

STATIC FREE CLEANROOM EMI-CWR

# Tiger-Vac®

# EMI®

## Model: EMI-CWR Static Free Cleanroom Vacuum Cleaner Suitable for Pharmaceutical applications

- Certified for use in Class 10 cleanrooms
- With ULPA filtration: Efficiency of 99.999% on 0.12 microns
- Static Free
- RFI Shielded
- With EMI suppression below class B limits for digital apparatus (from 450 KHz to 30.00 Mhz)

**FOR THE PURE  
NECESSITY OF  
CLEANLINESS**

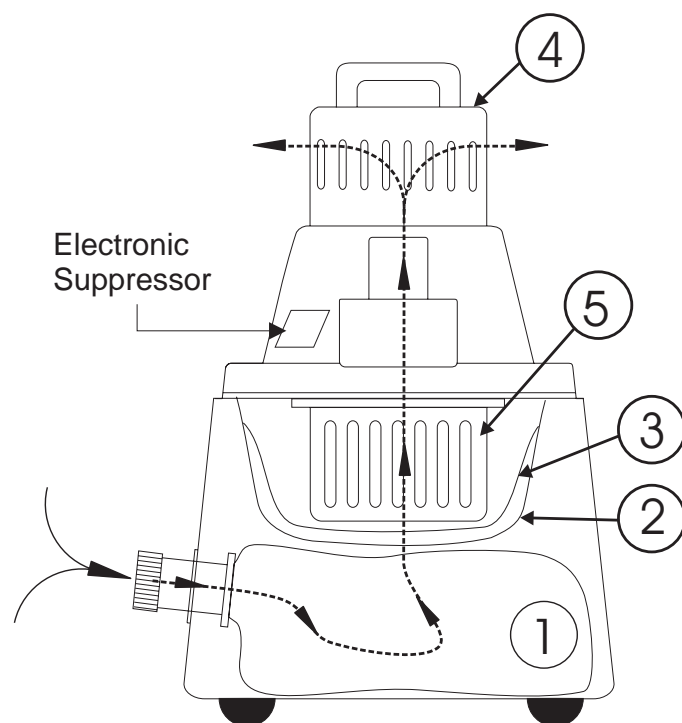


## 4 STAGE FILTRATION SYSTEM (UPGRADABLE TO 5 STAGES)

1. **Paper Filter Bag with liner** (one micron efficiency) collects the bulk of recovered materials and keeps the other filters clean.

**Double Cloth Filter** (2 stages, washable) consisting of:

2. **Dralon filter** with smooth surface prevents caking of fine dust.
3. **Polyester filter** (one micron efficiency) prolongs the life of the ULPA filter.
4. **ULPA filter** (Ultra Low Penetration Air) Minimum efficiency of 99.999% on 0.12 micron. The ULPA filter is large enough to handle the amount of airflow that the vacuum produces without any significant pressure drop. It also ensures compatibility with Class 10 cleanroom conditions.
5. **(Optional 5th Stage) Internal HEPA filter** (High Efficiency Particulate Air) can be incorporated in the filtration system for a total of 5 stages. The filter is installed before the motor and is used when recovering toxic or nuisance dusts. It protects the motor from contamination and it allows the motor to be serviced without danger to the operator. HEPA filter: 99.99% efficiency on 0.3 micron.



### Class 10 Compatible

When we first set out to build our cleanroom vacuum cleaners, we did not attempt to modify an existing model and adapt it for cleanroom use. We knew that the cleanroom industry deserved and wanted better, so we started from scratch. A quick glance at the EMI-CWR's innovative features will prove that we did not leave anything out.

EMI cleanroom vacuum cleaners are certified for use in class 10 cleanrooms. Cleanroom compatibility tests have been performed by independent labs and copies of the test reports are available upon request. As part of our quality assurance program, every ULPA filter is individually laser tested and every vacuum cleaner is individually leak tested before being shipped. This assures compatibility with Class 10 cleanroom conditions.

### Static Free Vacuum System (ESD Safe)

The EMI-CWR is designed to be grounded during use. Any static electricity that is produced while vacuuming is dissipated through the conductive hose, through the vacuum cleaner and it is discharged to the ground. A ground continuity tester is included with every vacuum cleaner to verify ground continuity before use. The EMI cleanroom vacuum cleaners eliminate static electricity and static charge buildup and they protect sensitive electronic equipment.

For critical static control applications requiring zero voltage potential (telecommunication facilities, computer and electronics manufacturing, integrated circuit manufacturing, etc.) a special TELECOM package is available. Conductive wheels are incorporated on the vacuum cleaner and a special tool kit is provided. ESD safe micro tools and a round brush with conductive bristles are standard with the EMI-CWR.

### Additional Features

The EMI-CWR is equipped with a dual speed control that allows the operator to regulate the suction. The EMI-CWR also incorporates a thermo-protector which prevents the motor from overheating if there is a blockage in a nozzle or hose. The heavy duty construction ensures that the EMI-CWR will resist abuse and the industrial gaskets and seals ensure that the vacuum cleaner will always be leak free.

### Warranty

The EMI-CWR cleanroom vacuum cleaners are covered by a two year warranty against defects in workmanship and materials.

	115V - 60 Hz	230V - 50 Hz
<b>Electrical Requirements</b> (at high speed) Current draw Power	8.5 amps 1000 watts	4.6 amps 1000 watts
<b>Performance</b> (at high speed) Airflow Vacuum (H <sub>2</sub> O)	120 cfm 95"	46 L/S 2050 mm
<b>Noise Level</b> (at high speed)	70 dB(A) @ 6.5 ft	70 dB(A) @ 2 m
<b>Filtration</b> (Filter Area) ULPA* filters Pre-filters** Total filter area	1 368 inches <sup>2</sup> 990 inches <sup>2</sup> 2 358 inches <sup>2</sup>	8 826 cm <sup>2</sup> 6 387 cm <sup>2</sup> 15 213 cm <sup>2</sup>

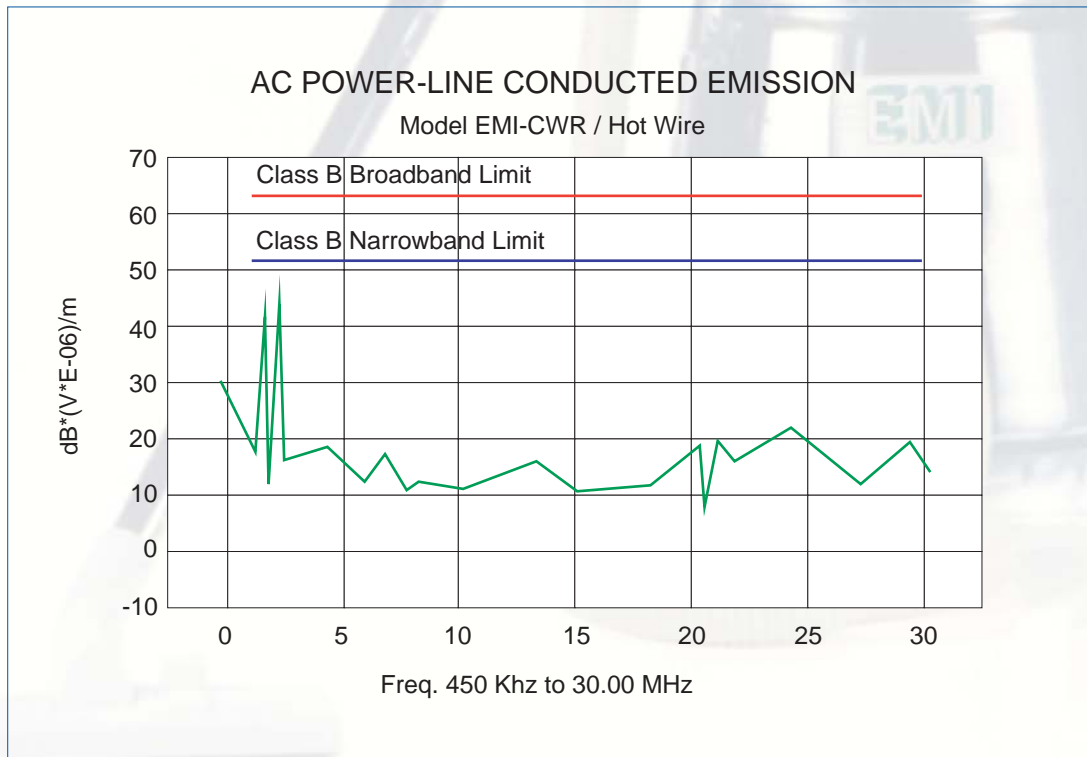


<b>Dimensions</b> Height Width Weight	27" (69 cm) 16" (41 cm) 35 lbs (16 kg)
<b>Recovery Capacity</b> (Dry only) Paper Filter Bag Recovery Tank	2.5 gal (9.5 litres) 4 gal (15 litres)

\*ULPA, Ultra Low Penetration Air \*\*Pre-filters include: paper filter bag, dralon and polyester filters

### EMI SUPPRESSION / RFI SHIELDING

The EMI cleanroom vacuums are equipped with an electronic filter suppresser which reduces electromagnetic interference (EMI), both radiated and conducted, below class B limits for digital apparatus as established by the FCC and ISO . It also provides shielding against RFI (Radio Frequency Interference.) The electronic filter is wired in line with the motor. If the electronic filter should fail, power to the motor will automatically be cut-off. The outer shell of the EMI-CWR is made entirely of chrome polished steel which acts as a shield against interference from emitting sources. EMI cleanroom vacuums will not disrupt computers, radio and video monitors and other sensitive electronic equipment.



## INNOVATIVE CLEANROOM ACCESSORIES (INCLUDED)

- |     |         |   |
|-----|---------|---|
| 1.  | 211028  | Latex paper filter bag (pkg. of 5)            |
| 2.  | 323303  | Suction hose SD*<br>Ø1.25" x 10' (Ø32mm x 3m) |
| 3.  | 323331  | Wands (2), stainless steel SD*                |
| 4.  | 211065  | Ground continuity tester                      |
| 5.  | 323314A | Flat tool, ESD Safe                           |
| 6.  | 323313A | Crevice tool, ESD Safe                        |
| 7.  | 323317A | Utility floor and wall tool,<br>ESD Safe      |
| 8.  | 323321A | Round tool, ESD Safe                          |
| 9.  | 323312A | Round brush, ESD Safe                         |
| 10. | 323311B | Combi floor tool                              |
| 11. | 323316  | Micro tool kit, ESD Safe                      |
| 12. | 211066  | Micro pad                                     |

\*SD: Static Dissipating

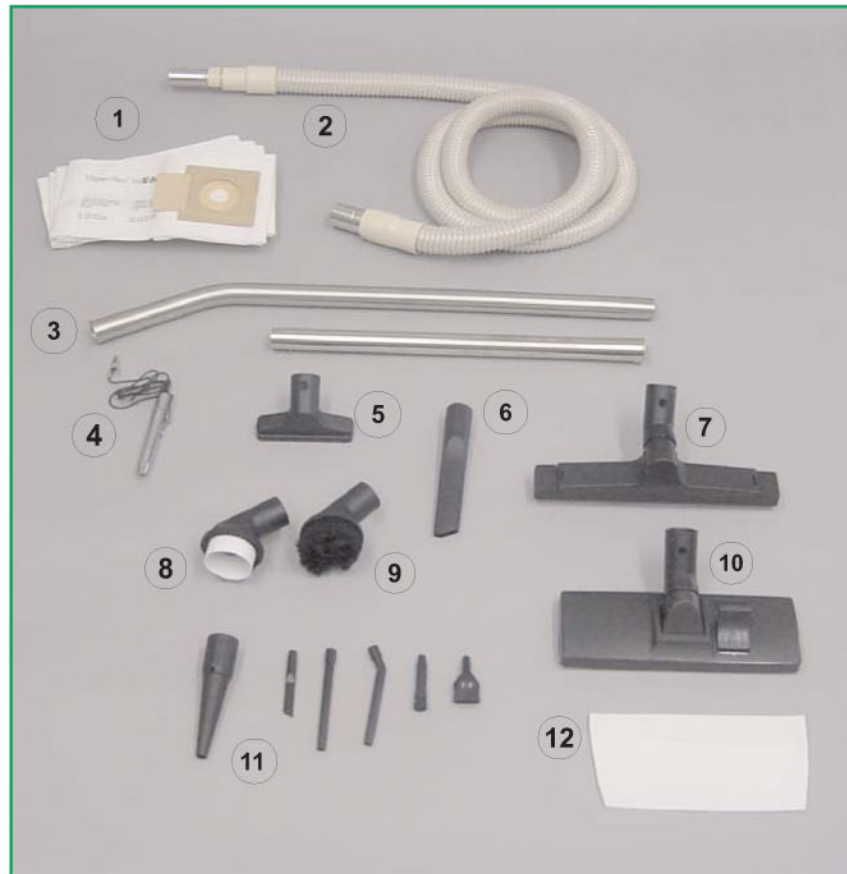


Fig. 1  
Ground tester to verify continuity



Fig. 2  
Stainless steel static dissipating micro tools (Optional)



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