

E2600 FILTER HOUSING

Advanced protection for optics and resists

Overview

Entegris E2600 filter housings are used to chemically purify environmental air used in photolithography exposure tools. The E2600 filter system protects the exposure tool from a full range of airborne molecular contaminants.

The E2600 filter housings are designed for use with Entegris chemical air filters to protect chemically amplified resists and exposed optical surfaces in the exposure tools.

When equipped with Entegris hybrid media chemical air filters, the E2600 filter housing offers advanced protection against airborne molecular acids, bases and condensable organic compounds.

Inside the E2600, specialized chemical filters are arranged in a multistage serial configuration to provide unparalleled protection against elevated contamination events, such as accidental spills of solvents and developer chemicals.

The E2600 cabinet can be equipped with either Entegris SilverSet® chemical filters or Entegris VaporSorb™ CSP-32 chemical filters.

SilverSet filters should be used for all advanced node applications, as they feature an asymmetrical filter configuration which prevents HMDSO conversion to TMS and PGMEA conversion to acetic acid. TMS can cause scanner lens contamination and acetic acid can cause photoresist processing issues.

In addition, the E2600 housing incorporates Entegris' interstack sample port design to facilitate testing and provide advanced warning of filter breakthrough.

Scanner Performance

- >99% initial removal efficiency of targeted airborne molecular contaminants: acids, acid forming species, molecular bases and amines, and condensable organic compounds defined as those with boiling points above 150°C
- >24 months of filter life when used in Entegris filter housings at rated flow and typical cleanroom ambient molecular contamination levels



Features and Benefits

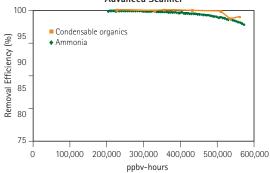
- Hybrid media chemical air filters remove a full range of contaminants including acids, bases and condensable organics
- Multistage serial filter layout
- Internal HEPA filters ensure particle control
- Interstack sampling ports allow filter performance monitoring, breakthrough-warning and intelligent filter change out planning
- Small footprint saves cleanroom space
- Rigid construction ensures reliable, troublefree operation
- Chemically clean construction materials ensure contamination-free air to the process tool
- Dual inlet and outlet transitions for simple, hard or flexible duct connection to process tool air handling system

Specifications

Connections:	Compression fitting	
Operating conditions:	Maximum flow rate	2,600 m³/hr (1530 cfm)
	Clean Dry Air (CDA)	655 kPa (95 psig); negligible flow
Dimensions:	Length	1200 mm (47.2")
	Width	838 mm (33.0")
	Height	1842 mm (72.5")

Performance Data

E2600 Filtration System Test Advanced Scanner

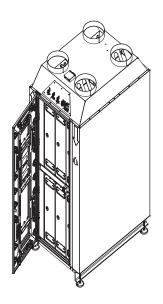


Note: Data shown is from the E2600 mixed challenge filter

Filter Testing Lab

Entegris offers an advanced test laboratory providing full-scale filter testing to determine service life and removal efficiency. Such testing is used to develop filter media for maximum life at removal efficiencies of >99%, often demanded by advanced 193 nm lithographic processes.

In addition, Entegris offers an array of analytical and testing services to characterize airborne molecular contamination and filter performance. Services include cleanroom and process equipment testing along with design consultation.



Ordering Information

Part Number	Description	
ESI004802-01	E2600 cabinet	
ESI006154-01	Set of 12 SilverSet chemical filters	
ESI004842-01	Set of 12 VaporSorb CSP-32 chemical filters	

For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit www.entegris.com and select the Customer Service link for the center nearest you.

Terms and Conditions of Sale

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit www.entegris.com and select the Legal Notices link from the footer.

 $Entegris^{\circledcirc}, the\ Entegris\ Rings\ Design^{\circledcirc}, Creating\ a\ Material\ Advantage^{\circledcirc}, SilverSet^{\circledcirc}\ and\ VaporSorb^{\ref{Material}}\ are\ trademarks\ of\ Entegris,\ Inc.$

ENTEGRIS, INC.

Corporate Headquarters | 129 Concord Road | Billerica, MA 01821 USA Customer Service Tel. +1 952 556 4181 | Customer Service Fax +1 952 556 8022 In North America 800 394 4083 | www.entegris.com

