



SUS FILTER





FILTER 구성



필터 하우스
-나사타입



필터 하우스-플랜지타입



하우스징 내부
- 버핑 처리
- 전해연마



고효율
엘레먼트



오토드레인
AD-34





FILTER MODEL



모델	접속구경 (inch)	처리유량 (m3/min)	사용압력 (bar)	폭 (mm)	높이 (mm)	교환용 카트리지가
STKF15	1/2"	1.40	0.97			EHY15
STKF20	3/4"	2.90	0.97			EHY20
STKF25	1"	5.00	0.97	200	870	EHY25
STKF40	1 1/2"	12.00	0.97	330	1,094	EHY40
STKF50	2"	20.00	0.97	360	1,296	EHY50

필터의 등급은 P/U/H/S/C 5종류가 있습니다.
다음의 Elements Grade(필터 엘레먼트 등급)을 참조 바랍니다.



Elements Grade



For Clean, Dry & Technically
Oil Free Compressed Air

AFE Standard Filtration Grades



Grade P Particulate Element

- For coarse pre-filtration
- Particle removal down to **3 micron**
- Initial pressure drop 0.03 bar g
- Filter media: Cellulose (filter paper)
- Aluminum / Plastic end-caps
- Stainless steel support sleeves
- Max temperature: 60 degree C



Grade H Coalescing Element

- High efficiency filtration
- Particle removal down to 0.01 micron
- Oil content down to 0.01 mg/m³
- Initial pressure drop 0.09 bar g
- Filter media: Borosilicate
- Aluminum / Plastic end-caps
- Stainless steel support sleeves
- Max temperature: 60 degree C
- Drainage layer: Foam



Grade S Coalescing Element

- High efficiency filtration
- Particle removal down to 0.01 micron
- Oil content down to 0.001 mg/m³ in conjunction with filter grade H
- Initial pressure drop 0.10 bar g
- Filter media: Borosilicate (glass-fiber)
- Aluminum / Plastic end-caps
- Stainless steel support sleeves
- Max temperature: 60 degree C
- Drainage layer: Foam



Grade C (Act. Carbon) Element

- For odour removal filtration
- Oil content down to **0.003 mg/m³**
- Initial pressure drop 0.10 bar g
- Filter media: Activated carbon
- Aluminum / Plastic end-caps
- Stainless steel support sleeves
- Max temperature: 60 degree C



Grade U Coalescing Element

- For general filtration
- Particle removal down to 1 micron
- Oil content down to 0.1 mg/m³
- Initial pressure drop 0.05 bar g
- Filter media: Borosilicate
- Aluminum / Plastic end-caps
- Stainless steel support sleeves
- Max temperature: 60 degree C
- Drainage layer: Industrial Foam



AFE Special Customised Elements

- Produced to customers requirements
- For different operating conditions
- For different applications
- High temp, alkaline, acidic, etc.
- For filtration of hydraulic, fuel, oil separator, natural gas, vacuum, etc.

Note: Will produce in accordance to customer's product specifications.



Elements



For Clean, Dry & Technically
Oil Free Compressed Air



Stainless Steel Support

Pleated Filter Media

Efficient Foam or PES
Needlefelt Socks

Aluminium or Plastic
End Caps



AFE
Pleated
Element Design



Traditional
Wrapped
Element Design

Features & Benefits of AFE Pleated Elements

- Higher effective filtration area
- Higher dirt holding capacity
- Lower pressure drop
- Higher flow possibility



VALIDATION CERTIFICATE



Products Are Tested
And Validated To The
ISO 8573 / 12500 By
An Independent
Institute in Germany



INTERNATIONAL
STANDARD

ISO
8573

VALIDATION CERTIFICATE

ILK Dresden 

Institut für Luft- und Kältetechnik gGmbH
Bereich Luftreinhaltung

Measurements according to
ISO 8573-2 "Compressed Air for General Use – Part 2"
of the filter element

Compressed Air Filter Grade H


manufactured by
Airfilter Engineering (AFE)

resulted in an outlet residual oil concentration of

less than 0.01 mg/m³.*

The determination of the oil aerosol separation efficiency of the compressed air filter was executed at the test institute. Test procedures and results have been documented and archived.

Dresden, 29.03.2005


Dipl.-Ing. Ralf Heidenreich
(Department Manager)


Dipl.-Ing. (FH) Tim Neuhaus
(Project Manager)

* TEST PARAMETERS: Air stream loaded with > 20mg/m³ Aerosol of Mineral Compressor Oil, Viscosity Grade 46; air flow 50m³/h (ANR); test pressure 7 bar abs. (also meets ISO/DIS 12500-1). Declared result is the average from 3 consecutive tests on the same element. Employed measurement and test techniques, in addition to test conditions, generated reproducible results.

Certified to ISO 9001

Institute for Air Conditioning and Refrigeration • Germany



설치 사례



```

DATE 11/17/09 TIME 16:04:56
LOCATION 33 PERIOD 00:00:22
SIZE CUMULATIVE DIFFERENTIAL
0.3um 268 231
0.5um 29 27
1.0um 2 2
5.0um 0 0

```

Filter 2 ①

```

DATE 11/17/09 TIME 16:05:34
LOCATION 33 PERIOD 00:00:22
SIZE CUMULATIVE DIFFERENTIAL
0.3um 245 202
0.5um 43 29
1.0um 14 12
5.0um 2 2

```

Filter 2 ②

```

DATE 11/17/09 TIME 16:12:39
LOCATION 33 PERIOD 00:00:22
SIZE CUMULATIVE DIFFERENTIAL
0.3um 0 0
0.5um 0 0
1.0um 0 0
5.0um 0 0

```

Filter 2 ③

```

DATE 11/17/09 TIME 16:14:04
LOCATION 33 PERIOD 00:00:22
SIZE CUMULATIVE DIFFERENTIAL
0.3um 0 0
0.5um 0 0
1.0um 0 0
5.0um 0 0

```

파티클 측정 데이터
- 필터 설치 전, 후 -



```

DATE 12/03/13 TIME 11:13:56
LOCATION 32 PERIOD 00:00:22
TEMP = 16.8 C RH = 0.9 %
SIZE CUMULATIVE DIFFERENTIAL
0.3um 0 0
0.5um 0 0
1.0um 0 0
5.0um 0 0

```

```

DATE 12/03/13 TIME 11:14:32
LOCATION 32 PERIOD 00:00:22
TEMP = 17.1 C RH = 0.9 %
SIZE CUMULATIVE DIFFERENTIAL
0.3um 0 0
0.5um 0 0
1.0um 0 0
5.0um 0 0

```

파티클 측정 데이터
- 필터 설치후 -