



## **AEROEX Technologies Inc.**

### **Oil Mist Eliminator**

### **Model REX- Series**



## **Installation & Service Manual**

[www.aeroex.com](http://www.aeroex.com)

AEROEX Technologies Inc.  
17 Hamilton Rd  
Barrie, ON, Canada, L4N 8Y6  
Ph 705-734-0199, Fax 705-734-1013

[sales@aeroex.com](mailto:sales@aeroex.com)  
[orderdesk@aeroex.com](mailto:orderdesk@aeroex.com)  
[www.aeroex.com](http://www.aeroex.com)

Rev 8 0219



## Model REX Series Specifications

### AEROEX – Mist Eliminator

For highly effective separation of oils, emulsion, water. Designed to exhaust air from metalworking machinery and oil reservoirs. Filtration efficiency 99.9% at particle fraction greater than 0.3 microns. Aerosol measurements less than 0.020 mg/m<sup>3</sup> at 0.3 microns.

**Consisting of:**

- Powdered coated mild steel housing.
- Fan with motor.
- First stage mechanical separator elements.
- Second stage filtration by droplet agglomerator. (Depth Fiber Filter)
- Oil outlet connection.
- 3<sup>rd</sup> stage polishing filter 95% @ 0.3 microns or HEPA 99.99%.
- Optional Clean In Place (CIP) System.

**Material:**

Housing	mild steel, epoxy powder coated
Fan impeller	aluminum , optional steel, SS304
Mechanical Separator elements	mild steel
Agglomerator Media	Polypropylene

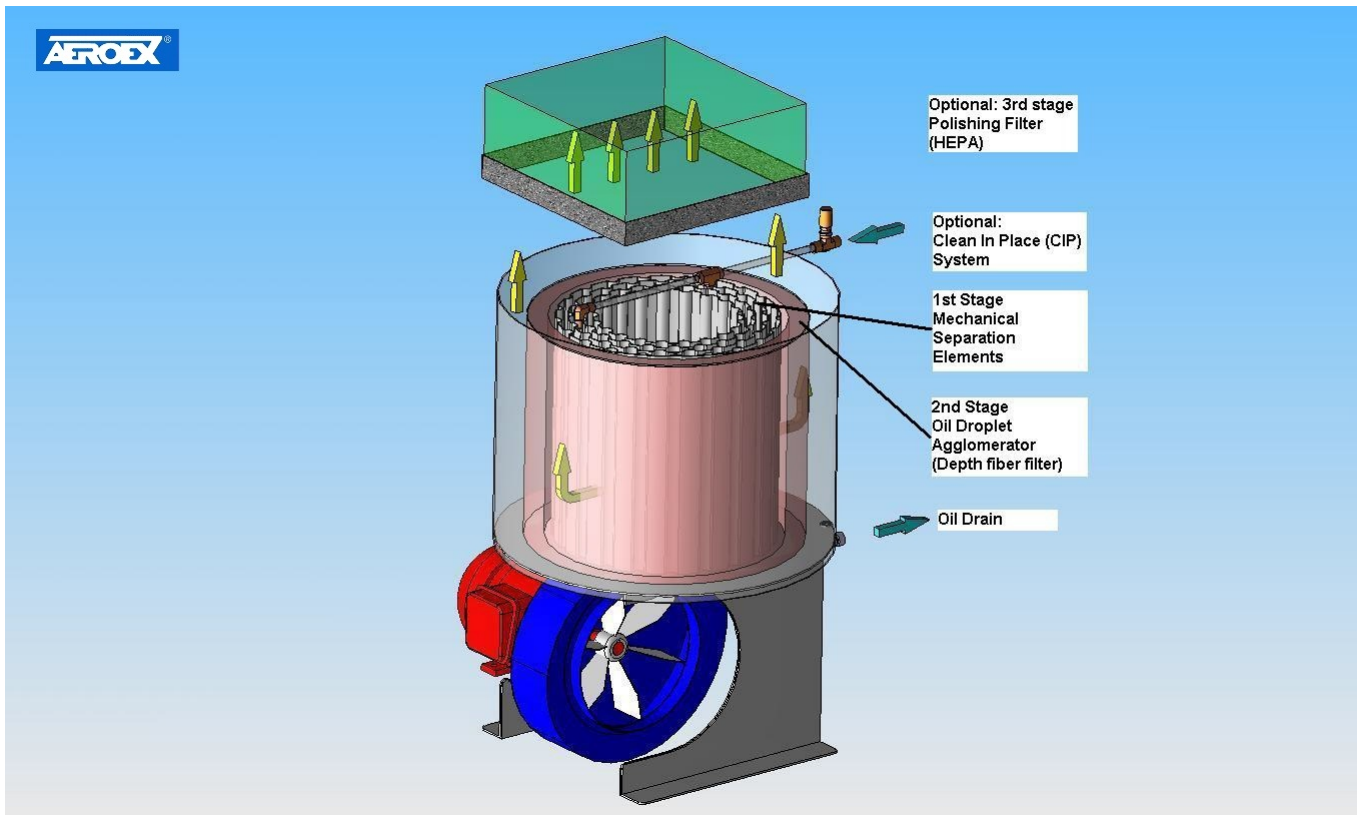
**Specifications:**

Model	CFM (m <sup>3</sup> /hr)	Sound dB(A)	Machine Tool Enclosure Volume ft <sup>3</sup>	Motor hp	Voltage RPM
<b>REX-500</b>	420 – 550 (715-870)	70-72	50 - 150	0.5	115/230/1/60 230/460 or 575/3/60 3600 / 60
<b>REX-700</b>	670 – 770 (1140-1310)	72-74	125 - 225	1	115/230/1/60 230/460 or 575/3/60 3600
<b>REX-1100</b>	1030 – 1150 (1759-1940)	76-78	200 - 350	3	230/460 or 575/3/60 3600
<b>REX-2000</b>	1750 – 2000 (3040-3400)	70-72	300 - 600	5, VFD 70-80 hz	230/460 or 575/3/60 2100 – 2300



Model	Dimensions	Weight	Duct Con.
<b>REX-500</b>	24" x 24" x 41"ht (610 x 610 x 1041 mm)	130 lb (60 kg)	5" (127 mm)
<b>REX-700</b>	24" x 24" x 47"ht (610 x 610 x 1194 mm)	210 lb (95 kg)	6" (152 mm)
<b>REX-1100</b>	29" x 29" x 51"ht (742 x 742 x 1260 mm)	300 lb (136 kg)	7" (177 mm)
<b>REX-2000</b>	55" x 32" x 50"ht (1397 x 813 x 1250 mm)	360 lb (164 kg)	10" (254 mm)
<b>REX-4000</b>	82" x 45" x 37" ht (2083 x 1143 x 940 mm)	700 lb (320 kg)	16" (406 mm)

## Model REX Series Description



## Installation:

- Mount mist collector unit vertical only.
- Units can be mounted directly on top of machines/tanks, on a post or on the wall.
- Ensure that there is 40 inches (1 meter) free space above unit for air exhaust & maintenance.
- Minimize the length of ducting to avoid air flow losses.
- Metal ducting or flexible hose can be used.
- Do not locate suction intake on machining applications in direct line of the cutting spray.
- A suction intake chip strainer mounted in the machine (CNC) enclosure is recommended to prevent chips from entering mist collector.
- Connect oil drain line.
- Install motor starter and set overloads. (Motor starter control panels can be purchased from Aeroex)
- Connect electrical power to motor.
- Check motor rotation.

### Optional Installation Kit

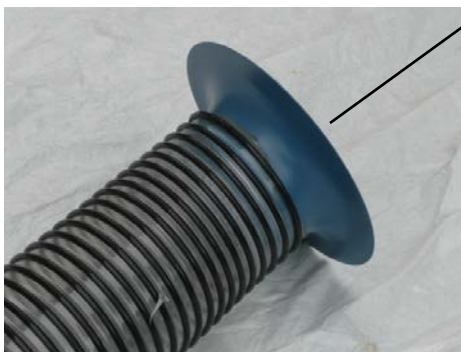
Drain hose (10 ft) with hose clamp

Suction Hose (6 ft) with hose clamps.

Flange with hose nipple

Chip strainer

(Items can be purchased separately)



*Flange with hose nipple*



*Chip strainer*

### Installation Options:

Motor starter control panels.

Floor mounting stand

Wall mount brackets



## Maintenance:

The mist collector can operate for long periods without maintenance. The maintenance period will depend on the type of oil & solids/chips in air stream. Some soluble oil & synthetic concentrates will congeal requiring the mechanical separator elements and agglomerator (filter) media to be manually cleaned/washed. The air flow will reduce if this happens.

Inspect the unit after 3 months, 6 months & 1 year to establish the maintenance interval. If there is no fouling, the mist separator can run indefinitely without maintenance. It is recommended that the 2<sup>nd</sup> stage agglomerator filter media be replaced every 7 - 10 years.

HEPA filter replacement:  
Replace when magnehelic pressure gauge reaches 3 – 3.5" WG



**Disassembly:**

Remove HEPA filter

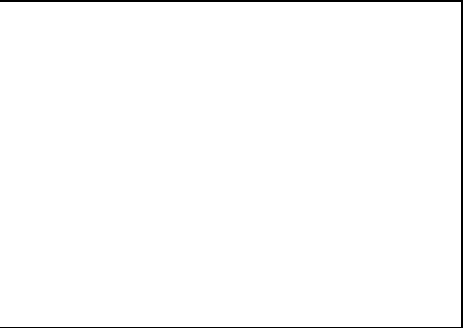


Remove pressure plate.

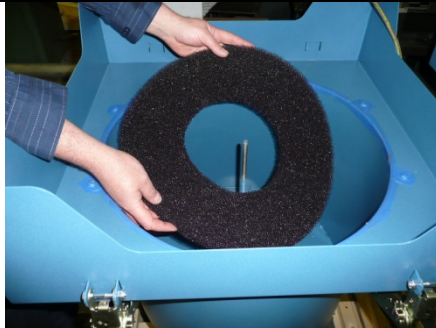
Remove 2<sup>nd</sup> stage filter (agglomerator). Can be washed many times. Replace ever 10 years.



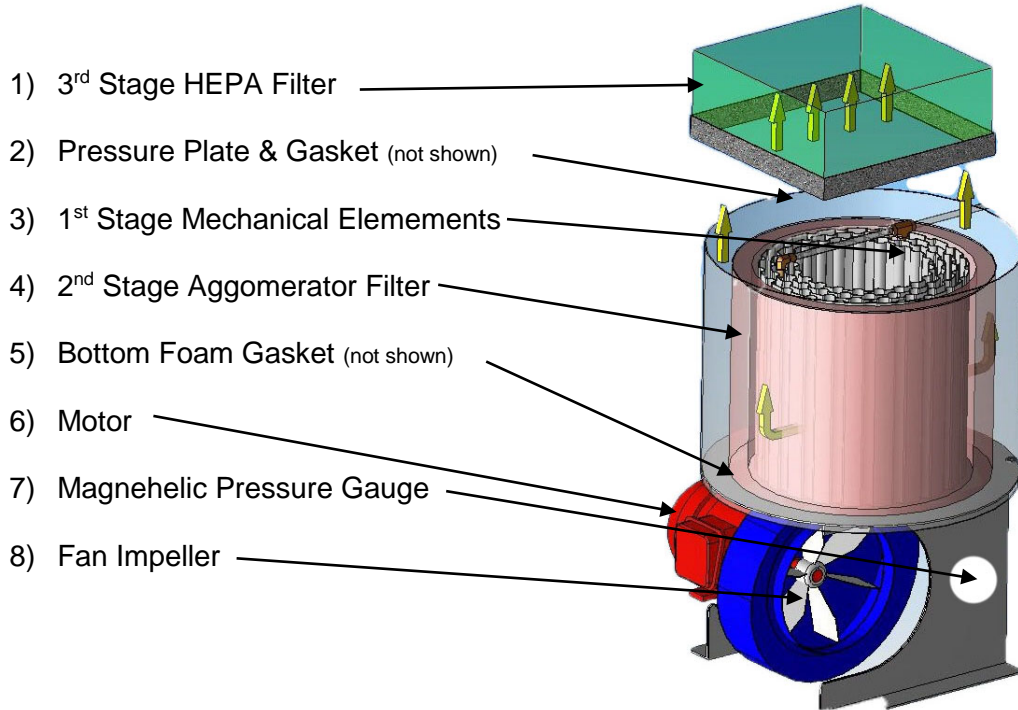
Remove mechanical elements.



Replace bottom foam gasket each time HEPA filter is changed.



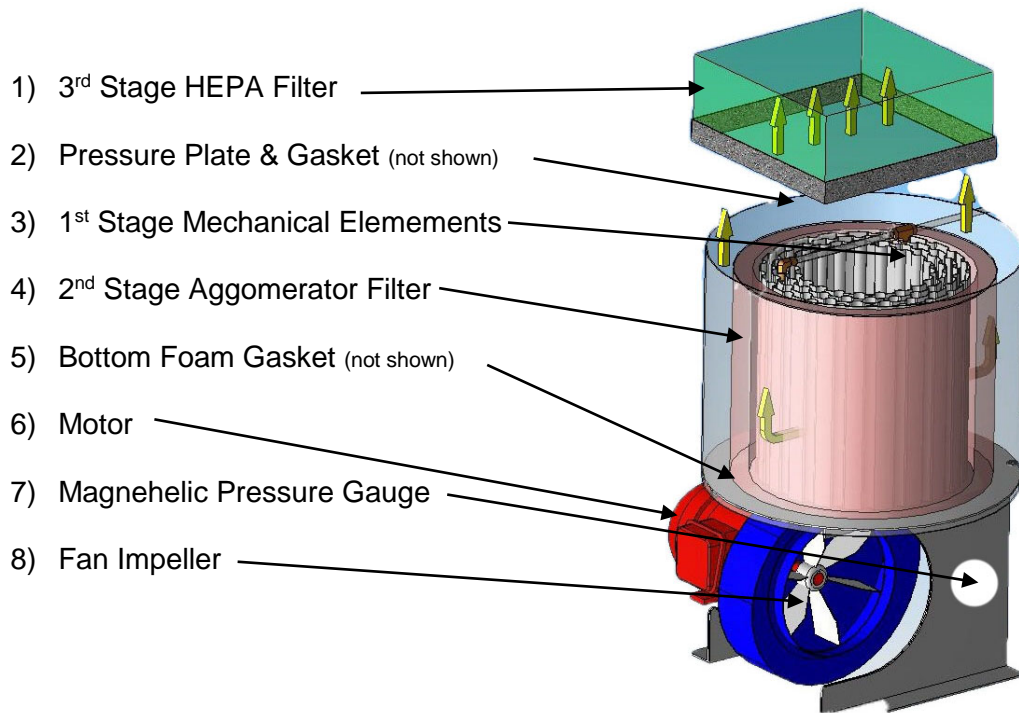
## REX-500 Spare Parts List



- 1) 3<sup>rd</sup> Stage HEPA Filter
- 2) Pressure Plate & Gasket (not shown)
- 3) 1<sup>st</sup> Stage Mechanical Elements
- 4) 2<sup>nd</sup> Stage Agglomerator Filter
- 5) Bottom Foam Gasket (not shown)
- 6) Motor
- 7) Magnehelic Pressure Gauge
- 8) Fan Impeller

Item #	Description	Qty	Part #	
1 (a)	HEPA Filter, 12" 95% @ 0.3 um	1	2000HF-095	
1 (b)	HEPA Filter, 99.9% @ 0.3 um	1	2000HF-099	
2(a)	Pressure plate and gasket	1	500PP-001	
2(b)	Pressure plate gasket	1	500PPG-001	
3	1 <sup>st</sup> stage mechanical elements	1	600ME-002	
4	2 <sup>nd</sup> stage allomerator filter	1	600AF-012	
5	Bottom foam gasket	1	500BG-001	
6(a)	Motor, 0.5 hp 115/230/1/60, 3600rpm	1	500M-115230	
6(b)	230/460/3/60, 3600 rpm	1	500M-230460	
6(c)	575/3/60, 3550 rpm	1	500M-575	
7	Magnehelic pressure gauge	1	500MG-001	
8	Fan impeller PW9	1	500FI-001	

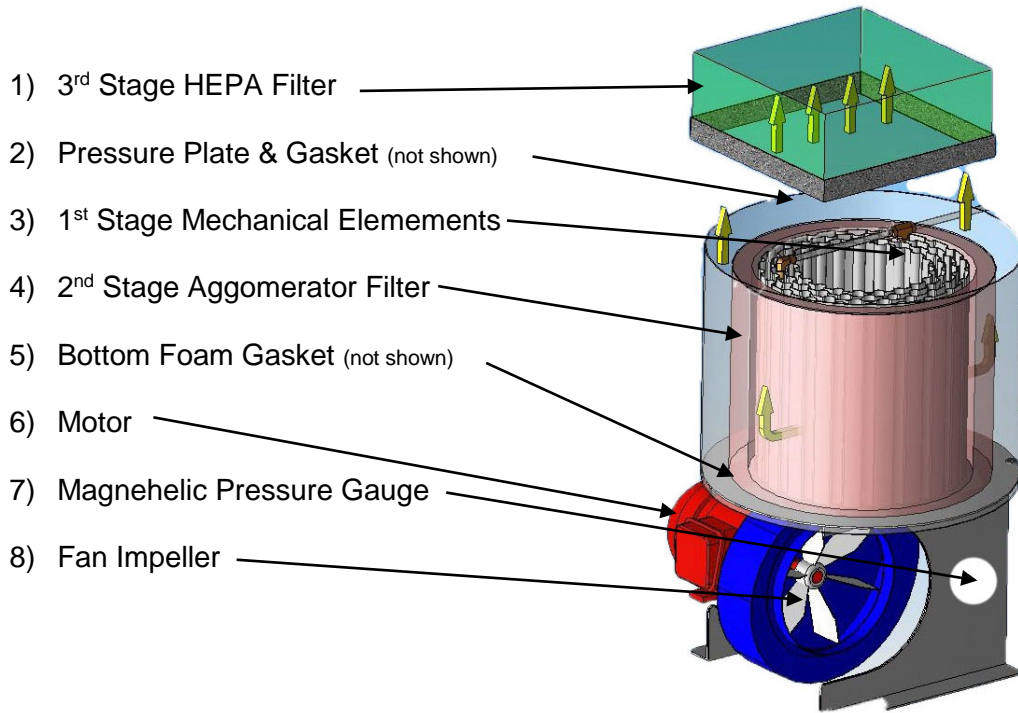
## REX-700 Spare Parts List



Item #	Description	Qty	Part #	
1(a)	HEPA Filter, 95% @ 0.3 um	1	2000HF-095	
(b)	HEPA Filter, 99.9% @ 0.3 um	1	2000HF-099	
2(a)	Pressure plate and gasket	1	700PP-001	
2(b)	Pressure plate gasket	1	700PPG-001	
3	1 <sup>st</sup> stage mechanical elements	1	700ME-002	
4	2 <sup>nd</sup> stage allomerator filter	1	700AF-012	
5	Bottom foam gasket	1	700BG-001	
6(a)	Motor, 1.0 hp 230/460/3/60, 3600 rpm	1	700M-230460	
6(b)	575/3/60, 3600 rpm	1	700M-575	
7	Magnehelic pressure gauge	1	2000MG-001	
8	Fan impeller PW11	1	700FI-001	

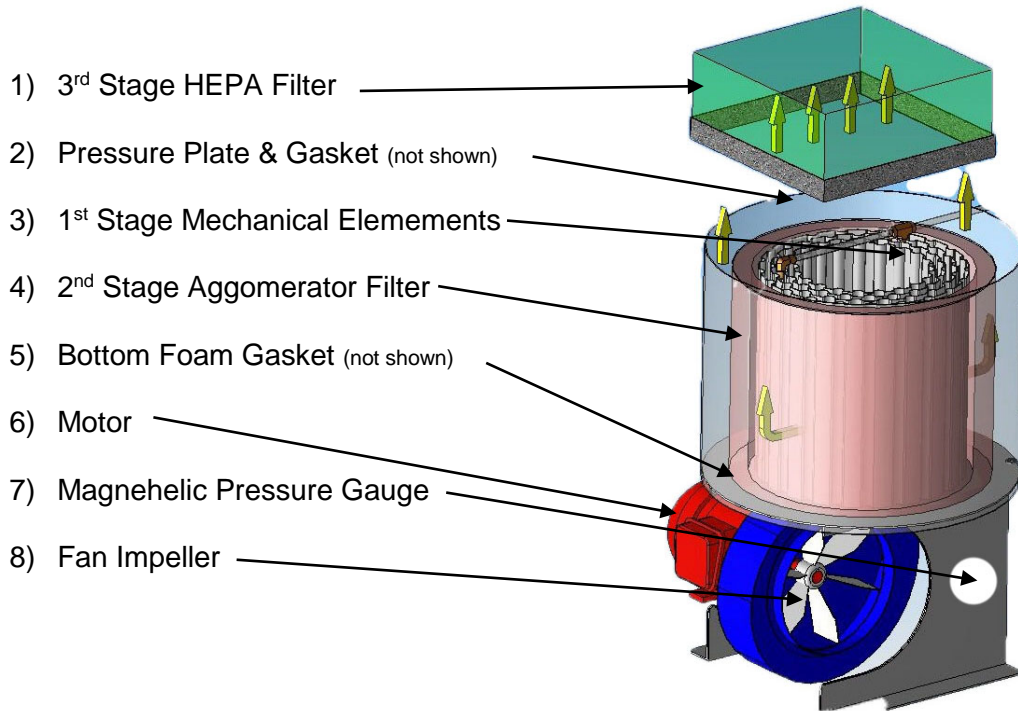


## REX-1100 Spare Parts List



Item #	Description	Qty	Part #	
1(a)	HEPA Filter, 95% @ 0.3 um	1	2000HF-095	
(b)	HEPA Filter, 99.9% @ 0.3 um	1	2000HF-099	
2(a)	Pressure plate and gasket	1	1100PP-001	
2(b)	Pressure plate gasket	1	1100PPG-001	
3	1 <sup>st</sup> stage mechanical elements	1	1100ME-002	
4	2 <sup>nd</sup> stage allomerator filter	1	1100AF-012	
5	Bottom foam gasket	1	1100BG-001	
6(a)	Motor, 3.0 hp 230/460/3/60, 3600 rpm	1	1100M-30230460	
6(b)	575/3/60, 3600 rpm	1	1100M-30575	
7	Magnehelic pressure gauge	1	2000MG-001	
8	Fan impeller PW12	1	1100FI-001	

## REX-2000 Spare Parts List



Item #	Description	Qty	Part #	
1(a)	HEPA Filter, 95% @ 0.3 um	2	2000HF-095	
1(b)	HEPA Filter, 99.9% @ 0.3 um	2	2000HF-099	
2(a)	Pressure plate and gasket	1	2000PP-001	
2(b)	Pressure plate gasket	1	2000PPG-001	
3	1 <sup>st</sup> stage mechanical elements	1	2000ME-002	
4	2 <sup>nd</sup> stage allomerator filter	1	2000AF-012	
5	Bottom foam gasket	1	2000BG-001	
6(a)	Motor, 5.0 hp 230/460/3/60, 3600 rpm	1	2000M-5H230460	
6(b)	575/3/60, 3600 rpm	1	2000M-5H575	
6(c)	230/460/3/60, 1750 rpm (with vfd)	1	2000M-5L230460	
6(d)	575/3/60, 1750 rpm (with vfd)	1	2000M-5L575	
7	Magnehelic pressure gauge	1	2000MG-001	
8	Fan impeller PW14 (3500 rpm motor)	1	2000FI-001	
	Fan impeller TK9 (1750 rpm motor with VFD)	1	2000FI-002	