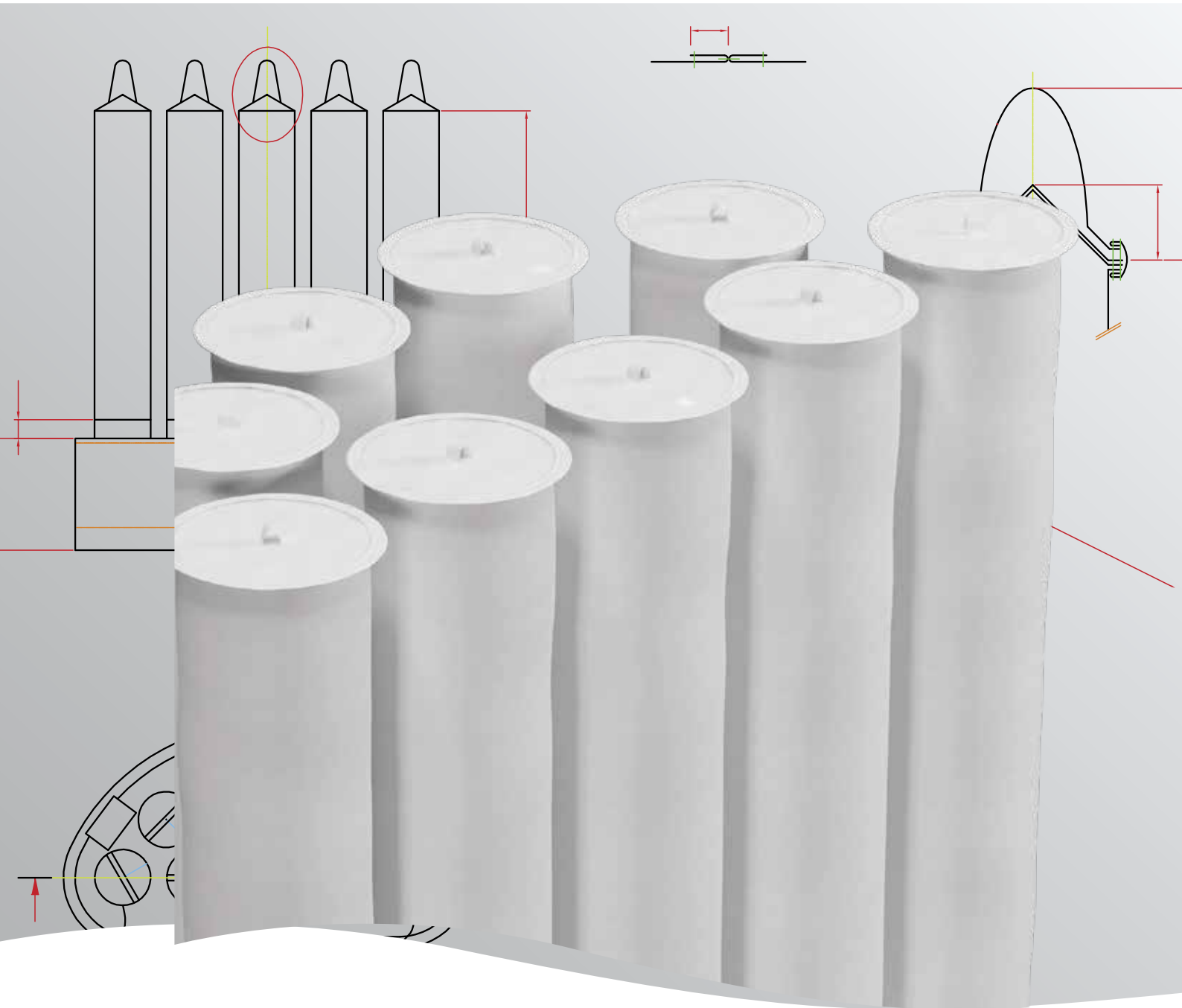


SEFAR® PHARMA GMP

Filter solutions for the Life Science industry



S E F A R
■ ■ ■ ■

Sefar Life Science Solutions

Sefar responds to the stringent requirements of the pharmaceutical industry by creating the highest quality standards available. Developed in partnership with the world's top pharmaceutical manufacturers SEFAR® PHARMA GMP products represent the highest level of security available on the market today.



Specially made for Life Science industries

Sefar controls every crucial production step from yarn production to the ready-to-use filters making possible a complete traceability of all critical parts. Our unique market position enables us to supply products to our customers that meet all required quality levels and compliances.

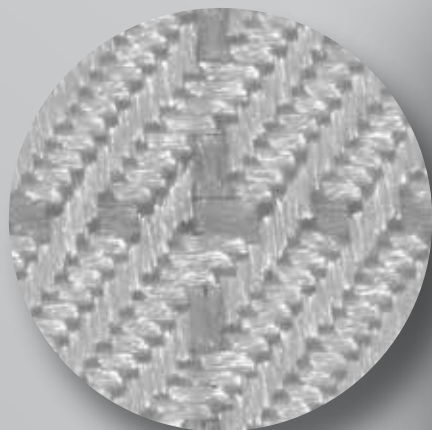


Sefar has perfected its manufacturing processes to meet the needs of the pharmaceutical industry. Our exclusive GMP compliant filter products are manufactured in our cleanroom following strict GMP guidelines.

	Available quality levels		
	PHARMA GMP	PHARMA	Basic
Food and drug conformity for complete filter	✓	✗	✗
FDA and EC regulation compliance for all components	✓	✗	✗
All production and fabrication processes according to EC 2023/2006 or corresponding cGMP (21 CFR 210 ff)	✓	✗	✗
Fabrication processes in dedicated cleanroom (GMP class D or ISO class 8)	✓	✗	✗
Food and drug conformity for filter media	✓	✓	✗
Tested for extractables and migration values according to EC 10/2011	✓	✓	✗
Food and drug conformity for filter media polymers	✓	✓	✓
ISO 9001 quality control procedures	✓	✓	✓
Dedicated sales staff, including on-site sales support	✓	✓	✓
Products backed by engineering support staff	✓	✓	✓
PHARMA labels (where applicable)	✓	✓	optional
Conductivity certificate for complete filter (where applicable)	✓	✓	optional



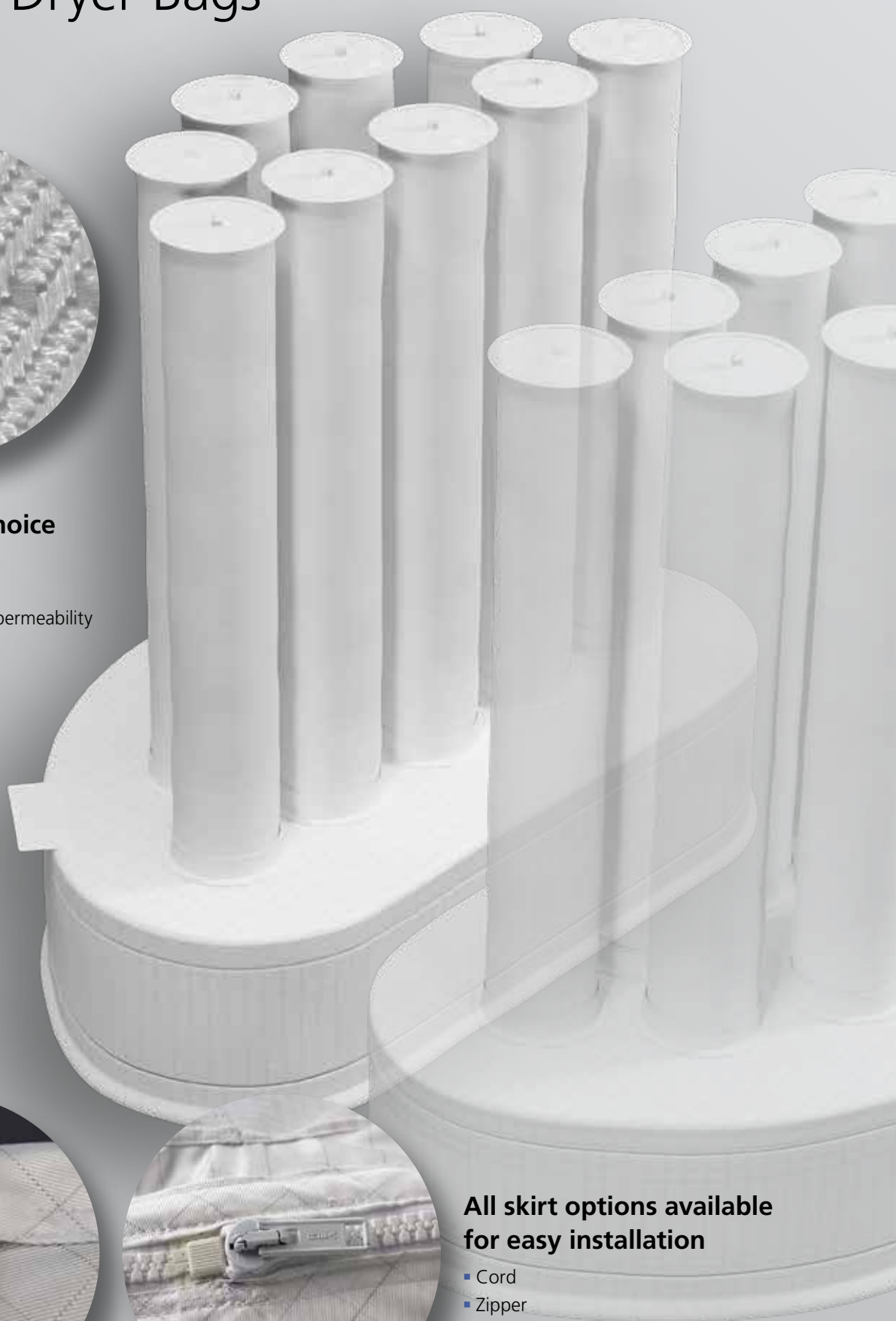
Fluid Bed Dryer Bags



The industry reference fabric choice

SEFAR **TETEX**® MULTI

- Conductive fabrics
- Best retention at highest permeability



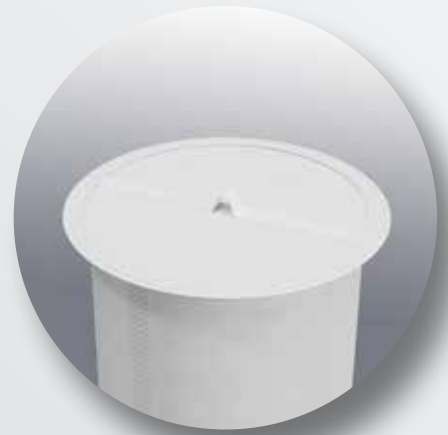
All skirt options available for easy installation

- Cord
- Zipper





Caps tailor made to fit your requirements



Sefar unique welding technology

No particle loss through stitching holes



Sefar unique label technology

- Excellent identification and traceability
- Customer defined text
- No contamination
- No fading and shedding

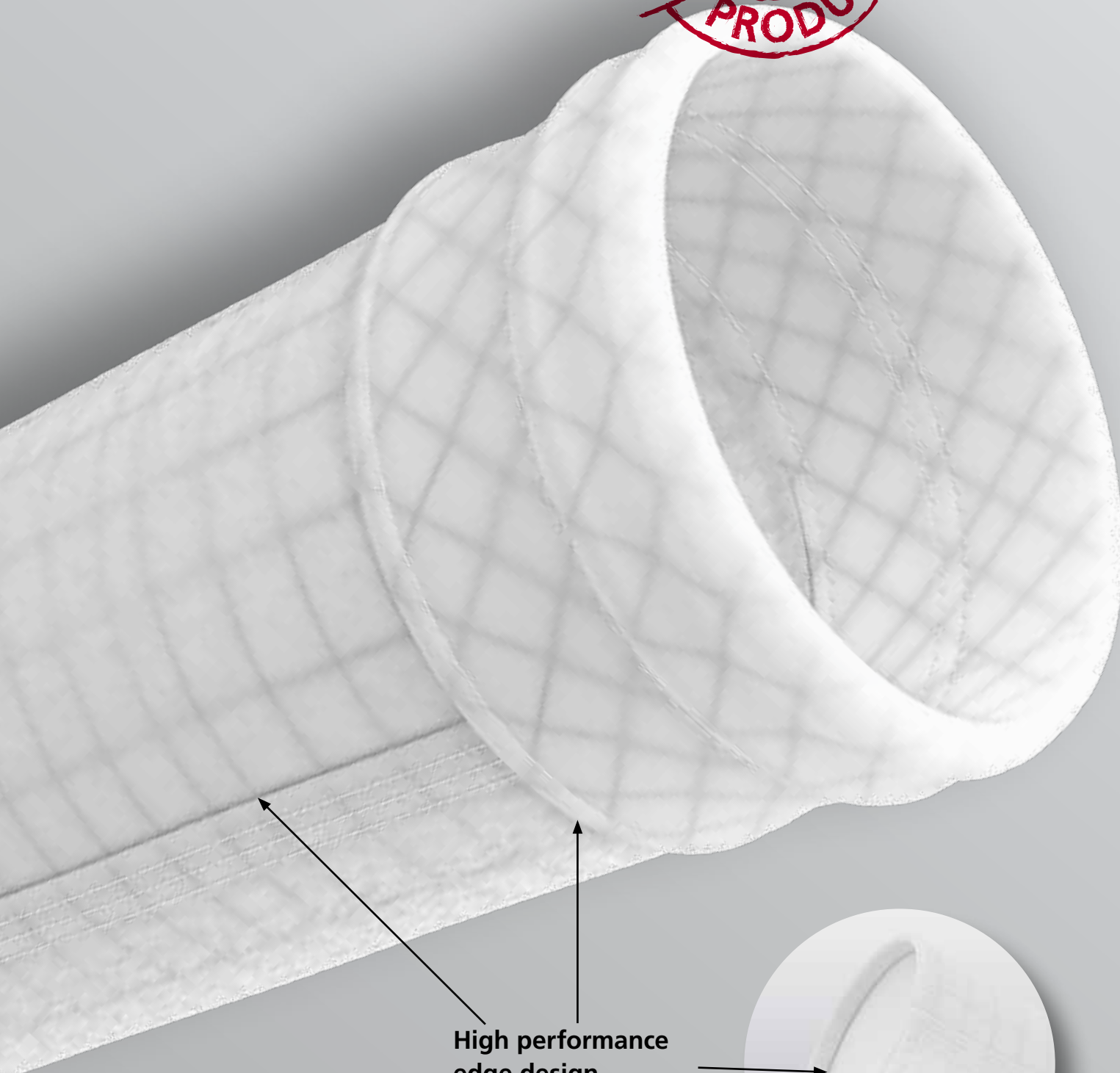


EC 1935/2004	✓
EC 10/2011	✓
GMP EC 2023/2006 or cGMP	✓
FDA CFR 177	✓
ISO 9001	✓
Conductivity tested	✓
Single packaging	✓
Customized labeling	✓
Traceability	✓
Bioburden test	✓

	Material	Antistatic	Air permeability [cfm]	Air permeability [l/(m ² · s)]	Air permeability [l/(dm ² · min)]	Weight [g/m ²]
03-110-168 WA PHARMA	PA	✓	13.8	110	66	168
07-65-180 WA PHARMA	PET	✓	8.1	65	39	180
07-100-150 WA PHARMA	PET	✓	12.5	100	60	150
07-200-150 WA PHARMA	PET	✓	25.0	200	120	150
07-300-150 WA PHARMA	PET	✓	37.5	300	180	150

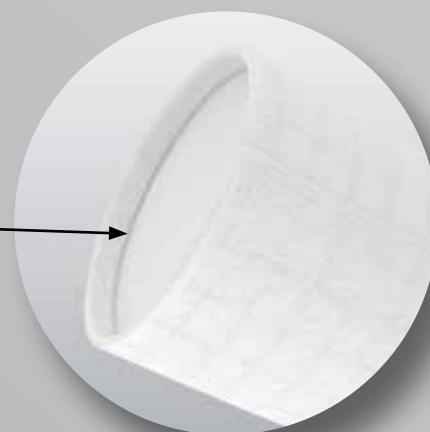
Filter Bags

The certified filter bag solution



High performance edge design

to avoid product contamination from needle felt fibres



High conductivity stainless steel matrix

to provide excellent protection against explosion

ePTFE membrane

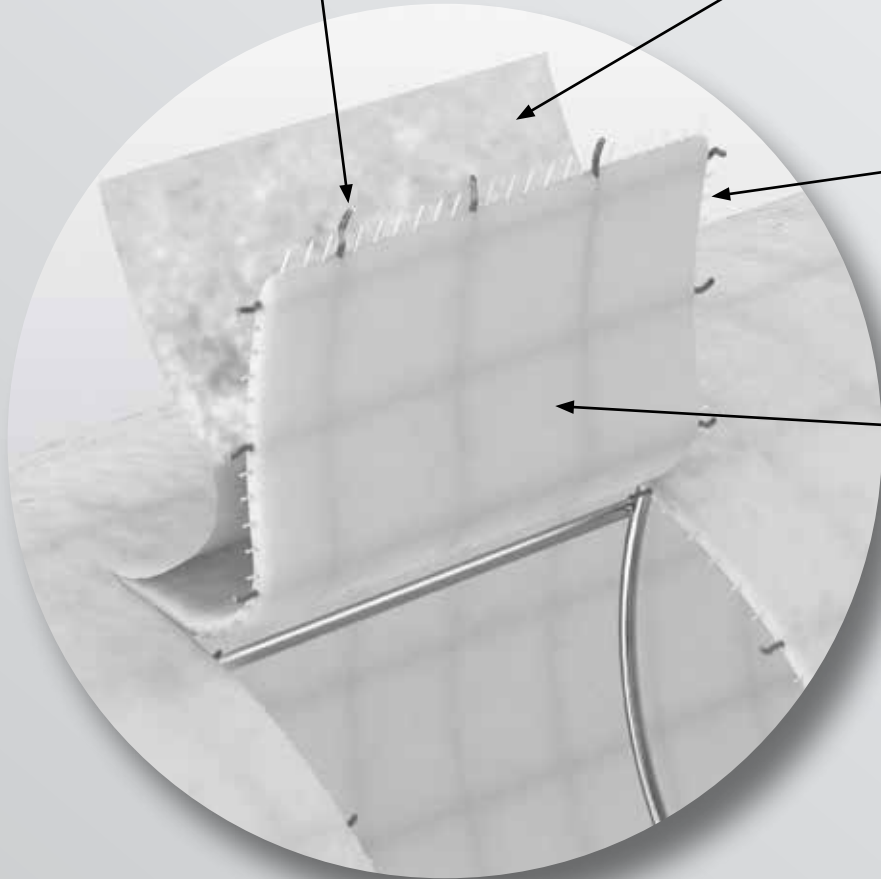
to avoid contamination and provide high filtration efficiency

PET or PTFE scrim

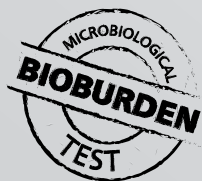
for high mechanical resistance and stability

PET or PTFE needlefelt

EC and FDA compliant



EC 1935/2004	✓
EC 10/2011	✓
GMP EC 2023/2006 or cGMP	✓
FDA CFR 177	✓
HACCP	✓
ISO 22000	✓
ISO 9001	✓
ATEX (EC 94/9)	✓
Single packaging	✓
Customized labeling	✓
Traceability	✓
Test report	✓
Bioburden test	✓
UV-Sterilized (on request)	✓



NEW

	Material	PTFE Membrane	Antistatic	Weight [g/m ²]
07-400-50 NFMA PHARMA	PET	✓	✓	400
07-550-50 NFMA PHARMA	PET	✓	✓	550
07-550-50 NFM PHARMA	PET	✓	-	550
24-750-50 NFMA PHARMA	PTFE	✓	✓	750
24-750-50 NFM PHARMA	PTFE	✓	-	750

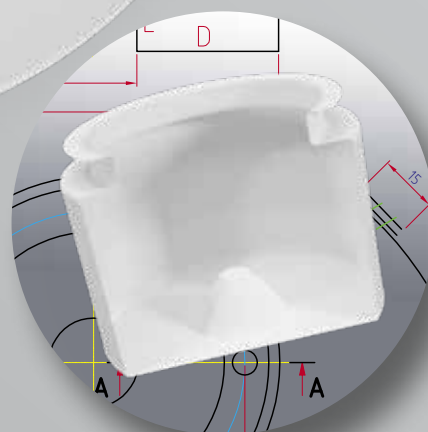
Centrifuge Bags

**Excellent mechanical
resistance and easy
installation**

Sefar unique fabric design



**Customized design
to fit your equipment**





The industry reference fabric choice

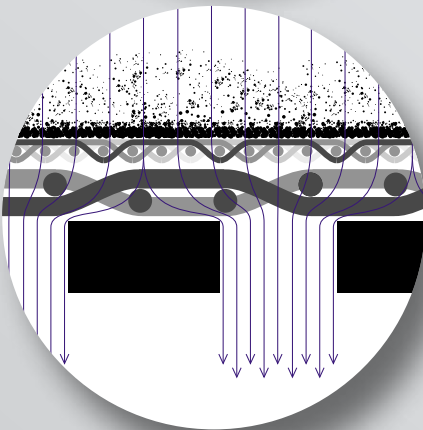
SEFAR **TETEX DLW®**

- Best particle retention
- Best cake release
- Reduced installation and maintenance time



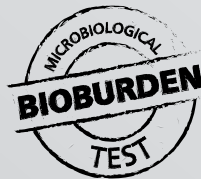
Sefar unique label technology

- Excellent identification and traceability
- No contamination
- No fading
- No shedding



DLW integrated drainage layer

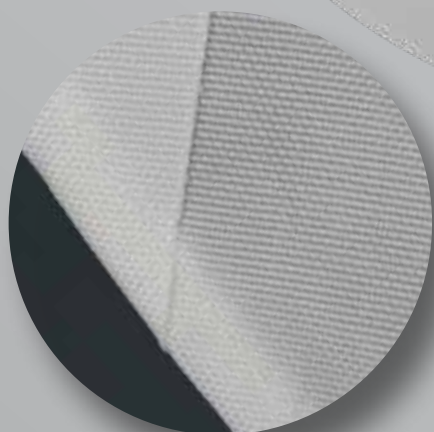
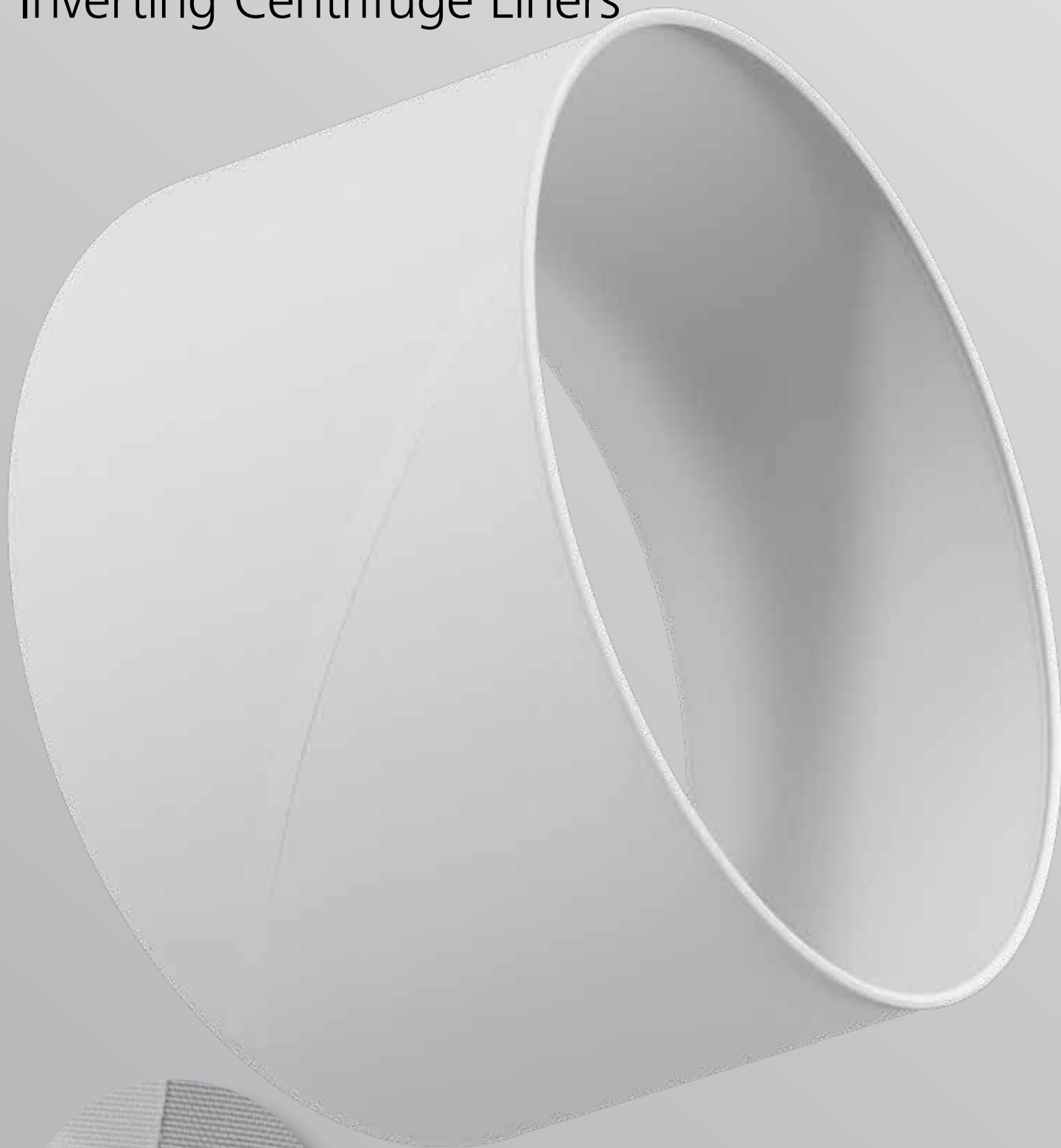
- Improved production capacity



EC 1935/2004	✓
EC 10/2011	✓
GMP EC 2023/2006 or cGMP	✓
FDA CFR 177	✓
ISO 9001	✓
Single packaging	✓
Labeling options	✓
Traceability	✓
Bioburden test	✓

	Material	Air permeability [cfm]	Air permeability [l/(m ² · s)]	Air permeability [l/(dm ² · min)]	Nominal pore size [µm]	Weight [g/m ²]
05-8000-SK 007 PHARMA	PP	3.8	30	18	7	420
05-8000-SK 008 PHARMA	PP	5.0	40	24	8	420
05-8000-SK 012 PHARMA	PP	6.3	50	30	12	455
05-8000-K 020 PHARMA	PP	12.5	100	60	20	425
05-8000-SK 030 PHARMA	PP	25.0	200	120	30	440
05-8000-K 050 PHARMA	PP	50.0	400	240	50	440
05-8000-K 085 PHARMA	PP	75.0	600	360	85	440
05-8000-W 120 PHARMA	PP	212.5	1700	1020	120	425
17-8000-SK 008 PHARMA	PEEK	5.6	45	27	8	586
17-8000-SK 020 PHARMA	PEEK	12.5	100	60	20	586
17-8000-K 040 PHARMA	PEEK	37.5	300	180	40	586
17-8000-SK 085 PHARMA	PEEK	100.0	800	480	85	512

Inverting Centrifuge Liners



Sefar unique welding technology

- No particle loss through stitching holes



The industry reference fabric choice

SEFAR **TETEX®** MULTI

- Maximal particle retention
- High strength
- Flexibility



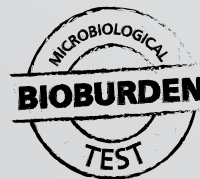
Sefar unique marking technology

- Excellent identification and traceability
- No contamination
- No fading
- No shedding



SEFAR **TETEX MONO®**

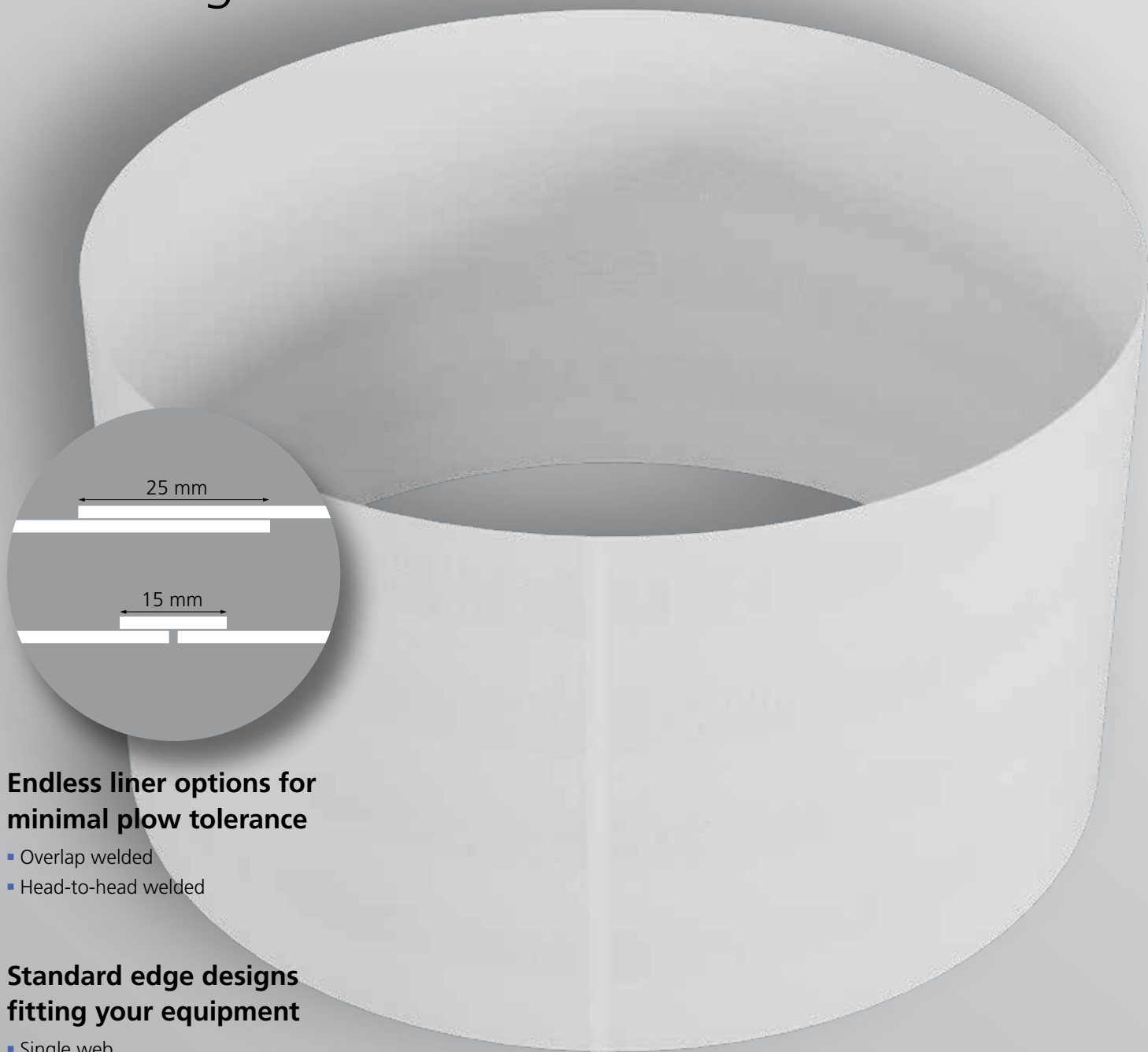
- Maximal particle retention with maximal permeability
- Optimal cleaning properties



EC 1935/2004	✓
EC 10/2011	✓
GMP EC 2023/2006 or cGMP	✓
FDA CFR 177	✓
ISO 9001	✓
Single packaging	✓
Customized marking	✓
Traceability	✓
Bioburden test	✓

	Material	Air permeability [cfm]	Air permeability [l/(m ² · s)]	Air permeability [l/(dm ² · min)]	Nominal pore size [µm]	Weight [g/m ²]
Monofilament fabric						
05-1100-SK 014 PHARMA	PP	12.5	100	60	14	136
05-1050-SK 025 PHARMA	PP	12.4	95	57	25	210
05-1050-K 036 PHARMA	PP	24.7	114	190	36	215
05-1550-K 053 PHARMA	PP	22.1	170	102	53	300
17-2005-SK 012 PHARMA	PEEK	19.5	150	90	12	103
Multifilament fabric						
05-4-660 K PHARMA	PP	0.5	4	2.4	–	660
05-11-360 SK PHARMA	PP	1.4	11	6.6	–	360
05-12-330 W PHARMA	PP	1.5	12.5	7.5	–	320
05-22-300 W PHARMA	PP	2.8	22	13.2	–	300
05-40-505 W PHARMA	PP	5.2	40	24	–	505
07-11-570 SK PHARMA	PET	1.4	11	6.6	–	570
17-10-240 K PHARMA	PEEK	1.3	10	6	–	235
17-25-240 W PHARMA	PEEK	3.1	25	15	–	235

Centrifuge Liners

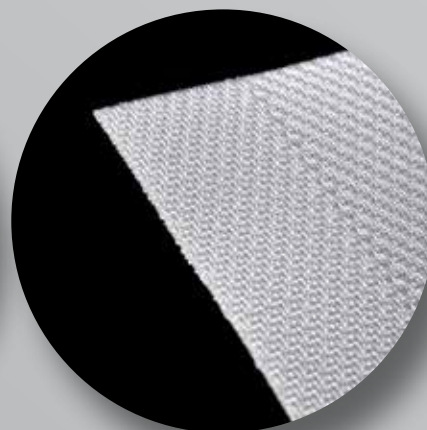
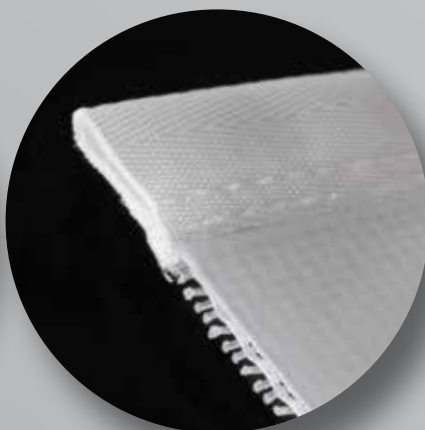
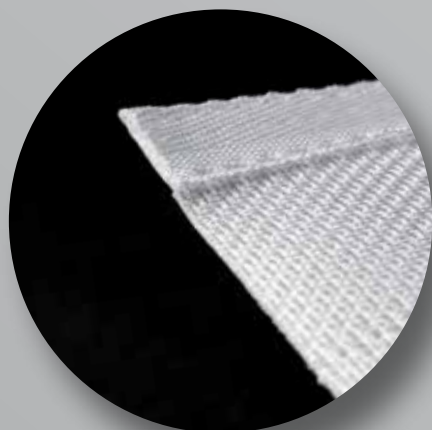


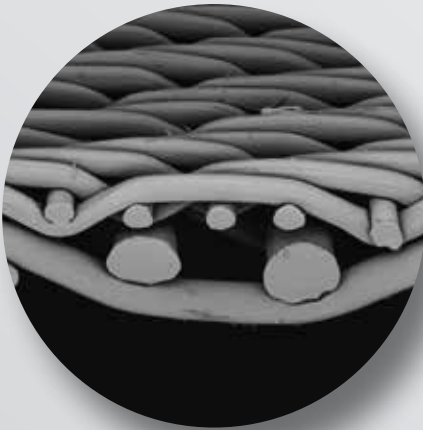
Endless liner options for minimal plow tolerance

- Overlap welded
- Head-to-head welded

Standard edge designs fitting your equipment

- Single web
- Folded web
- Heat cut





The industry reference fabric choice

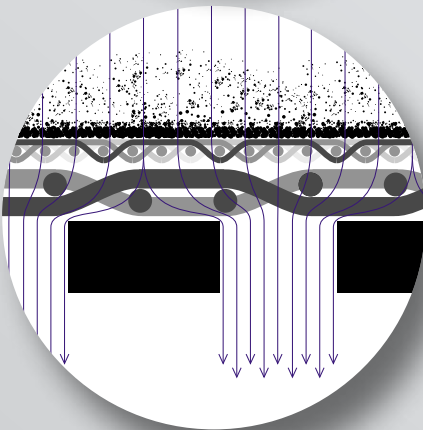
SEFAR **TETEX DLW®**

- Best particle retention
- Best cake release
- Reduced installation and maintenance time



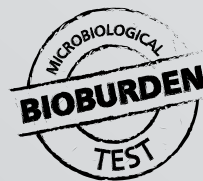
Sefar unique marking technology

- Excellent identification and traceability
- No contamination
- No fading
- No shedding



DLW integrated drainage layer

- Improved production capacity



EC 1935/2004	✓
EC 10/2011	✓
GMP EC 2023/2006 or cGMP	✓
FDA CFR 177	✓
ISO 9001	✓
Single packaging	✓
Customized marking	✓
Traceability	✓
Bioburden test	✓

	Material	Air permeability [cfm]	Air permeability [l/(m ² · s)]	Air permeability [l/(dm ² · min)]	Nominal pore size [µm]	Weight [g/m ²]
05-8000-SK 007 PHARMA	PP	3.8	30	18	7	420
05-8000-SK 008 PHARMA	PP	5	40	24	8	420
05-8000-SK 012 PHARMA	PP	6.3	50	30	12	455
05-8000-K 020 PHARMA	PP	12.5	100	60	20	425
05-8000-SK 030 PHARMA	PP	25	200	120	30	440
05-8000-K 050 PHARMA	PP	50	400	240	50	440
05-8000-K 085 PHARMA	PP	75	600	360	85	440
05-8000-W 120 PHARMA	PP	212.5	1700	1020	120	425
17-8000-SK 008 PHARMA	PEEK	5.6	45	27	8	586
17-8000-SK 020 PHARMA	PEEK	12.5	100	60	20	586
17-8000-K 040 PHARMA	PEEK	37.5	300	180	40	586
17-8000-SK 085 PHARMA	PEEK	100	800	480	85	512

Filter Nutches and Horizontal Filter Discs

Sefar unique PEEK polymer fabrics

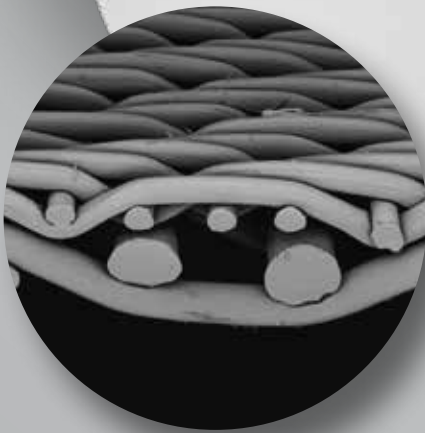
- Resistance to high temperature
- High chemical resistance



The industry reference fabric choice

SEFAR **TETEX DLW**[®]

- Best particle retention
- Best cake release
- Reduced installation and maintenance time



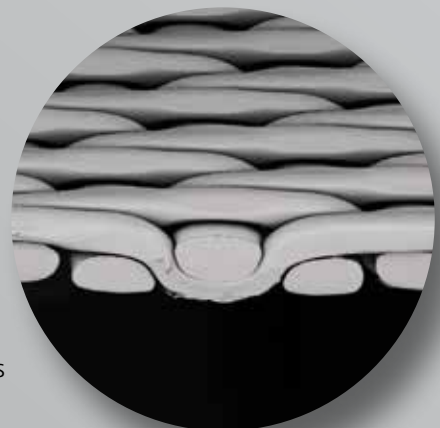
SEFAR **TETEX**[®] MULTI

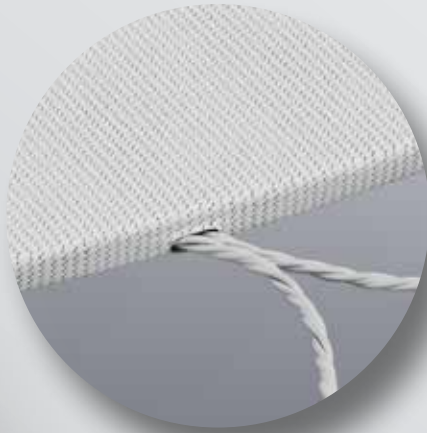
- Maximal particle retention
- High strength
- Flexibility



SEFAR **TETEX MONO**[®]

- Maximal particle retention with maximal permeability
- Optimal cleaning properties

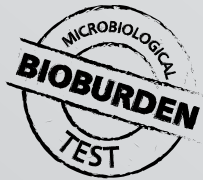




EC 1935/2004	✓
EC 10/2011	✓
GMP EC 2023/2006 or cGMP	✓
FDA CFR 177	✓
ISO 9001	✓
Single packaging	✓
Customized marking	✓
Traceability	✓
Bioburden test	✓

All options available for easy installation

- Hemmed
- Taped
- Cord
- Laser cut

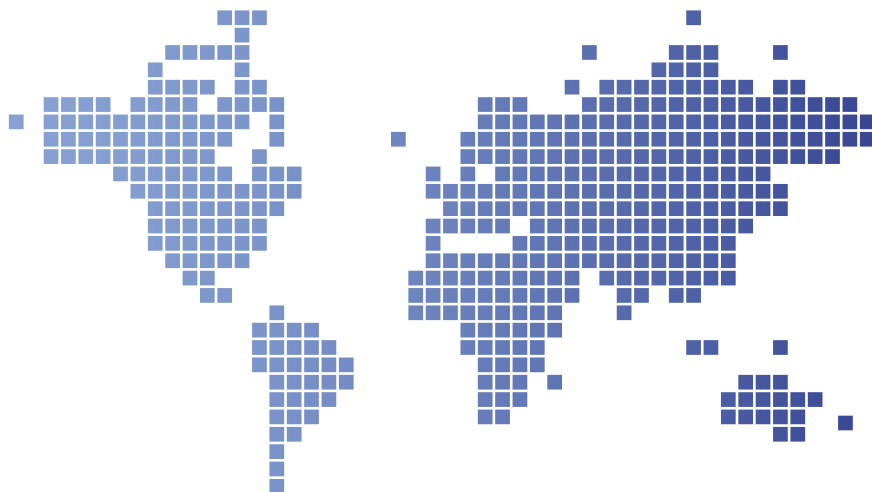


Sefar unique marking technology

- Excellent identification and traceability
- No contamination
- No fading
- No shedding



	Material	Air permeability [cfm]	Air permeability [l/(m ² · s)]	Air permeability [l/(dm ² · min)]	Nominal pore size [µm]	Weight [g/m ²]
Double layer fabric						
05-8000-SK 007 PHARMA	PP	3.8	30	18	7	420
05-8000-SK 008 PHARMA	PP	5.0	40	24	8	420
05-8000-SK 012 PHARMA	PP	6.3	50	30	12	455
05-8000-K 020 PHARMA	PP	12.5	100	60	20	425
05-8000-SK 030 PHARMA	PP	25.0	200	120	30	440
05-8000-K 050 PHARMA	PP	50.0	400	240	50	440
05-8000-K 085 PHARMA	PP	75.0	600	360	85	440
05-8000-W 120 PHARMA	PP	212.5	1700	1020	120	425
17-8000-SK 008 PHARMA	PEEK	5.6	45	27	8	586
17-8000-SK 020 PHARMA	PEEK	12.5	100	60	20	586
17-8000-K 040 PHARMA	PEEK	37.5	300	180	40	586
17-8000-SK 085 PHARMA	PEEK	100.0	800	480	85	512
Multifilament fabric						
05-4-660 K PHARMA	PP	0.5	4	2.4	–	660
05-11-360 SK PHARMA	PP	1.4	11	6.6	–	360
17-10-240 K PHARMA	PEEK	1.3	10	6	–	235
17-25-240 W PHARMA	PEEK	3.1	25	15	–	235
Monofilament fabric						
05-1100-SK 014 PHARMA	PP	12.5	100	60	14	136
05-1050-SK 025 PHARMA	PP	11.9	95	57	25	210
05-1550-K 053 PHARMA	PP	21.3	170	102	53	300



Sefar Worldwide

Sefar is the leading manufacturer of monofilament precision fabrics for filtration and screen printing applications. Sefar products are used in a wide variety of industries, reaching from electronics, medical, automotive, aerospace, food, water, pharmaceutical and graphics to chemicals, fertilizers and minerals. With its profound understanding of the applications, Sefar helps its customers to achieve optimum results in their industrial processes. With subsidiaries and representatives around the world, Sefar offers its customers the comprehensive, global support they need.

Sefar AG

Hinterbissastrasse 12
9410 Heiden
Switzerland

Phone +41 71 898 57 00

filtration@sefar.com

www.sefar.com

Africa Contacts

South Africa – Johannesburg

Phone +27 11 708 2485
info@sefarfilterpure.com

Morocco – Casablanca

Phone +212 522 66 14 66
info.ma@sefar.com

Americas Contacts

USA – Buffalo

Phone +1 800 995 0531
sales@sefar.us

Canada – Saguenay

Phone +1 418 690 0888
info.bdh@sefar.com

Brazil – São Bernardo do Campo

Phone +55 11 4390 6300
contato.brasil@sefar.com

Mexico – Cuautitlan Izcalli

Phone +52 55 2291 0652
info.mexico@sefar.com

Oceania Contacts

Australia – Huntingwood

Phone +61 2 8822 1700
oceania@sefar.com

New Zealand – MT Wellington

Phone +64 9 527 4409
salesnz@sefar.com

Asia Contacts

China – Suzhou

Phone +86 512 6283 6383
info.cn@sefar.com

India – District Thane

Phone +91 9028 656 256
info.in@sefar.com

Malaysia – Johor

Phone +60 7 861 0023
info.my@sefar.com

Singapore

Phone +65 6299 9092
info.sg@sefar.com

South Korea – Seoul

Phone +82 2 713 9133
info.kr@sefar.com

Thailand – Bangkok

Phone +66 2 210 0018
info.th@sefar.com

Vietnam – Ho Chi Minh City

Phone +84 862 925 562
info.vn@sefar.com

Europe Contacts

England – Bury

Phone +44 161 765 3530
sales@sefar.co.uk

France – Billy-Berclau

Phone +33 3 21 08 70 70
vente@sefar.com

Germany – Edling

Phone +49 8071 90400 0
info@sefar.de

Italy – Collegno

Phone +39 011 42 001
info@sefar.it

Netherlands – Lochem

Phone +31 573 744 111
info@sefar.nl

Poland – Poznan

Phone +48 511 467 467
biuro.pl@sefar.com

Spain – Cardedeu

Phone +34 93 844 47 10
info.maissa@sefar.com

Turkey – Ankara

Phone +90 312 287 34 14
info.tr@sefar.com

Our current general sales conditions shall apply.

Please consult the current local product data sheet prior to any use.

