

CATALOG

THE ONE FILTER

**CREATE THE FIRST CLASS FILTER
AND SPARE PART**

FOR SCREW AIR COMPRESSOR

- AIR FILTER
- OIL FILTER
- AIR/OIL SEPARATOR
- ACCESSORIES & KIT

ABOUT US

Green Filtration System Co., Ltd., established in 2014, is a trusted manufacturer and distributor specializing in high-quality industrial filters, air compressor filters, and OEM replacement filters under the brand **“THE ONE FILTER.”**

We supply premium filter elements that meet international standards, ensuring reliable performance for industrial plants, distributors, and maintenance teams nationwide.

With more than a decade of industry experience, we recognize that a high-quality filter may not appear impactful at first glance — but it delivers real results in efficiency, performance stability, and extended equipment service life.

Our product range covers automotive and industrial applications, designed to deliver consistent performance and reduced downtime.

All products are manufactured under strict quality control in compliance with ISO9001 and IATF16949 standards, reinforcing our capability as a dependable manufacturer with stable supply and long-term reliability.

OUR MISSION

“THE ONE FILTER develops and manufactures filtration solutions that meet global standards and the real operational needs of the industrial sector. We achieve this through the following key practices:”

OUR VISION

“Our vision is to become the leading provider of internationally recognized filtration systems, driving sustainable growth in Thailand’s industrial sector through reliable innovation, eco-friendly practices, and solutions that meet evolving market needs.”



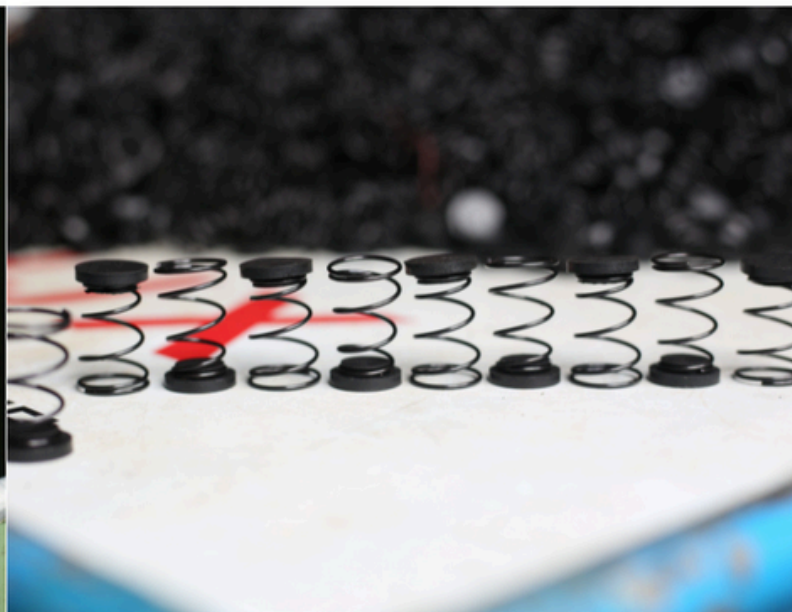
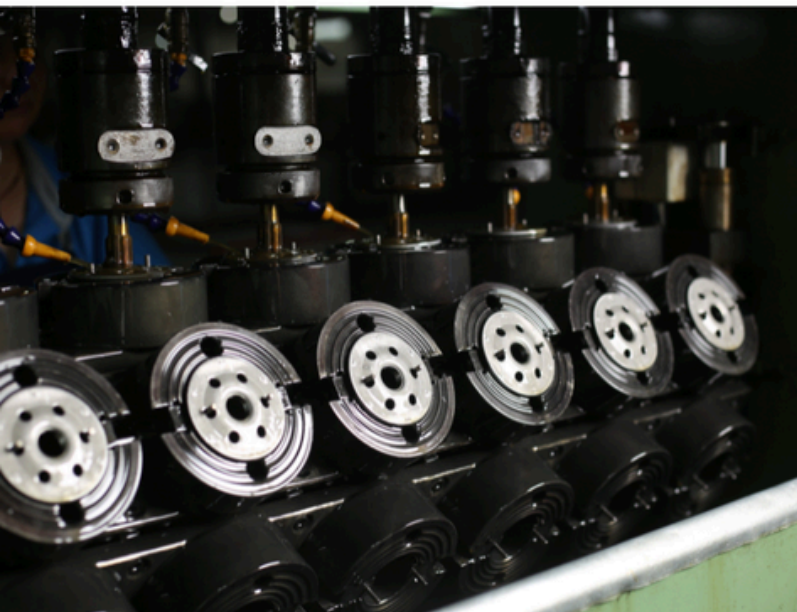
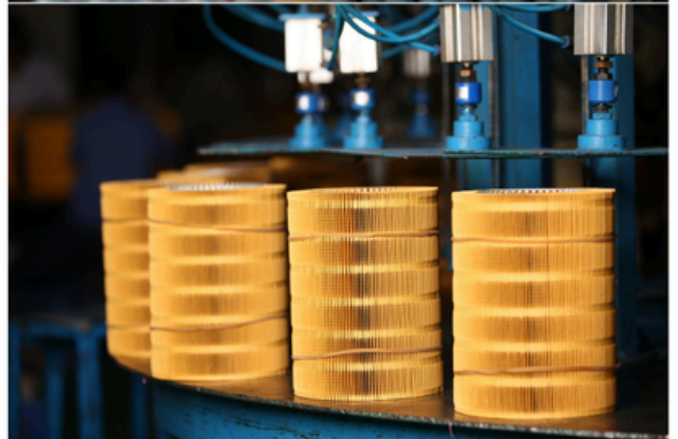
CORE VALUES

“We are the ONE you can rely on — for quality, integrity, and long-term partnership.”

O – OUTSTANDING QUALITY

N – NOBILITY IN CONDUCT

E – ENDURING RELATIONSHIP

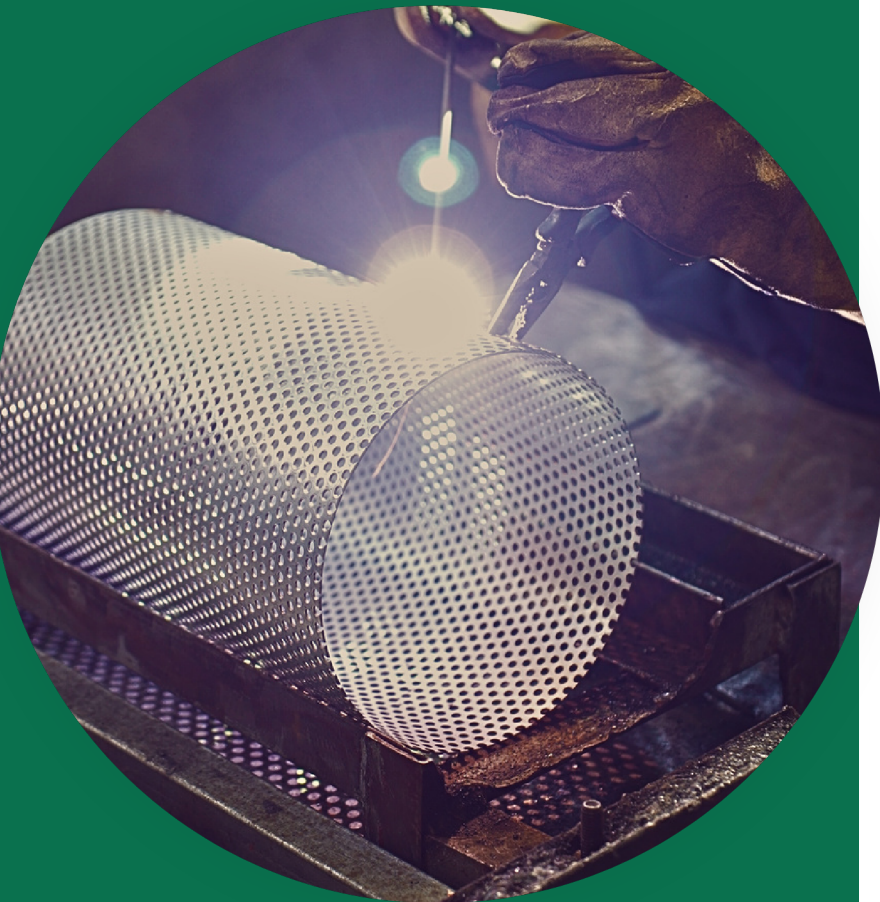


AIR/OIL SEPARATOR

Air/oil separator is one of the most sensitive wear components in an air compressor.

A high-quality separator not only maintains high operating efficiency but also offers a long service life lasting thousands of hours.

THE ONE FILTER use premium international-grade filtration media. We are committed to providing cost-effective air/oil separators with long service life, low pressure drop, and low residual oil-verified through testing of oil content in the discharge air and pressure drop performance.



Attention in Application :

1. The designed maximum differential pressure for the air/oil separator is 5 MPa. Therefore, when system pressure increases, the outlet valve should be opened gradually until the compressor reaches its operating load.
A sudden release of pressure is strictly prohibited, as it may damage or crush the filter element and cause oil leakage.
2. Reverse flow or sudden airflow fluctuation may damage the fine separation layer inside the filter element, potentially leading to element failure.
3. If the operating flow rate exceeds the rated flow rate by more than 20%, the oil content in the compressed air will inevitably increase.
4. The service life of the separator depends greatly on the buildup of solid particles in the fine separation layer.
Therefore, it is essential to use high-efficiency air filters and oil filters, and to replace the lubrication oil regularly.

Technical Specifications:

1. Aspiration Method: External / Internal
2. Oil Content in Discharge Air: < 3 ppm
3. Initial Pressure Drop: < 0.02 MPa
4. Installation Method: Vertical, Screw-in
5. Operating Temperature Limit: < 120°C
6. Service Life: > 4,000 hours

THE ONE FILTER	Normal flow rate [m ³ /min]	D1 (mm)	D2 (mm)	Flange (mm)	Highth (mm)
SQ2138	3.5	135	75	170	160
SQ2139	6.5	170	109	200	230
SQ2140	4.5	135	75	170	200
SQ2155	16	300	220	355	305
SQ2157	22	300	220	355	400
SQ2159	34.5	300	219	355	600
SQ2160	28	300	220	355	500
SQ2164	39	400	314	434	520

THE ONE FILTER	Normal flow rate [m ³ /min]	Connector G (mm)	Outer D1 (mm)	O-Outer D2 (mm)	O-Inner D3 (mm)	Highth (mm)
SQ620	0.6	M22*1.5	76	71	62	83
SQ621	1	M22*1.5	76	71	62	127
SQ622	1.6	M24*1.5	93	71	62	75
SQ623	1.8	M24*1.5	93	71	62	212
SQ626	2	M32*1.5	108	103	92	260
SQ627	4	M32*1.5	108	103	92	310
SQ631	4.5	M39*1.5	136	111	100	177
SQ635	4	1 1/2-16UNF	136	111	100	302
SQ632	5.5	M39*1.5	136	111	100	302



AIR FILTER

An air filter is used to remove dust and impurities from the air before it enters the compressor. This protects precision components, helps maintain the performance of the filter elements, and ensures the compressor operates in a clean environment, reducing the risk of severe damage or system failure.

Key Characteristics of THE ONE FILTER

1. Expanded filtration area Optimized pleat design and precise folding techniques increase the effective filtration area.
2. Consistent pleat spacing Evenly divided pleats ensure smooth airflow channels, resulting in higher dust-holding capacity.
3. Strong structural integrity EVA bonding and a controlled winding process reinforce the filter element for dependable durability.
4. Flat pleat tips Flat pleat edges reduce structural resistance and help prevent deformation during operation.

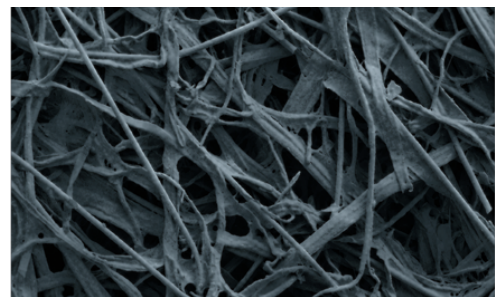
Air Filter Replacement Guidelines :

1. Replace the filter element when it reaches its designed service life.
2. The designed service life of the air filter element is 2,000 hours.
It may be extended only if the compressor operates in a very clean environment, but not by more than an additional 1,000 hours. Conversely, the service interval should be shortened if the compressor operates in harsh or contaminated conditions.
3. Replace the filter element immediately if the alarm is triggered.
The pressure drop alarm is set at 0.05 bar.

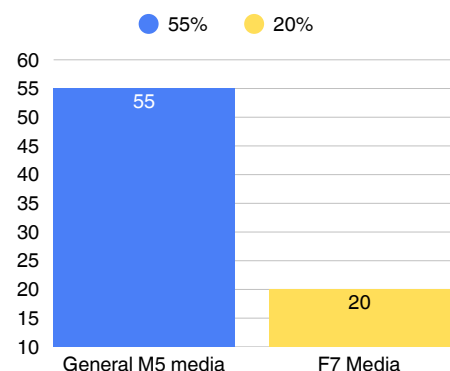
Hazards When the Filter Element Exceeds Its Service Life:

1. Reduced air output
When intake air is restricted, overall compressor output decreases.
2. Compressor overload and shortened service life
Excessive pressure drop across an expired filter element forces the compressor to work harder, which can reduce the compressor's service life.
3. Risk of severe internal damage.
If the filter element becomes damaged, foreign particles may enter the system, potentially causing serious internal failure or even complete compressor breakdown.

1-3 μ m particle penetration comparsion in-between filtration medie



We applied F7 grade filtration media whose efficiency of 1-3 μ m particle can reach 80%-85%. Only about 15%-20% of 2 μ m particle will enter the compressor, which is a third of particle quantity that M5 media a allowed.



THE ONE FILTER	Normal flow rate [m ³ /min]	D1 (mm)	D2 (mm)	Highth (mm)
SA-K8107U	1	80	40	106
SA-K8102U	2	109	50	121
SA-K8308	3	130	76	151
SA-K8301A	6	123	73	310
SA-K8305A	10~13	216	124	390
SA-K8710A	16~20	240	144	526

THE ONE FILTER	Normal flow rate [m ³ /min]	D1 (mm)	D2 (mm)	Highth H1 (mm)	Highth H2 (mm)
SA-K7361	1	117	88	95	105
SA-K7142	2	153	86	150	158
SA-K7362	3	174	108	225	225
SA-K7363	6	201	95	330	330
SA-K7330	10~13	215	125	389	401
SA-K7364	16~20	302	195	540	552
SA-K7329	30~40	350	240	530	541
SA-K7348	43~50	350	252	740	752

THE ONE FILTER	Normal flow rate [m ³ /min]	D1 (mm)	D2 (mm)	Highth H1 (mm)	Highth H2 (mm)
SA-K8643		60	34		70
SA-K8140		100	70		80
SA-K8069		118	68		134
SA-K8102	3.3	110	50	95	120
SA-K8418	6.8	130	76	125	150
SA-K8445	7.7	160	76	140	165
SA-K8385	12.5	230	100	120	156



OIL FILTER

THE ONE FILTER is located within the lubrication system. Its function is to remove metal particles and other contaminants from the compressor's lubrication oil, helping ensure smooth and reliable operation when the system oil remains clean.

Characteristics of THE ONE FILTER Oil Filter :

1. High filtration efficiency using premium-grade filtration media.
2. Low pressure drop and long service life.
3. Excellent resistance to compression, vibration, and temperature (from -40°C to $+120^{\circ}\text{C}$).
4. High-quality adhesives to ensure a secure seal and prevent oil leakage.



Oil Filter Replacement Guidelines :

1. Replace the filter element when it reaches its designed service life.
2. The designed service life of the filter element is approximately 2,000 hours, after which it must be replaced. The service interval should be shortened if the compressor operates under harsh or contaminated conditions.
3. If an alarm is triggered before the service life is reached, the filter element must still be replaced. The pressure drop alarm is generally set at 3 bar.

Hazards When the Filter Element Exceeds Its Service Life :

If the return oil becomes insufficient, the outlet air temperature will rise, which can shorten the service life of the air/oil separator.

In addition, inadequate lubrication — combined with increased metal particles caused by filter element failure — can lead to serious damage to the compressor motor.



THE ONE FILTER	Normal flow rate [m ³ /min]	Connector G (mm)	Outer D1 (mm)	O-Outer D2 (mm)	O-Inner D3 (mm)	Highth (mm)	By pass opening pressure (bar)
SO-M6014	3	1"-16UNF	93	71	62	170	2.5
SO-M6012	6	1"-16UNF	93	71	62	210	2.5
SO-M6178	1	3/4"-16UNF	76	71	62	118	2.5
SO-M6177	2	3/4"-16UNF	93	71	62	142	2.5
SO-M6173	3	1"-12UNF	93	71	62	172	2.5
SO-M6172	6	1"-12UNF	93	71	62	210	2.5
SO-M6174	9	1 1/8"-16UNF	108	104	93	260	2.5
SO-M6175	13	1 1/8"-16UNF	136	111	100	302	2.5



THE ONE FILTER	Cross Refer	OEM P/N	OD (mm)	ID (mm)	Highth (mm)
SO-K1667	Atlas copco	1622314200	83	49	174
SO-K1668	Atlas copco	1622365200	83	49	342
SO-K1669	Ingersoll rand	23424922	97	55	229
SO-K1670	Sullair	02250139-996	97	55	494
SO-K1671	Sullair	02250139-995	97	55	262
SO-K1672	Sullair	02250155-709	63	29	216
SO-K1673	GD	2118345	80	42	320

ACCESSORIES & KIT



DL-42W
Auto Drain



HAS208
Auto Drain



BK-350
Auto Drain



AD-402-04
Auto Drain



BWD118
Auto Drain



BWD-110
Auto Drain



02250049-034
Blowdown Valve



VVF12
Blowdown Valve



1622365903
Clean Oil Level Gauge



Holes 10 / 12 / 15 (mm.)
Clean Oil Level Gauge



MAAM-1850A
Controller



MAAM-870
Controller



16130-09000
Coupling



Rotax 42
Coupling



GR75
Coupling



E30
Coupling



1622377800
Intake Valve



10899633001
Defferential Pressure Sensor



1614900800 / 1614900802
Intake Valve



1613814400
Intake Valve



MPVL-42A-Y
Minimum Pressure Valve



MPV-256-K
Minimum Pressure Valve



001176
Minimum Pressure Valve Kit



1625005540
Minimum Pressure Valve Kit



1089057551
Pressure Transducer



1613672800
Piston



041006
Muffler



1089057983
Pressure Transducer



1089079210
Solenoid Valve



0392110006
Shock PAD



6014 (G1/8" 24V)
Solenoid Valve



1089062120
Solenoid Valve



230039-909
Temperature Sensor



88290021-986
Temperature Sensor



For MAM
Temperature sensor



02250185-553
Thermostatic Valve



AVV-008-K
Air Intake Valve



AVV-05A-K
Air Intake Valve



AVV-85F-K
Air Intake Valve



HDK085 / HF-85
Air Intake valve



22186726
Thermostatic Valve



02250078-204
Thermostatic Valve



2901145490
Thermostatic Valve



2901007400
Thermostatic Valve



CKD6062-2c
Regulator



2900100800
The Regulator



250018-456
MPV kit



2901021800
MPV kit



408275
regulator



250038-666
Solenoid



00-125332 (230V - G1/2)
burkert



250017-280
Kit Thermo



2901021100
Unlaoding valve kit



8829003-805
Pressure transducer



22067177
unloader valve kit

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