABORATORY FILTER TSD	SS 316L	PVDF	
Equipment No. APN	several		
Filter Area (m²)	0.012		
Vessel Ø (mm)	80		
Max. Pressure (barg)	-1 / 20	5	
Max. Temperature (°C)	250	80	
Material	SS 316L	PVDF	
Dimensions (mm)	460 x 500 x 220		
Weight (kg)	10.7	7.3	



PILOT FILTER FUNDABAC® MONO MANUAL		
Equipment No. APN	several	
Filter Area (m²)	0.16-0.32	
Vessel Ø (mm)	140-220	
Max. Pressure (barg)	6-10	
Max. Temperature (°C)	100-200	
Material	SS 316L, PP	
Dimensions (mm)	1770 X 970 X 2210	
Weight (kg)	400	



PILOT FILTER FUNDABAC® MONO AUTOMATIC		
Equipment No. APN	several	
Filter Area (m²)	0.16-0.32	
Vessel Ø (mm) 150-220		
Max. Pressure (barg)	6-10	
Max. Temperature (°C)	100-200	
Material	SS 316L, PVDF	
Dimensions (mm)	on demand	
Weight (kg)	670	



PILOT FILTER FUNDABAC® QUATTRO AUTOMATIC		
Equipment No. APN	52919, 53017	
Filter Area (m²)	1.0, 1.2	
Vessel Ø (mm)	400, 508	
Max. Pressure (barg)	10	
Max. Temperature (°C)	120, 80	
Material	SS 316L, HRL	
Dimensions (mm)	2100 x 970 x 2210, 1810 x 1710 x 3150	
Weight (kg)	650, 1400	



PILOT FILTER FUNDABAC® HEPTA AUTOMATIC		
Equipment No. APN	several	
Filter Area (m²)	2.3-50.7	
Vessel Ø (mm)	500-1600	
Max. Pressure (barg)	6-10	
Max. Temperature (°C)	100-200	
Material	SS 316L	
Dimensions (mm)	on demand	
Weight (kg)	1100-11000	



PILOT FILTER CONTIBAC® RX AUTOMATIC SS		
Equipment No. APN	several	
Filter Area (m²)	1-3	
Vessel Ø (mm)	323.9	
Max. Pressure (barg)	6.5-7.5	
Max. Temperature (°C)	80	
Material	SS 316L	
Dimensions (mm)	on demand	
Weight (kg)	355-940	



# Headquarters and Subsidiaries

# Switzerland (HQ)

DrM, Dr. Mueller AG Alte Landstrasse 415 8708 Maennedorf, Switzerland

Tel. +41 44 921 2121 Fax +41 44 921 2131

mailbox@drm.ch
www.drmgroup.com

# China

DrM Shanghai Co., Ltd. Building 2 No. 18 Rong Xin Road Xinqiao,Song Jiang District Shanghai 201612, China

Tel. +86 21 5768 7390 Fax +86 21 5768 7391

# **Poland**

DrM Polska Sp. z o.o. Al. Kazimierza Wielkiego 5 PL87-800 Wloclawek, Poland

Tel. +48 54 237 2921 Fax +48 54 237 2931

# **India**

DrM Filter Technology Pvt. Ltd. Plot 46 – 1 & 2 Hansot Road Village Pungam, Ankleshwar Bharuch, Gujarat, 393020, India

Tel. +91 2646 652775/6

# **USA**

DrM, Inc. 2125 Center Ave. Suite 507 Fort Lee NJ 07024, USA

Tel. +1 201 302 0667 Fax +1 201 302 6062

# **Malaysia**

DrM, Dr. Mueller AG SEA Regional Office No. 13 Jalan SE 2B Sunway Eastwood Taman Equine Seri Kembangan 43300 Selangor, Malaysia

Tel. +60 3 8940 4917 Mob. +60 17 394 056