



---

---

---

## MAINTENANCE MANUAL OF MAIN LINE FILTER

---

---

AFF75A - 20

---

AFF125A - 30

---

AFF150A - 40

---

AFF220A - 40

---

---

---

---

---

---

---

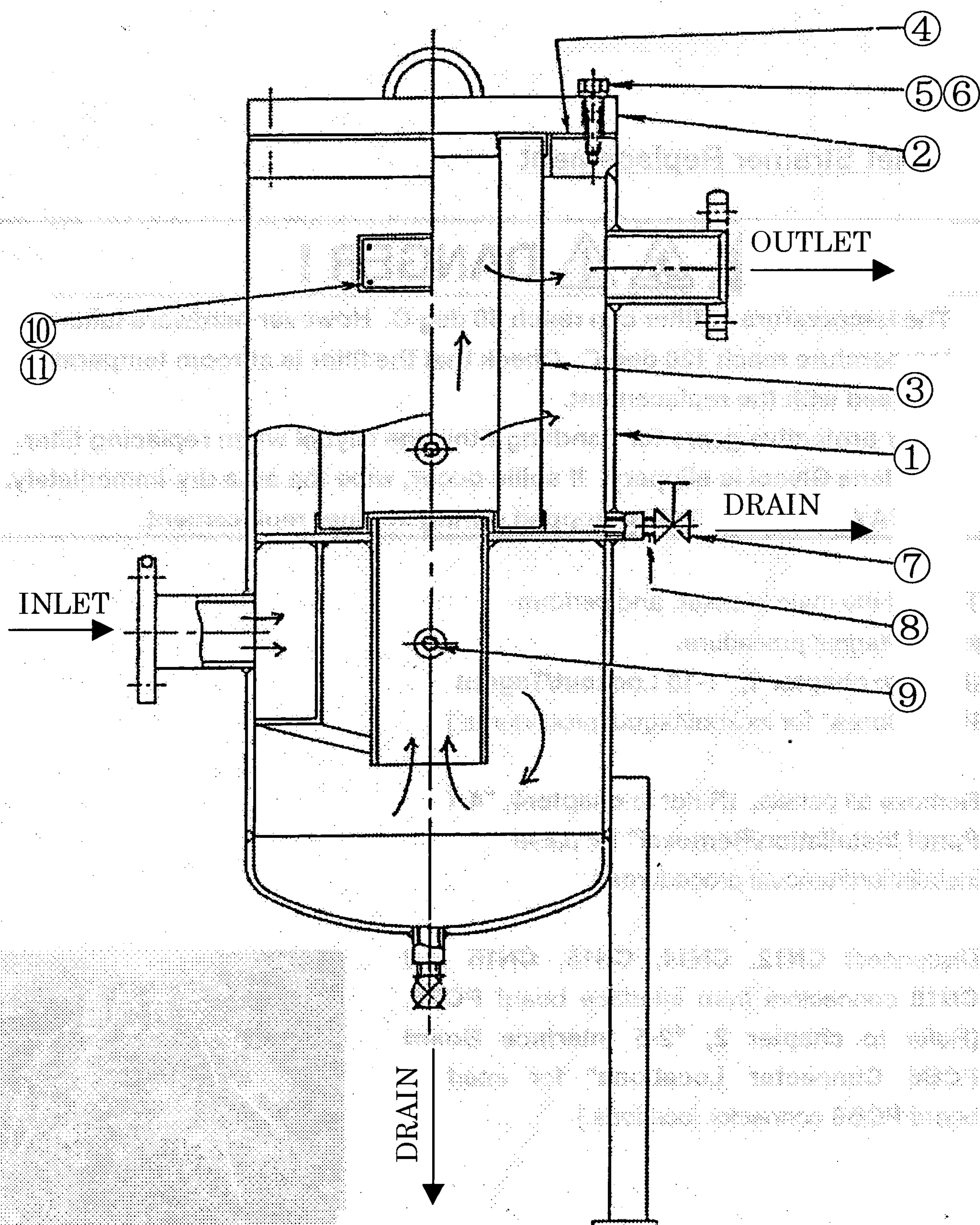
---

How to use

1. When air is cooled, the even filtered air is condensed. So, install the unit in the air line where the temperature is the lowest.
2. Ensure direction of IN and OUT.
3. Make the flushing of pipe line.
4. Drain off once a day by drain valve. Use automatic drain valve where drain is accumulated frequently.
5. Pressure, temperature and flow shall be within the specifications.
6. When pressure drop becomes large replace element.
7. Replacement of element shall be done as follows:

Replace the element in one year. Replace the element when pressure drop builds up to 0.1 MPa even before one year operation. When replacing elements, close valves of inlet and outlet and keep the pressure in the filter at 0 MPa by opening drain valve. Take out the element upward by removing the top cover (2). When the element is fitted at the designed place, check the packing and fasten the bolts equally after setting the cover. Next, close the drain valve and open the valve if inlet and outlet for start of operation. Since the used element can not re-used throw away it.

## CONSTRUCTION



13					
12					
11		MACHINE SCREW	SUS304	4	M3×0.5× <sup>L</sup> 16
10		NAME PLATE	SUS304	1	
9		PLUG	FCMB	2	R <sup>1</sup> / <sub>4</sub>
8		NIPPLE	SGP-E	2	R <sup>3</sup> / <sub>8</sub>
7		VALVE	B.C	2	Rc <sup>3</sup> / <sub>8</sub>
6		SPRING WASHER	SS400		
5		HEX' BOLT	S45C		
4		PACKING	NBR	1	Hs90
3		ELEMENT	GLASS FIBER	1	
2		FILTER COVER	SS400	1	
1		FILTER CASE	SS400, SGP-E	1	
No.	PART No.	PART NAME	MATERIAL	QT.	REMARKS

### Outline

The unit is designed to remove dust, mist and oil mist in the compressed air. The air including such dust, mist and oil mist will shorten the life of pneumatic equipments and cause problems resulting in unstable quality of products. The drain separator has been used so far as a part of air source but it is very difficult to remove oil and water completely with the drain separator. The SMC main line filter is the exact unit with high efficiency to solve those problems.

### The principle of operation

The air including dust, mist and oil mist enters inside of the element and large particles of dust are separated from air at the first layer of the element. When mist and oil mist passes through several layers of the element they are gradually condensed and separated from air in form of liquid drip. In this way this unit provides clean air by removing dust, mist and oil mist in the compressed air.