MISSION CRITICAL South-Tek Systems

S-SERIES

COMPRESSED AIR FILTERS

South-Tek Systems provides complete air and gas solutions to power mission-critical operations. We deliver single-source solutions with unmatched support through a full product suite, powering greater control at lower costs for excellent results.

South-Tek leads the industry in nitrogen generation innovation, offering patented technology for maximum efficiency and longevity, coupled with unparalleled customer support.

Backed by over 20 years of experience, we have everything you need to power your mission, from nitrogen generators to compressors, filters and dryers.

EXPERTISE
Find the right solution for every application.

CONTROL
Take control of your processes.

PERFORMANCE
Generate excellence, every time.

S-SERIES COMPRESSED AIR FILTERS

S-SERIES

The new S-Series have more port sizes and offer a reliable performance by minimizing airborne contamination in compressed air systems to the maximum possible extent. Leading with its unique “zero clearance” feature, the innovative S-Series design allows compressed air users to easily replace the inner element and assemble the filter in any unit. The S-Series is an economical option manufactured according to ISO 8573 standards. It is also PED eligible due to its sustainable and durable aluminum construction.

14 Models Between
20cfm - 700 cfm

FEATURES

- 20 cfm - 700 cfm air flow range
- NPT/BSP pipe sizes ranging from 1⁄4 “to 4”
- Aluminium construction without any pores
- **Options:**
  - “Standard Drain” with 1⁄2” connection or
  - “Drainless” with 1⁄2” connection with adapter.
- Elegantly designed connection clips and wall apparatus
- Production in accordance with ISO8573
- Zero Clearance
- Anodising
- Lock System Indicator

SHC-SERIES

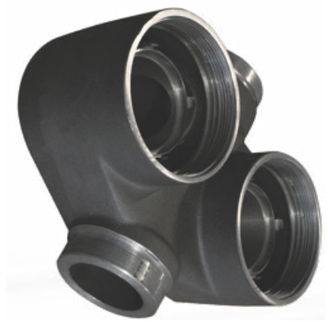
In Addition to S-Series, South-Tek also has the SHC-Series to meet high capacity air pressure needs. High capacity SHC-Series filters are designed to increase the capacity of air filters used in compressed air systems. Thus, the utilization of compressed air volume can be easily pushed up to 3200 cfm. **Compressed air users will be able to install SHC-Series in their systems without any need for ASME Standards eligibility requirements.**

6 Models Between
910 cfm - 3200 cfm

S-SERIES COMPRESSED AIR FILTERS

FEATURES

- 910 cfm- 3200 cfm air flow range
- NPT/BSP pipe and ANSI flange sizes ranging from 1⁄4" to 4"
- Aluminium construction without any pores
- Options:
  - "Standard Drain" with 1⁄2" connection or
  - "Drainless" with 1⁄2" connection with adapter
- Elegantly designed connection clips and wall apparatus
- Production in accordance with ISO8573
- Zero clearance
- Anodising
- Lock system indicator



S-SERIES ADVANTAGES

- Low initial investment costs
- Low maintenance costs
- Compact design
- Easy to use and install
- High performance
- Third party tested

Purity Class	ISO 8573.1: 2010 Compressed Air Quality Standard							
	Solid Particulate					Water		Oil
	Max. number of Particles per m^3			Particle Size (micron)	Concentration (mg/m_3)	Vapor Pressure Dew Point	Liquid (g/m_3)	Total Oil (Aerosol, Liquid and Vapor) (mg/m)
	0.1-0.5 micron	0.5-1 micron	1-5 micron					
0	As specified and determined by equipment user and supplier							
1	≤20,000	≤400	≤10	-	-	≤-70°C	-	≤0.01
2	≤400,000	≤6,000	≤100	-	-	≤-40°C	-	≤0.1
3	-	≤900,000	≤1,000	-	-	≤-20°C	-	≤1
4	-	-	≤10,000	-	-	≤+3°C	-	≤5
5	-	-	≤100,000	-	-	≤+7°C	-	-
6	-	-	-	5	5	≤+10°C	-	-
7	-	-	-	40	10	-	0.5	-
8	-	-	-	-	-	-	5	-
9	-	-	-	-	-	-	10	-

for Solid Particles	for Water	for Oil
Element Type 5 - Class 3	South-Tek Refrigerated Air Dryers are Class 4	Element Type 5 - Class 3
Element Type 1 - Class 2		Element Type 1 - Class 2
Element Type .01 - Class 1	South-Tek Desiccant Air Dryers are Class 1 & 2	Element Type .01 - Class
Element Type AC - N/A		Element Type AC - Class 1 (when used with Y)

S-SERIES COMPRESSED AIR FILTERS

AIR LINE DESIGN	AIR LINE DESIGN 1	APPLICATION	ISO 8573.1: 2010 CLASS
	5 1 COMPRESSED AIR FILTERS	SIMPLE	2.-.2
	AIR LINE DESIGN 2		
RECEIVER TANK AFTER-COOLER MOISTURE SEPARATOR COMPRESSOR EXTERNAL AUTO DRAIN	REFRIGERANT AIR DRYER 5 1 .01 COMPRESSED AIR FILTERS COMPRESSED AIR FILTERS	GENERAL PURPOSE	1.4.1
	AIR LINE DESIGN 3		
	REFRIGERANT AIR DRYER 5 1 .01 AC COMPRESSED AIR FILTERS COMPRESSED AIR FILTERS	ODORLESS	1.4.1
	AIR LINE DESIGN 4		
	5 AC 5 1 .01 COMPRESSED AIR FILTERS COMPRESSED AIR FILTERS DESICCANT DRYER	CRITICAL	1.2.1 (-40 °C / -40°F) 1.1.1 (-70 °C / -94 °F)

S-SERIES COMPRESSED AIR FILTERS

ELEMENT FEATURES

South-Tek offers superior protection - from 1 micron to 0.01 micron. Durable element construction and efficient drain layer ensures continued performance with optimal element change intervals. Plastic handles ensure easy replacement of elements.

SOUTH-TEK ELEMENTS ARE DESIGNED FOR EASY HANDLING

1. Depth media construction offers higher coalescing performance.
2. Supreme collapse resistance due to usage of fluted stainless tube, providing strength against pressure drops while improving the performance by passing air diagonally through the element.
3. PVC impregnated foam favors water/oil drainage.

ELEMENT ADVANTAGES

- High energy efficiency due to low pressure drops
- Durability under high pressure conditions (290 psi)
- 4 different ranges of filtration efficiency which offers an opportunity to operate at various different filtration applications.
- High filtration capacity, which can target the smallest contaminants (0.01 micron and above) at 290 psi pressure.
- Minimization of valuable compressed air loss with zero-loss drain option
- Third party tested

S-SERIES COMPRESSED AIR FILTERS

HEAD CLAMPING

Head clamping provides serial connection of filters without any extra piping; connection clamps are used for connecting multiple filters to each other. Wall mounting clamps are used to easily connect filters to the wall.

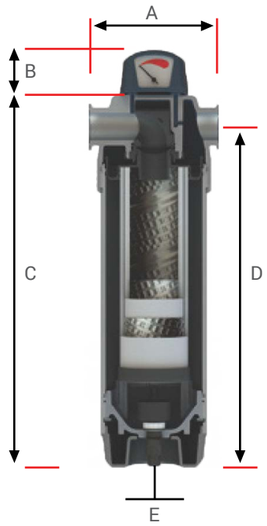
DRAINAGE RIBS

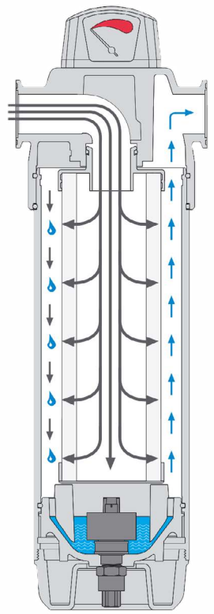
Drainage ribs favors the humidity flow.

CORRECTION FACTOR

For maximum flow rate of the filter model, multiply model flow rate shown in the below table by the correction factor corresponding to the working pressure.

Operating Pressure (bar)	PSI	Correction Factor
1	15	0.5
3	44	0.71
5	73	0.87
7	100	1
9	131	1.12
11	160	1.22
13	189	1.32
15	218	2904
16	232	1.50
18	261	1.57
20	290	1.63





The reliability of S-Series is guaranteed by the results obtained from "Third Party Tests" which is renowned worldwide in the compressed air industry.

ZERO CLEARANCE

A major innovation for servicing the zero clearance design gives a quicker, easier, simpler filter change, with no need for any special tools.

ANODISING

Anodising provides supreme corrosion resistance. Anodised surface treatment is proven to be better than other methods such as alocrome coating.

OPTIONS

- Drains: Automatic / manual / zero loss
- Indicator / no indicator
- O-rings: Viton

ALTERNATIVE FILTERS

- "S" Grade: Sterile filter
- "H" Grade: Hopcalite filter
- "T" Grade: 25 micron coarse dust filter
- "HT" Grade: High temperature filters

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Technical Specifications

Model	Connection Size (NPT)			Flow	Rate	Max Working Pressure	Element Model	Housing Dimensions (Inch)				
				CFM	M^3/h	(PSI)		A	B	C	D	E
S-20	1/4"	3/8"	1/2"	20	35	290	ES-20	4	1	8	8	1
S-32	1/4"	3/8"	1/2"	32	55	290	ES-32	4	1	10	9	1
S-40	3/8"	1/2"		40	70	290	ES-40	5	2	11	10	1
S-60	3/8"	1/2"		60	100	290	ES-60	5	2	12	11	1
S-75	3/8"	1/2"		75	125	290	ES-75	6	2	14	13	1
S-90	3/4"	1"		90	150	290	ES-90	6	2	15	13	1
S-130	1/4"	1"	1/2"	130	225	290	ES-130	6	2	16	14	1
S-175	1"	1/4"	1"	175	300	290	ES-175	6	2	19	17	1
S-235	1 1/4"	1"		235	400	290	ES-235	6	2	22	21	1
S-295	1 1/4"	1"	2"	295	50	290	ES-295	6	2	20	18	1
S-350	1 1/2"	1"	2"	350	600	290	ES-350	6	2	25	23	1
S-470	1 1/4"	1"	2"	470	800	290	EES-470	6	2	27	26	1
S-590	1 1/4"	1"	2"	590	1000	290	ES-590	6	2	34	32	1
S-700	1 1/4"	1"	2"	700	1200	290	ES-700	6	2	38	37	1
SHC-910	2 1/2"	3"		910	1550	290	ESHC-910	9	2	28	26	1
SHC-1175	2 1/2"	3"		1175	2000	290	ESHC-1175	9	2	34	32	1
SHC-1600	2 1/2"	3"		1600	2700	290	ESHC-1600	9	2	39	37	1
SHC-2000	4" FLG			2000	3400	232	ESHC-2000	14	2	34	32	1
SHC-2600	4" FLG			2600	4500	232	ESHC-2600	14	2	36	34	1
SHC-3200	4" FLG			3200	5400	232	ESHC-3200	14	2	42	40	1

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Specifications	Pre Filtering	General Purpose	Oil Removal	Activated Carbon
Grade	5	1	0.01	AC
Partical Removal (Micron)	5	1	0.01	0.01
Max Oil Carryover at 70°F (PPM)	5	0.5	0.01	0.003
Max Recommended Temperature (°F)	176	176	176	122
Initial Pressure Loss (PSI)	0.06	1.1	290	1.1
Pressure Loss for Element Change (PSI)	10	10	10	10
Element Color Mode	White	White	White	Metal SS

Indicator Type
Differential Pressure Gauge
Drain Type
Electro-Adjustable
External Float Type
Zero-Loss Drain
Manual

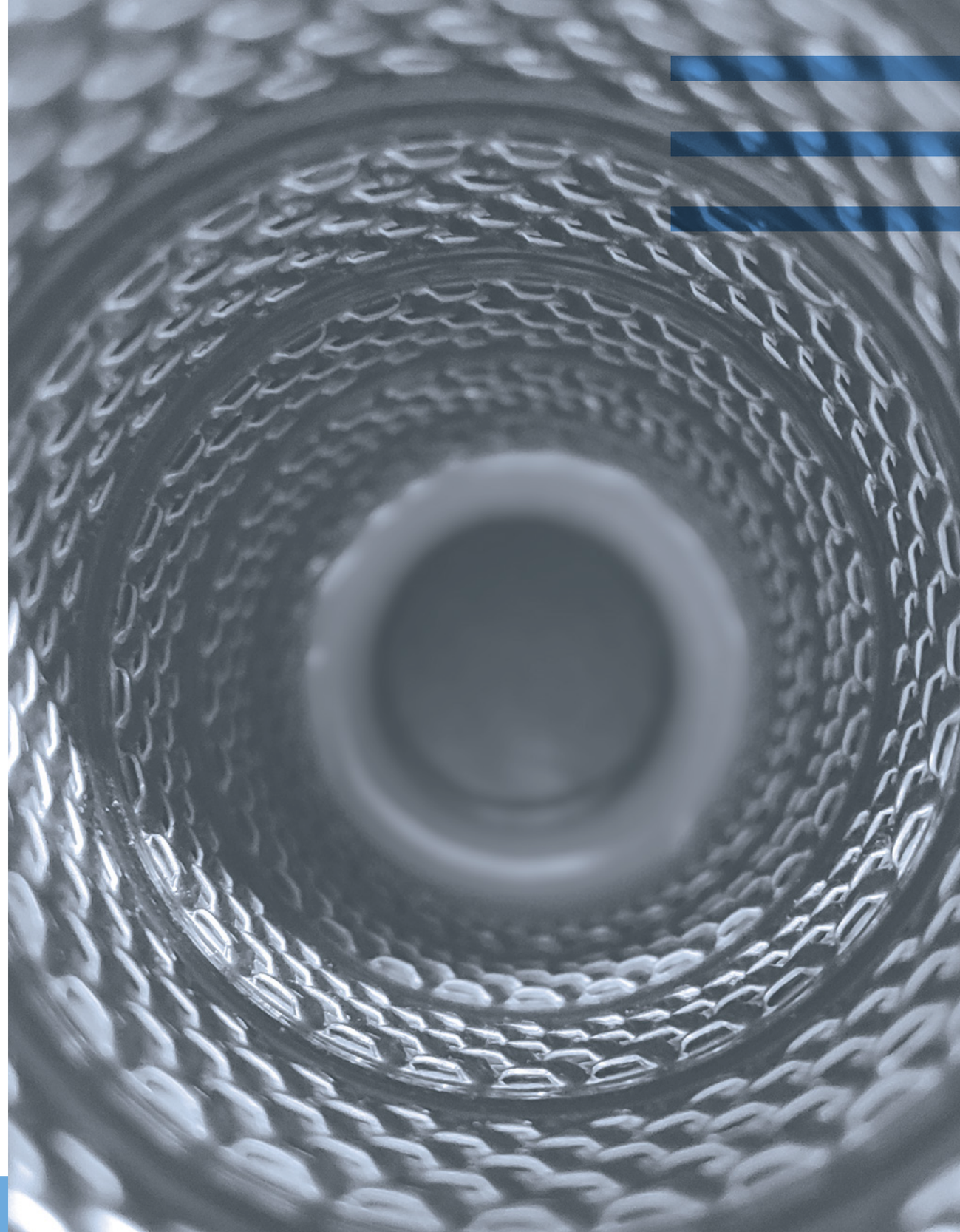
For 0.003 ppm quality oil in the air, the inlet temperature should be 77°F.

Notes

1) Given flows are at 100 psi pressure with reference to 68°F and 15 psi atmospheric air suction as per ISO 7183. In order to calculate the flow capacities at other pressures please refer to the correction factor table on page 9.
2) Grade AC must not operate in oil saturated conditions.
3) Grades 5, 1 and .01 elements need to be replaced periodically to suit applications but must be changed at least every 8000 hours.
4) Grade AC elements should be replaced periodically to suit the applications but must be changed at least every six months.
5) Grade AC will not remove certain gases including carbon monoxide and carbon dioxide.
6) Flow rates are based on a 100 psi operating pressure, for flows at other pressures use correction factor given above.
7) All filters are suitable for use with mineral and synthetic oils.
8) Gauge type pressure indicators are fitted to all models as standard except activated carbon filters.
9) All filters are in conformity with the 2014/68/EU Pressure Equipment Directive.

Ordering

The complete filter model number contains the size and grade, (e.g., S-90 1”.01 represents 90 cfm capacity and 1” connection general purpose filter model with replacement filter element model .01).



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