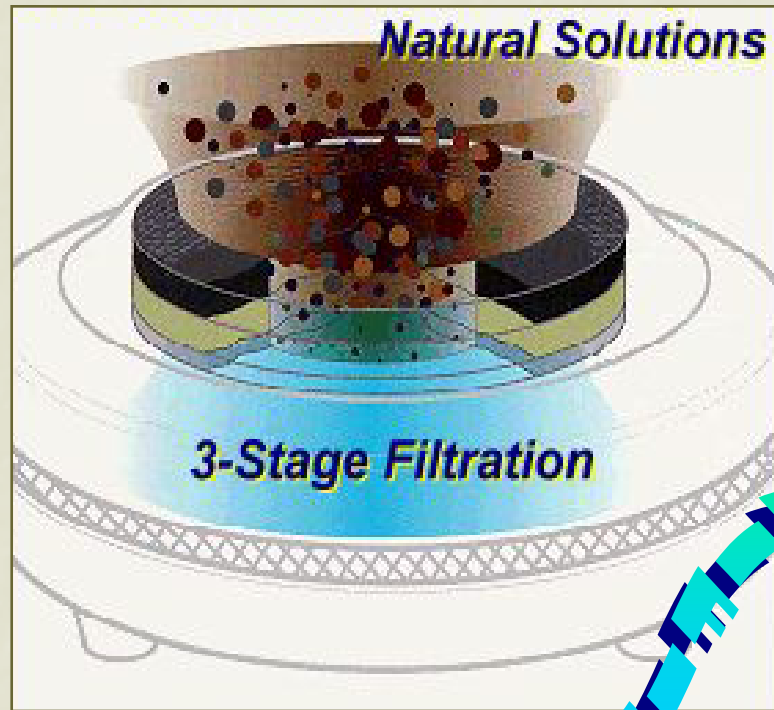
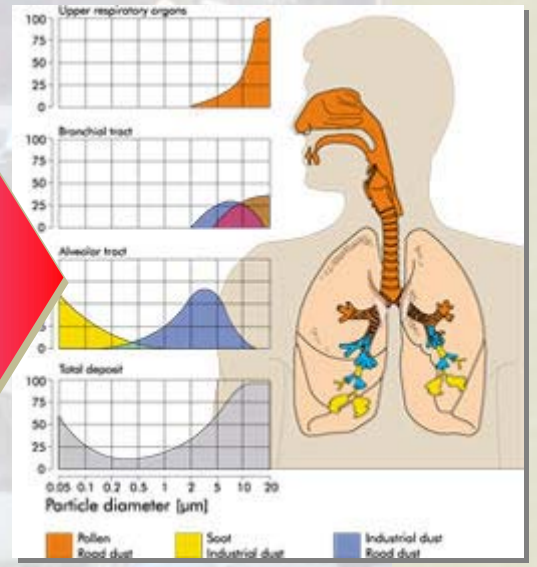
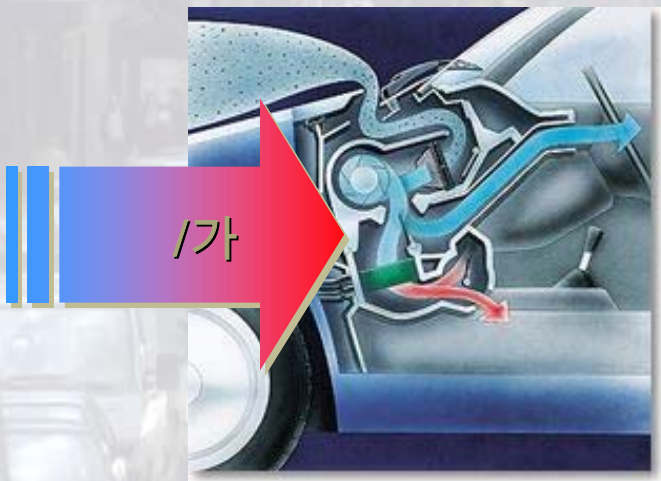


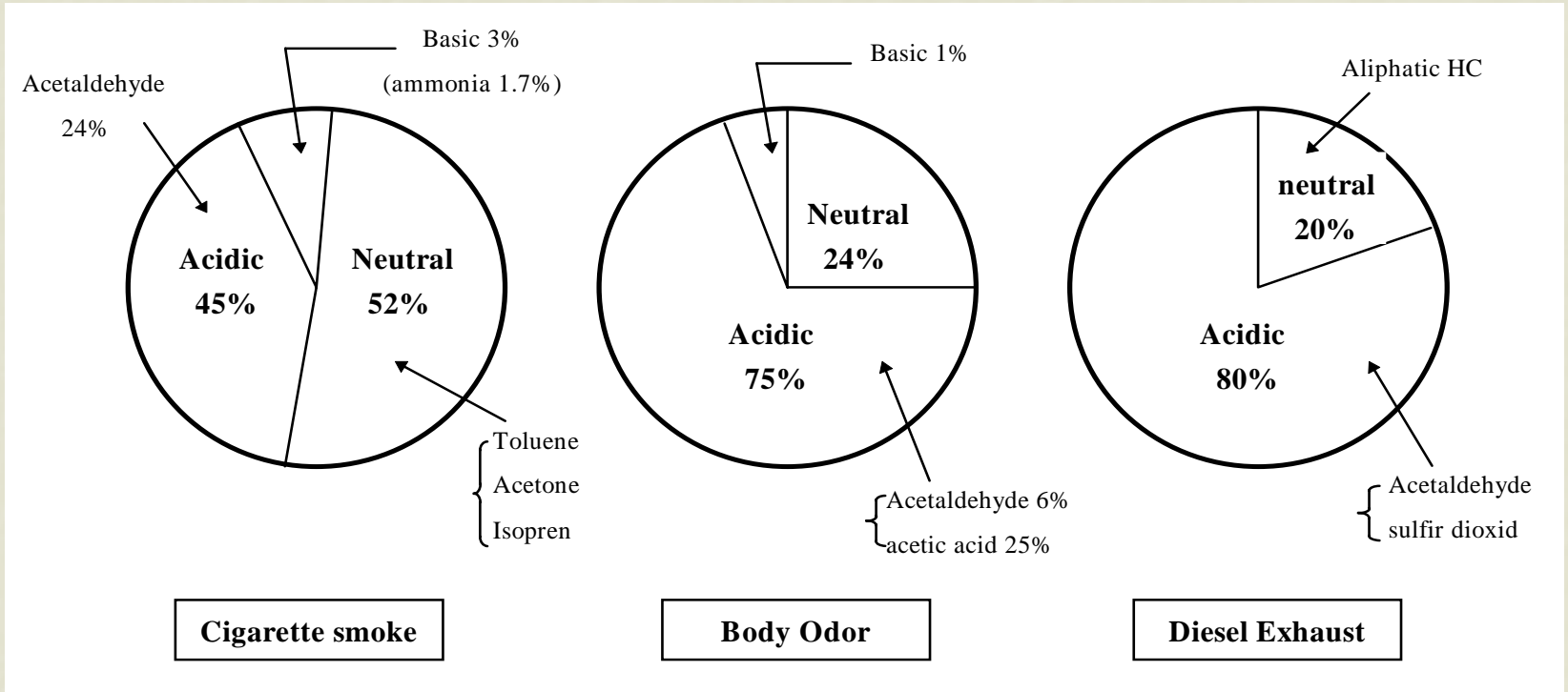
Are you breathing clean air ?



가

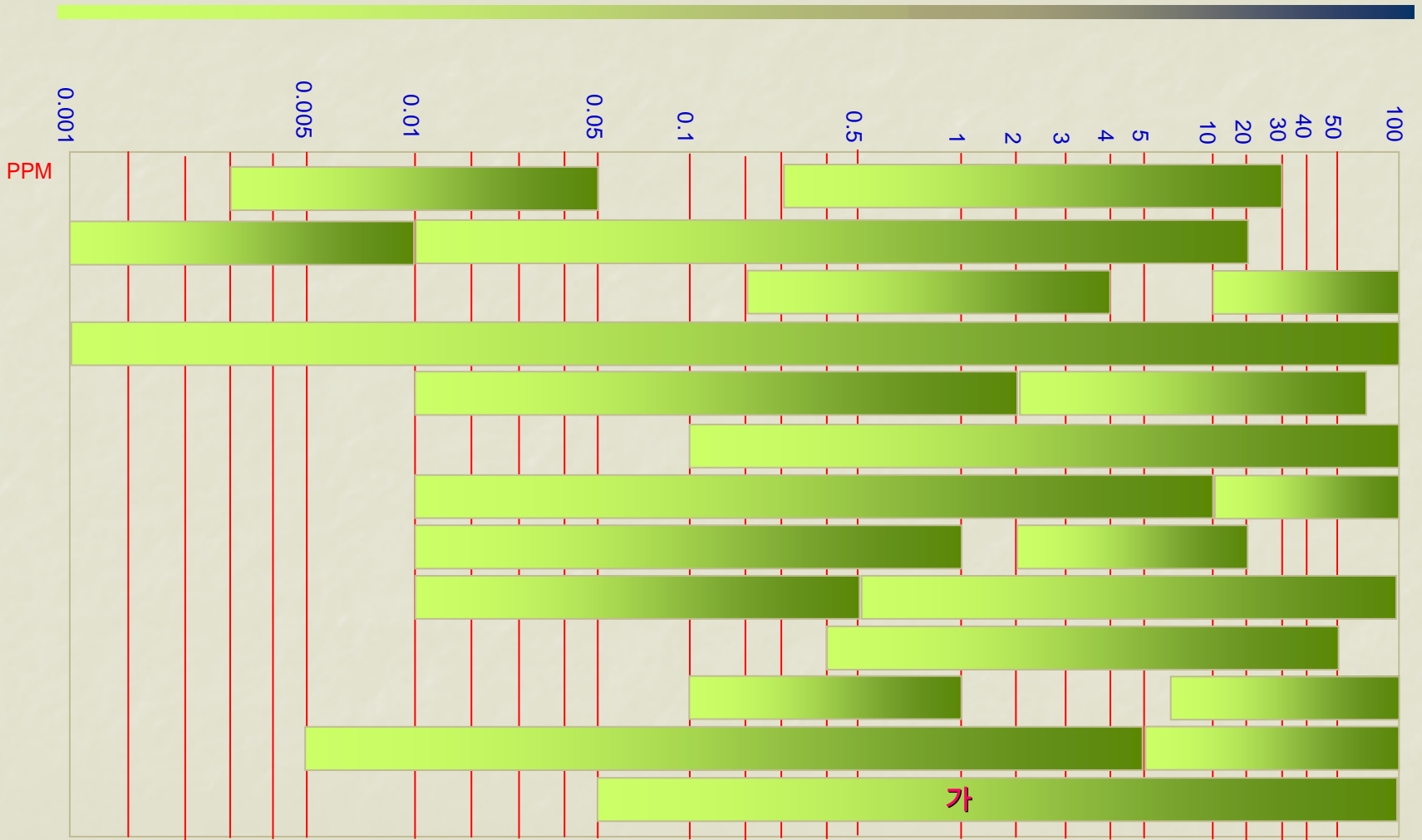


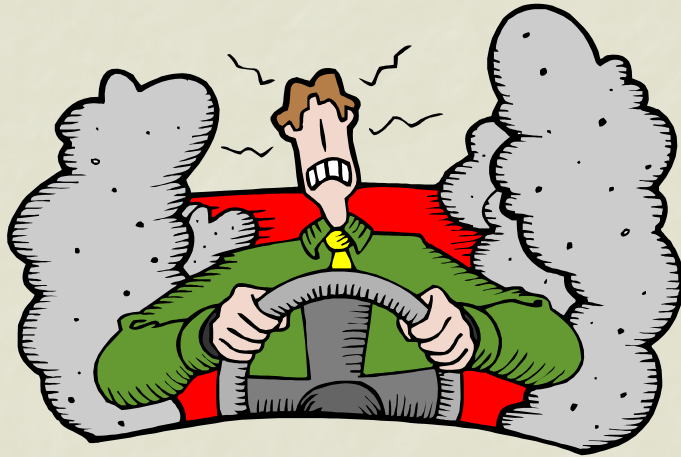
가 /



3M







Step 1

Step 2

Step 3



Emission gas

Nox

HC

Smoke

CO



Creating a more pleasant space in cabin

+

+

FATC

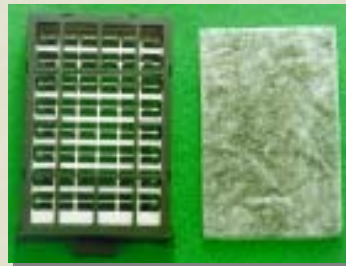
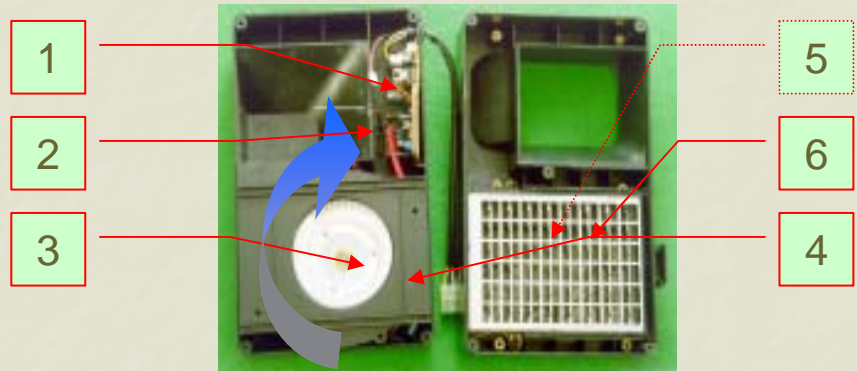
Cabin Air Filter

Air Purifier

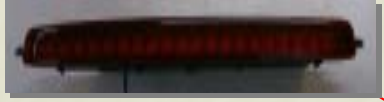




- (,)
- Parcel shelf ,
- (,)
- Parcel shelf ,
-
- (,)



1	Control PCB	4	Bell mouth
2	HVT	5	
3	Sirocco fan	6	



HMSL

Main PCB



Motor brkt

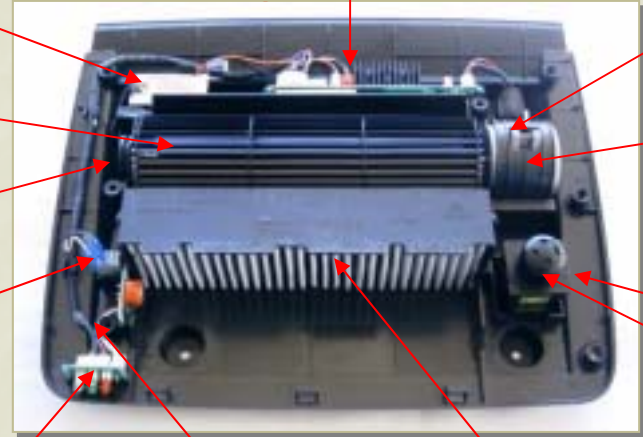


HVT ASS'Y

BLDC



CFF



Bearing Safety SW



Lead wire

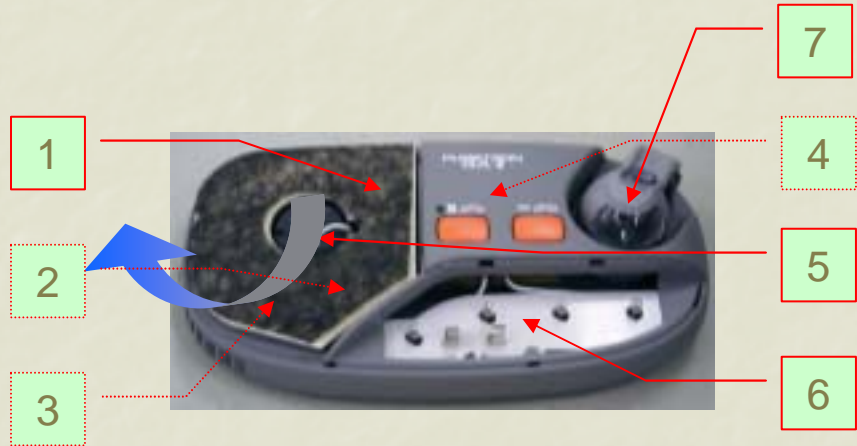


Filter



LED & Sensor





1		4	Control PCB
2		5	
3		6	
		7	

2

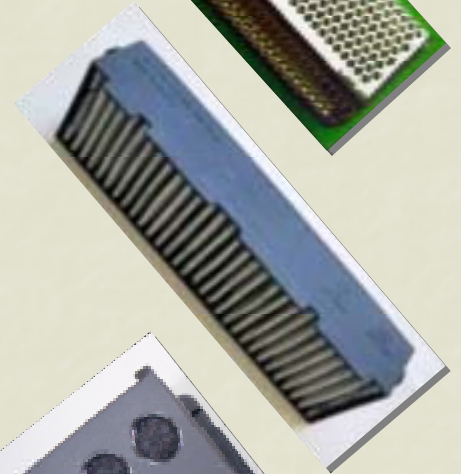
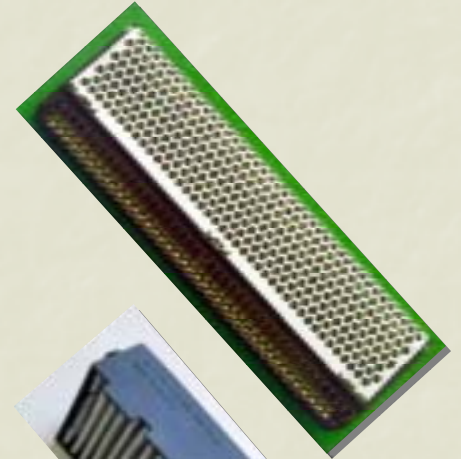


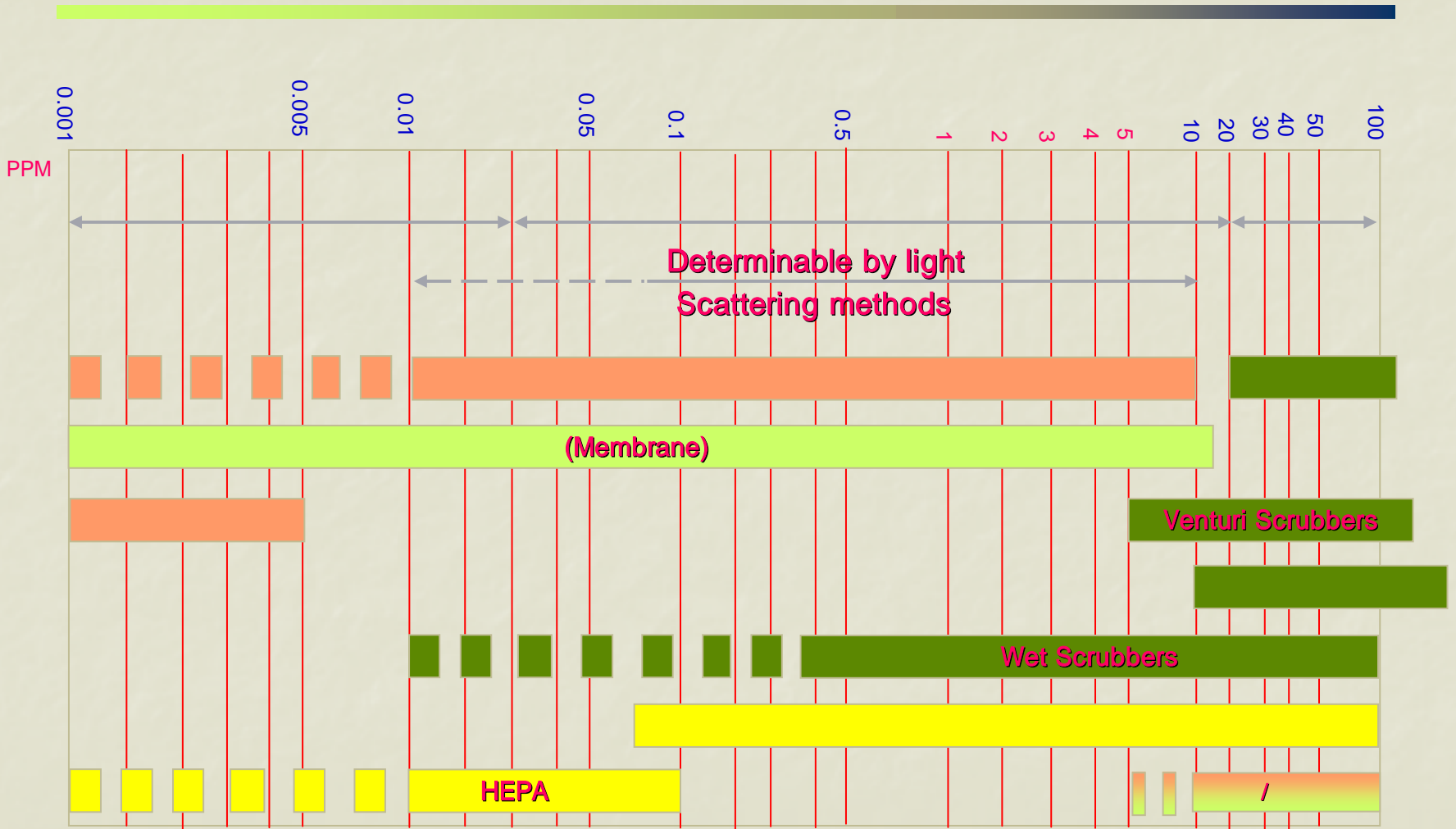
,

가

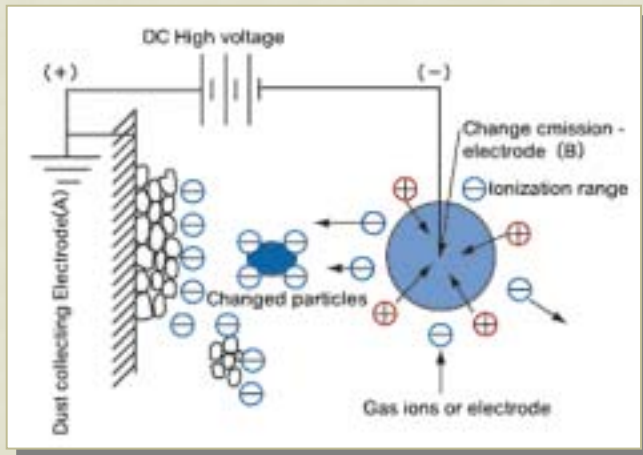
()

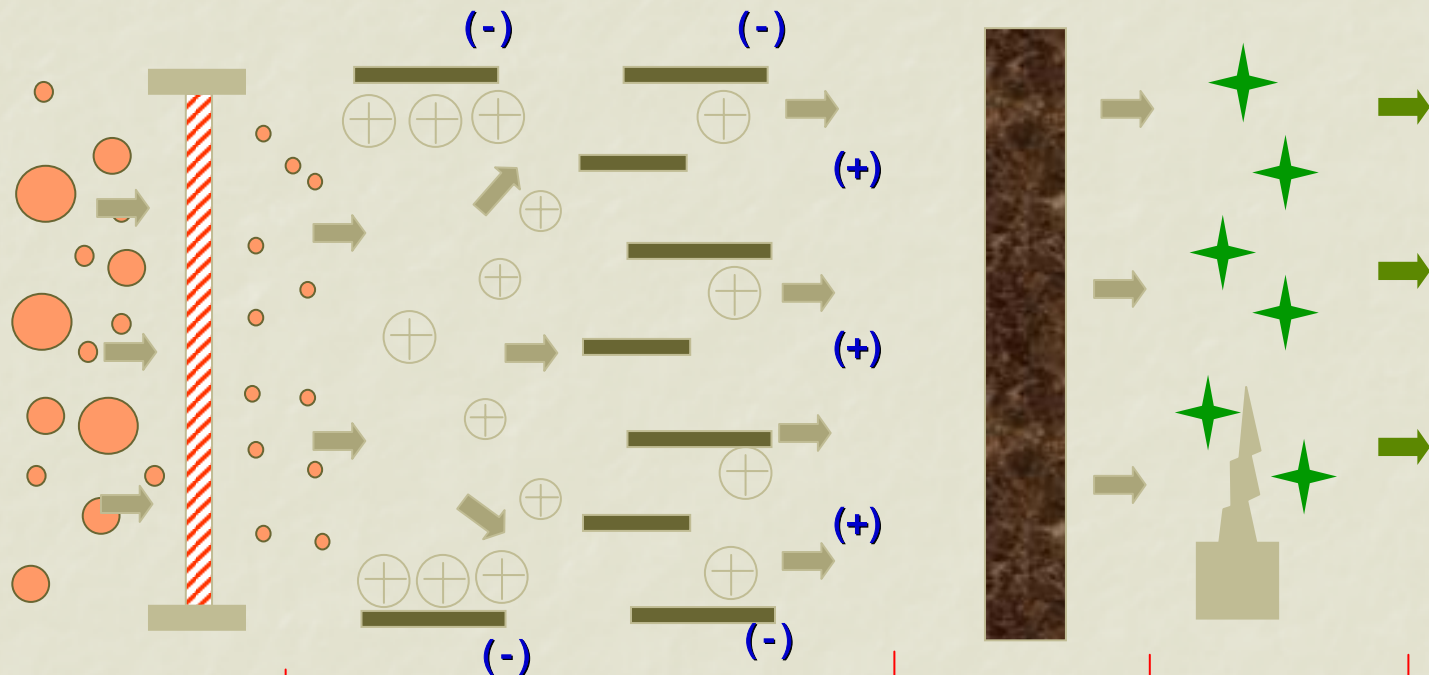
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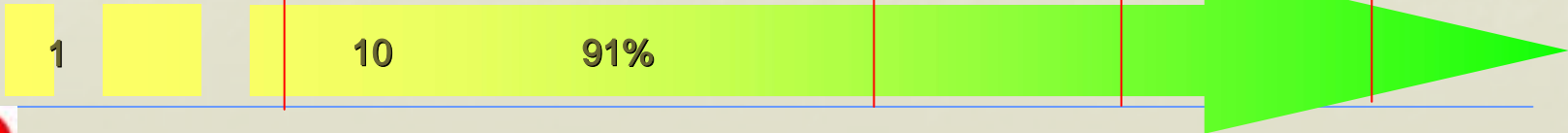
-
-
- 10 ~ 0.001 (0.01)
 - ; 91%(10)





1

+ 2





(PPM)	
0.01 ~ 0.015	
0.06	
0.1	.
0.1 ~ 0.3	가
0.23	가
0.6 ~ 0.8	, 가, , 가
1 ~ 2	, ,
5 ~ 10	, 가, , ,
15 ~ 20	, 2
50	1

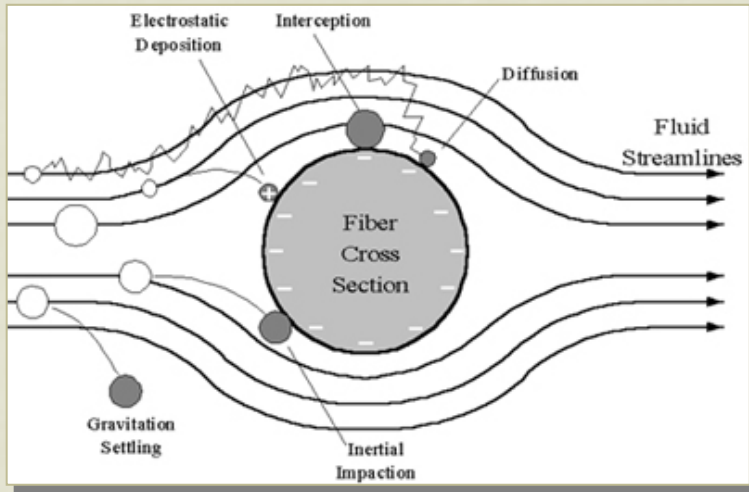
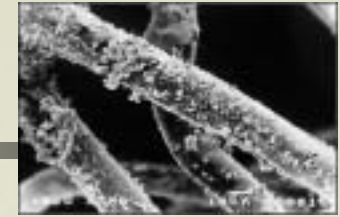
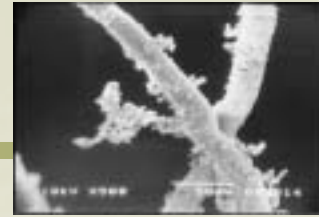
- ;
- FDA() ;
 - 0.05 PPM
- OSHA() ;
 - 8 0.10PPM
- NIOSH() ;
 - 0.10PPM
- EPA() ;
 - 0.08PPM 8



- ;
- , , , VOC 가 ,
- 가 . ,
- 가
- (/cm³);

	220 ~ 420
	2,000 ~ 4,000
	15,000 ~ 40,000
	100,000
	100
	(1991, 550 1996, 150)

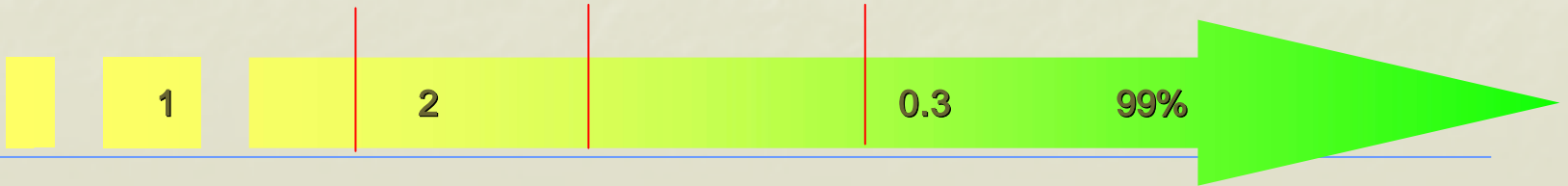
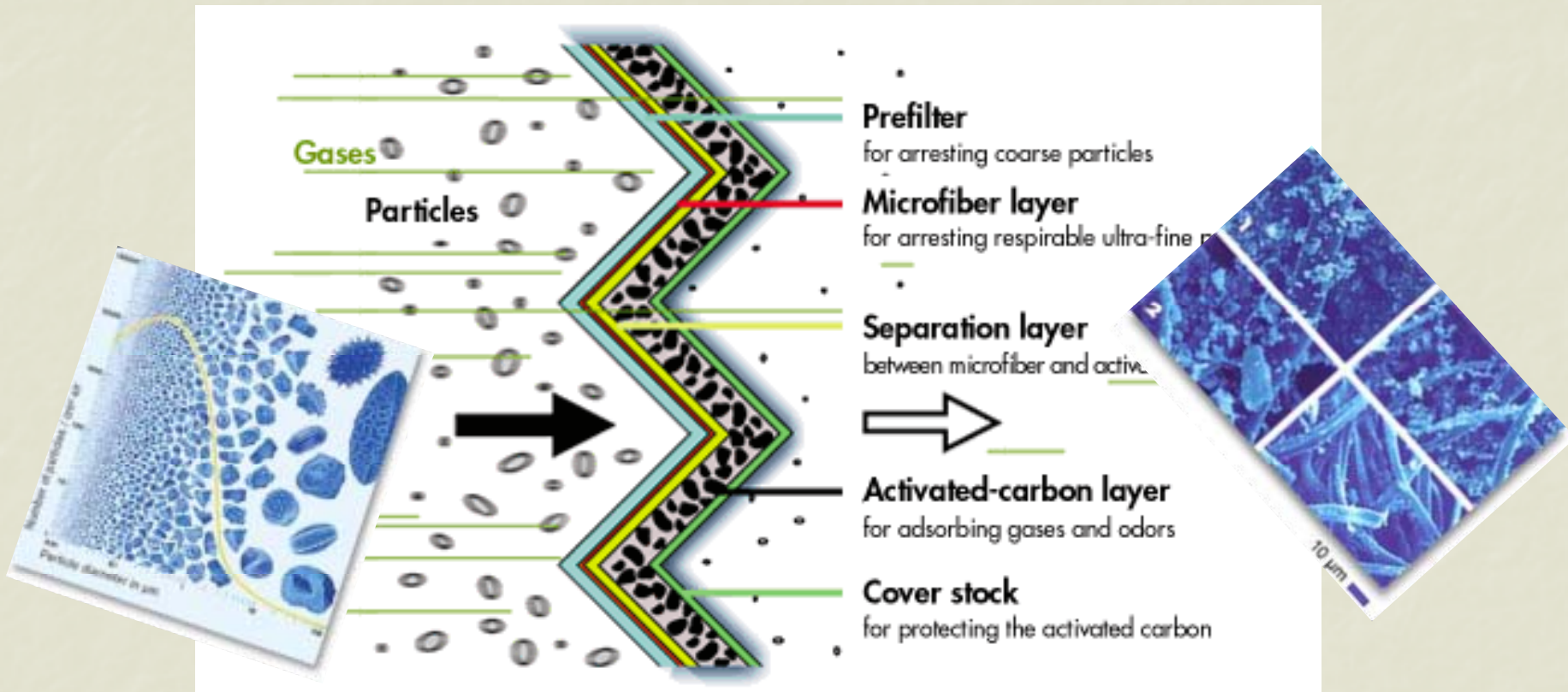




가
; Polyester, Polytetra teflon
Polyamide, expanded PTFE
Latex

가
1
가

ASHRAE	, Fabric filter	HEPA	70%
HEPA	High Efficiency Particulate Air	0.3	99.97%
ULPA	Ultra Low Penetration Air	0.12	99.999%
ACF()	Activated Carbon Filter	,	,
	Antimicrobial Filter	,	



- 가
- , 가 ()
- ()
-
-
-
- 가
- :



Activated Carbon()

- 1 Adsorbate() Adsorbent()
 - 2 Macropore, Mesopore
 - 3 Micropore
- 1 2 가 3



	, 가 가 , 가		
	가 가 가 가 가		
	, 가 가		가



	(m ² /kg)	(m ³ /kg)	(A)	
	700 ~ 1,400	0.6 ~ 1.1	12 ~ 15	Micropore
	200 ~ 600	0.2 ~ 1.0	20 ~ 120	
	150 ~ 350	0.3 ~ 0.8	40 ~ 150	
	100 ~ 250	0.4 ~ 0.5	~ 150	
	400 ~ 750	0.35 ~ 0.55	~ 15	

■ (Charcoal)

400 ~ 700
 , 900 ~ 1200

■ 1kg 700 ~ 1,400 m²

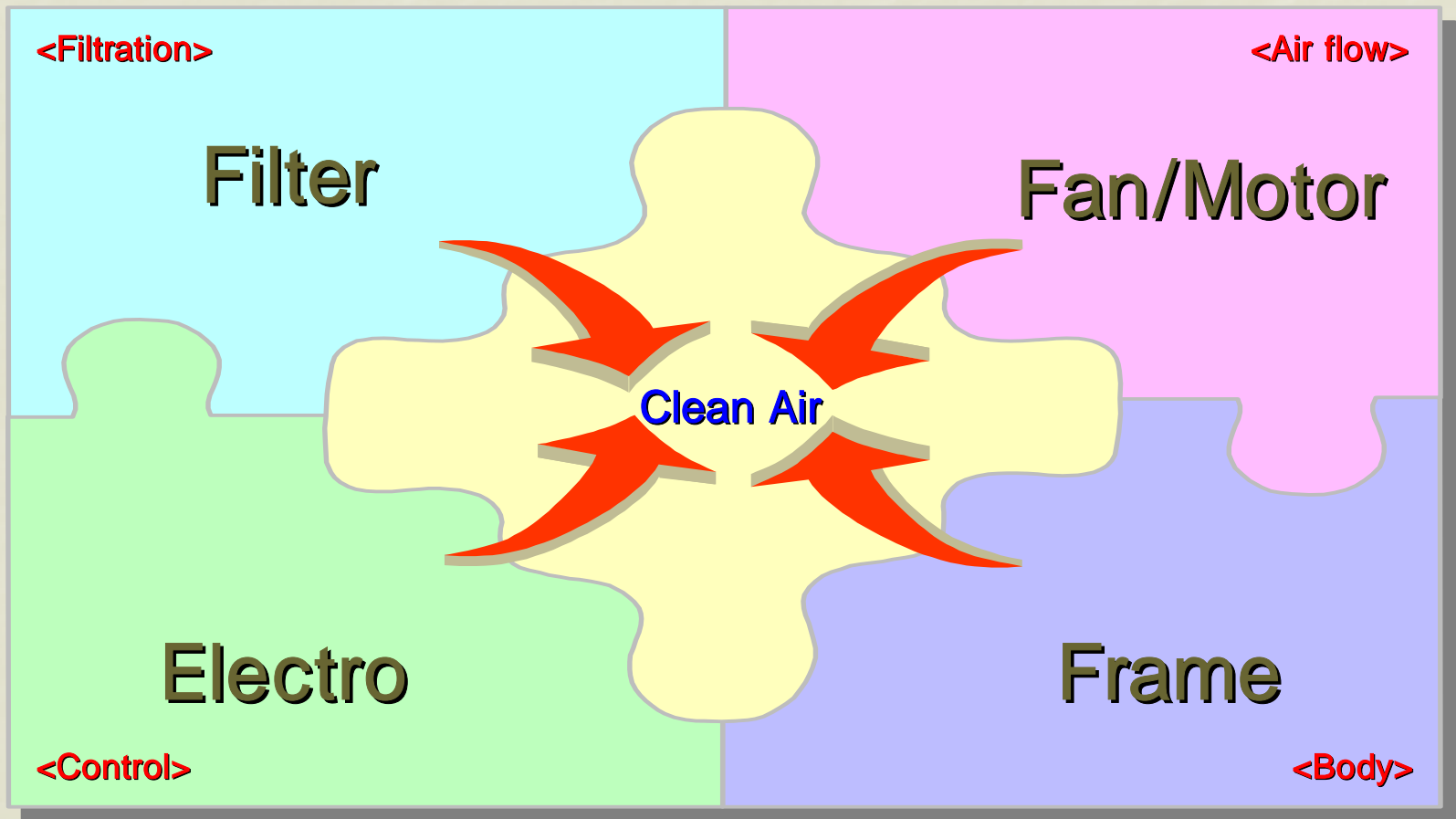
3 ()

	Toyota	Nissan	TAA	EF B	Magnus	Mitsubishi	
							
							m ³ /
	1.8	1.2	0.8	0.6	0.6	0.6	High
	Sirocco	Sirocco	Sirocco	CFF 60	CFF 60	CFF 45	
	Combi	Combi	+A/C	Combi	Combi	+A/C	
	L/H/A	L/H/A	L/H	SL/L/H/A	L/H/A	L/H/A	
	O	O	O/I	O/I/F/L	O/I/L	O/I/L	

; O(), I(), F(), L(HMSL)

	Subaru	Toyota	Carmate	Carmate	Leganza	Mando	
							
							m ³ /
	0.6	0.4<	0.4<	-	0.6<	0.6<	High
		Sirocco	Sirocco	-	CFF 60	CFF 45	
	+A/C		+A/C		Combi	+A/C	
	L/H/A	L/H/A	L/H	SL/L/H/A	L/H/A	L/H/A	
	O	O/L	O/L	I	O/I/L	O/I/L	

; O(), I(), F(), L(HMSL)



■ Filtration system

- ; 2 + ACF +

- 1 , 2

- ; 가 , 가

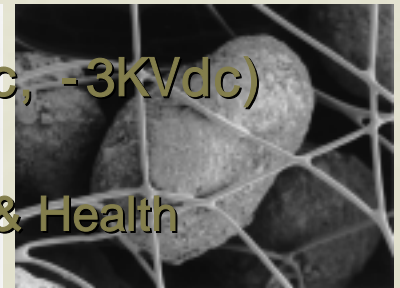
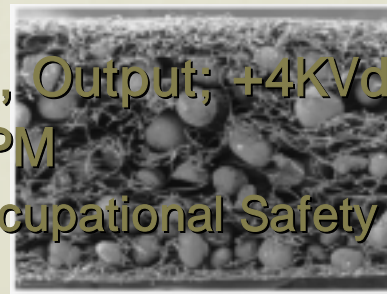
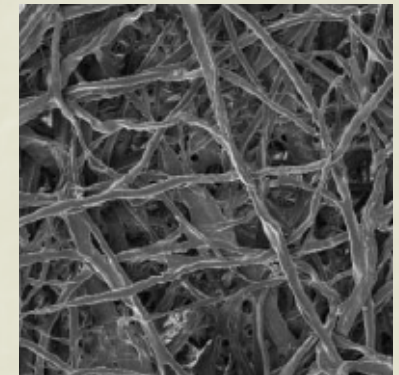
- ; 2
- 10 91%

- 100,000 /cm³

- HVT(Input; 12Vdc, Output; +4KVdc, -3KVdc)

- NIOSH 0.1PPM

- National Institute of Occupational Safety & Health



■ Fan/Motor

■ Fan

- Sirocco fan & Core-less motor
- Cross flow fan & BLDC motor

■ DC Brush-less motor

- ; 10,000 ~ 28,000
- ; 40dB
- ; 0.6~1.2CMM(max)



■ Control

■ Micom & EEPROM

- Auto
- Filter
- Sensor

■

■ Smoke sensing, Dust sensing

- Sensor
- Stop lamp



■ Frame

■ Case ;

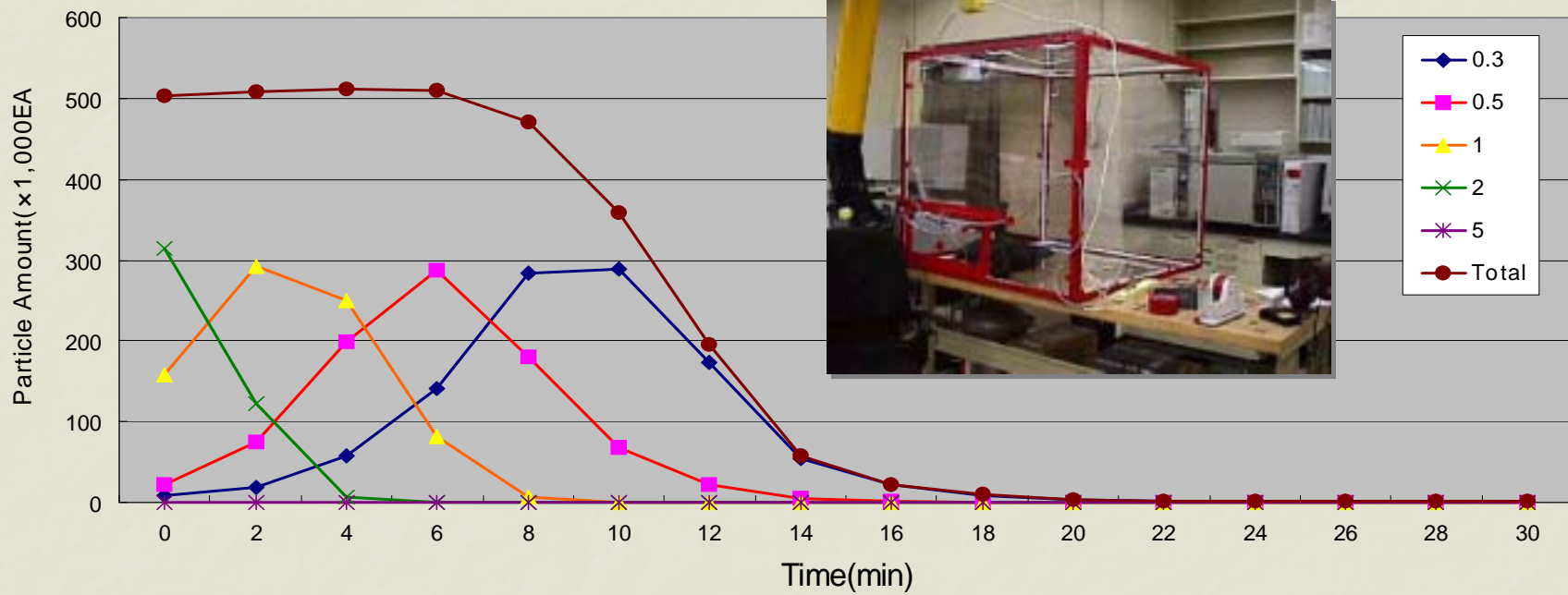
- : ABS, ABS+PC, PPF()

- Fan Housing

■ 가

- Wire connector

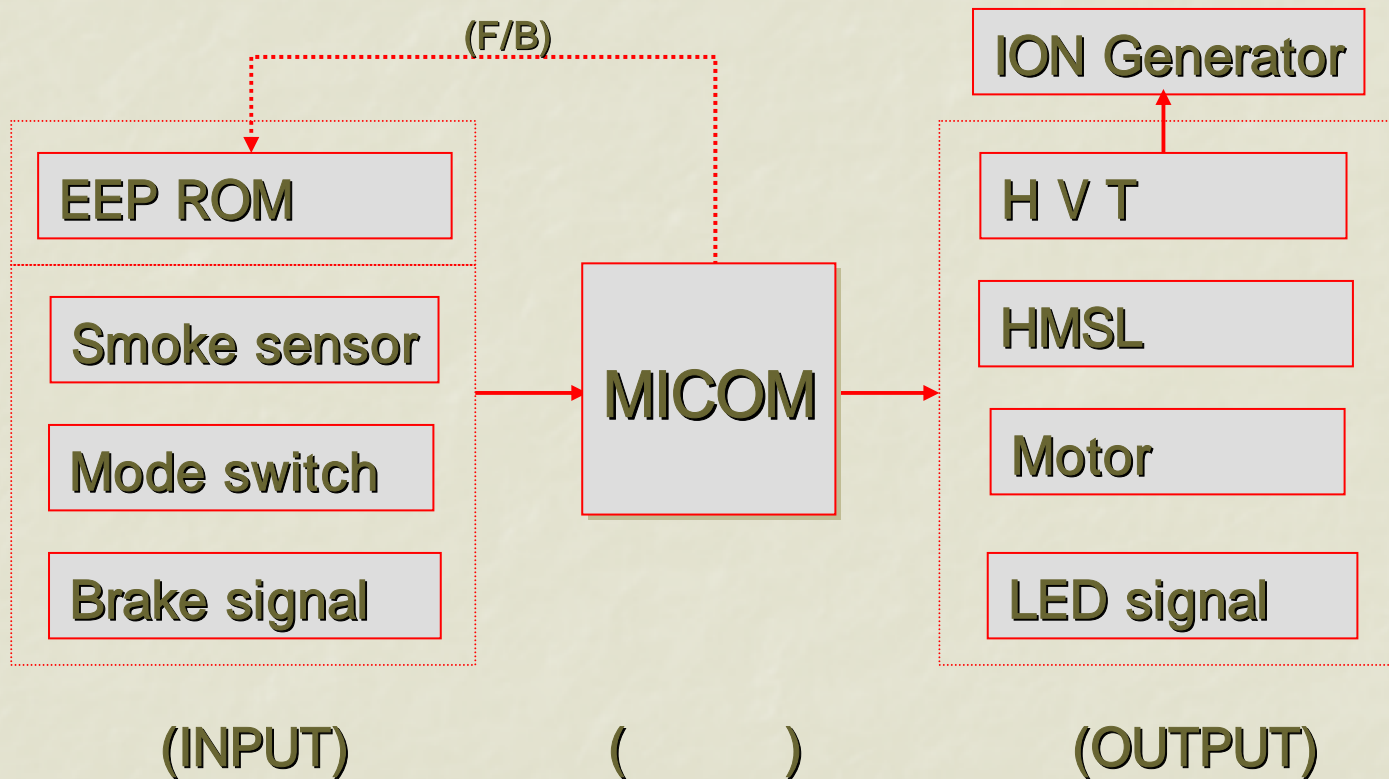
- Quick removing filter system

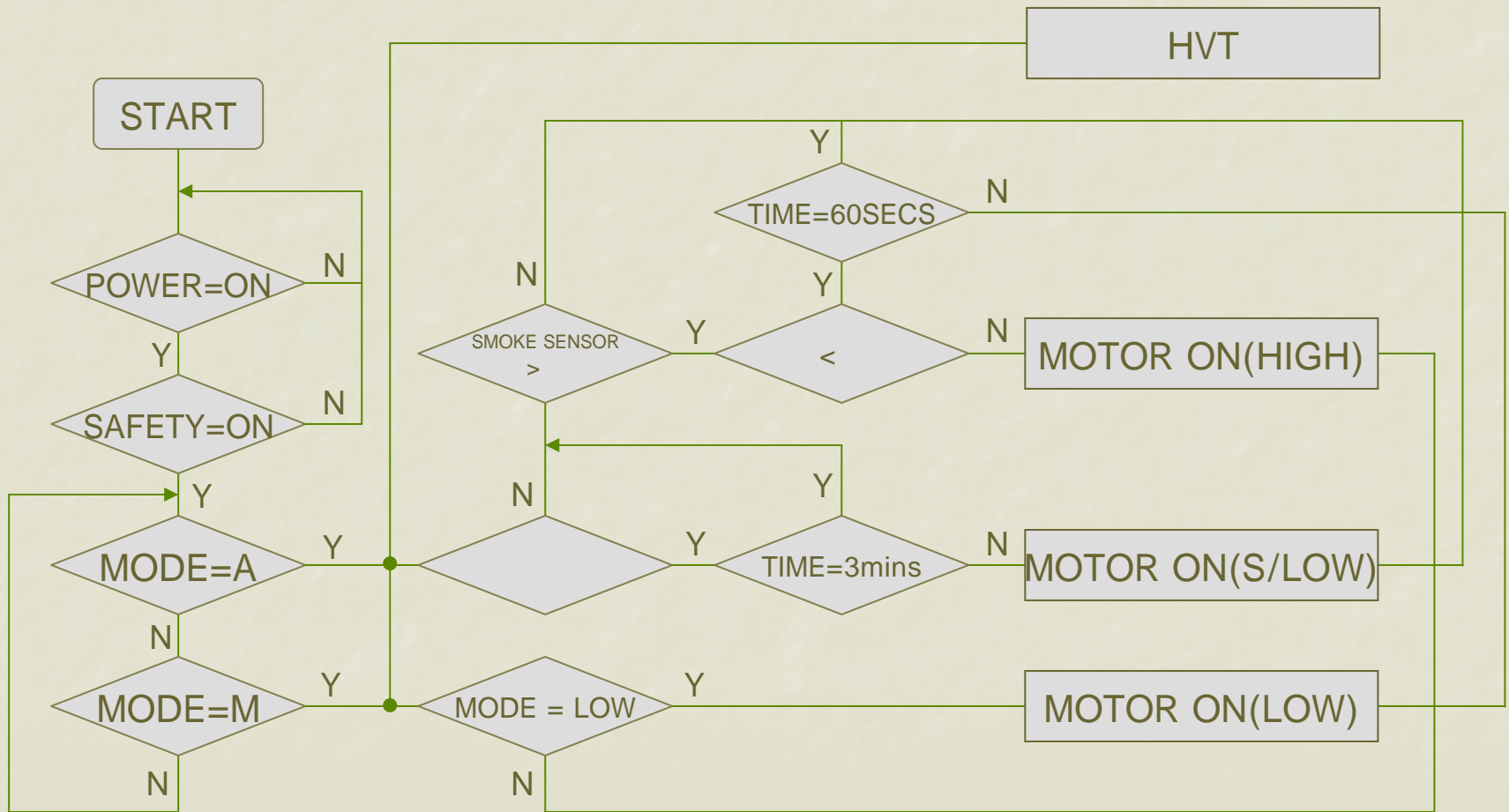


가
20~30 (1m³) 90%



Control diagram





(3~)



Auto On

10

60 가

-
-
- **Auto mode**
 - Low
 - S/Low(10") – High – Low(60") – S/Low
 - Micom full auto
-
- **Timer** **EEPROM**

