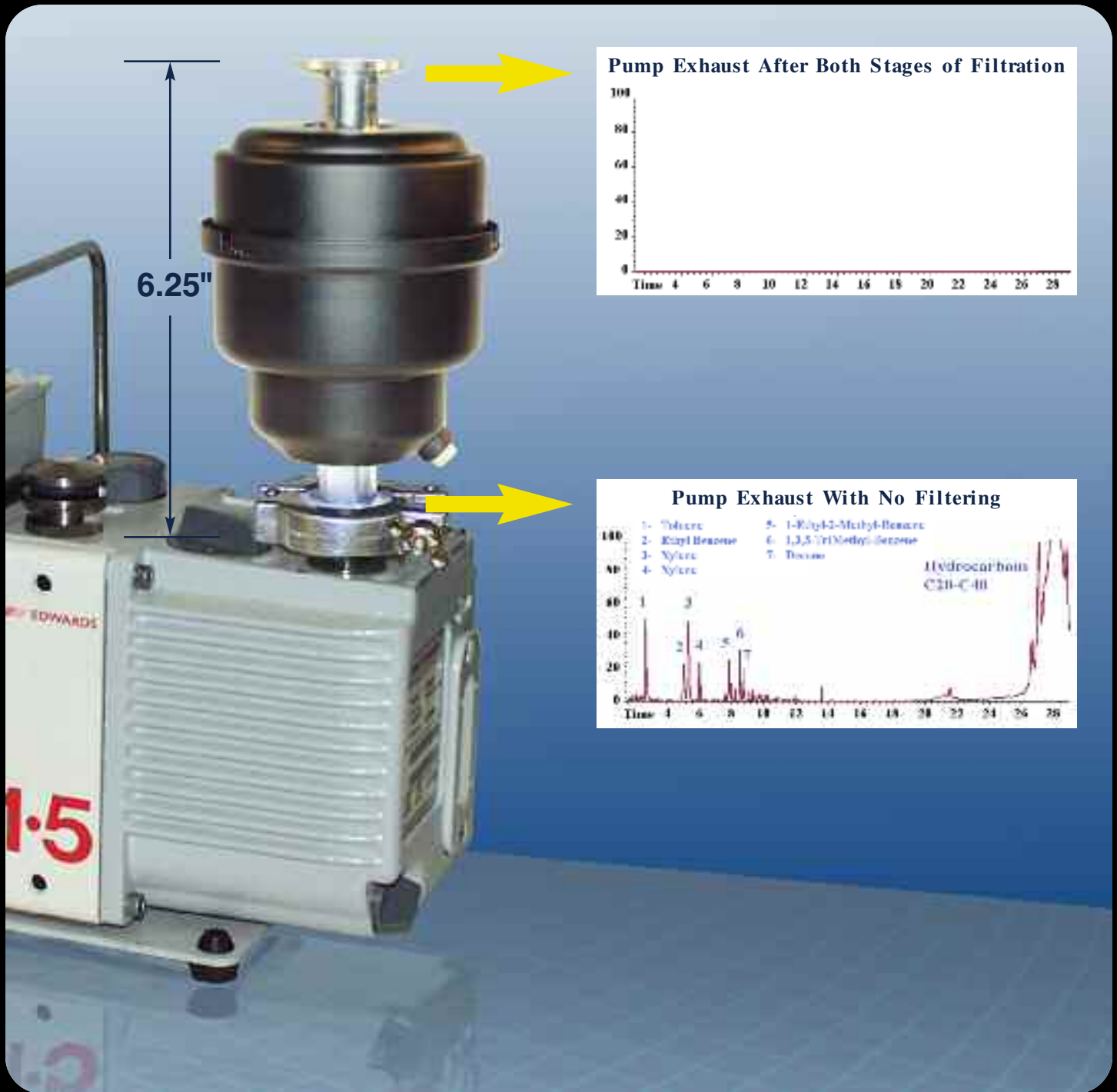


# ALL-IN-ONE TWO STAGE VACUUM PUMP FILTER KITS

*A TWO-STAGE FILTER SYSTEM TO PREVENT VACUUM PUMP  
EXHAUST FROM CONTAMINATING INDOOR AIR*



Scientific Instrument Services, Inc.™

## Features

### Two Stage Vacuum Pump Exhaust System

- Purifies Vacuum Pump Exhaust Gases
- Provides for a Safe Laboratory Environment
- Only 6.25" Tall
- Replaceable Elements
- Low Cost

#### Stage 1 - Oil Mist Eliminator

- Eliminates Pump Oil Fumes
- Returns Used Oil to Vacuum Pump

#### Stage 2 - Charcoal Filter

- Traps Organic Chemicals
- Traps Particles & Bacteria to 0.3 microns

The All-In-One Two Stage Vacuum Pump Exhaust Filter System has proven to be effective for removing volatile and semi-volatile organics from the exhaust of vacuum pumps and helping to maintain a safe environment. Several reports on the two stage vacuum pump exhaust filter systems are available from SIS™ in the references listed below (1, 2 & 3).



S.I.S.™ All-In-One Two Stage Vacuum Pump Exhaust Filter

Without any exhaust filters, organic contaminants from the pump oil and hydrocarbons from the pump oil are exhausted out of the vacuum pump (Figure 1 - top chromatogram).

#### Stage 1 - Oil Mist Eliminator

During initial pump down or when using the gas ballast valve, oil vapors exhaust from the vacuum pump. The oil mist eliminator traps the hydrocarbons in this exhaust

#### Stage 2 - Charcoal Filter

The charcoal trap (Stage 2) adsorbs and traps the volatile and semi-volatile organics from the pump exhaust and prevents these organics from entering the laboratory environment (Figure 1 - bottom chromatogram).

It is recommended that both filters in the All-In-One be replaced on a regular basis. The Carbon Filter (AC-10S) every 30 days and the Oil Mist Coalescing Filter (GL-915R) every six months. When the All-In-One filter is used on a vacuum pump exhaust port, the exhaust from the final stage of filtering has been shown to be cleaner than laboratory air.

#### Complete Vacuum Filter Studies On the Web

- (1) Vacuum Pump Exhaust Filters, Part I  
- Two Stage Vacuum Pump Exhaust Filter System,  
<http://www.sisweb.com/referenc/applnote/app-82.htm>
- (2) Vacuum Pump Exhaust Filters, Part II  
- Oil Mist Eliminators,  
<http://www.sisweb.com/referenc/applnote/app-83.htm>
- (3) Vacuum Pump Exhaust Filters, Part III  
- Charcoal Exhaust Traps,  
<http://www.sisweb.com/referenc/applnote/app-84.htm>

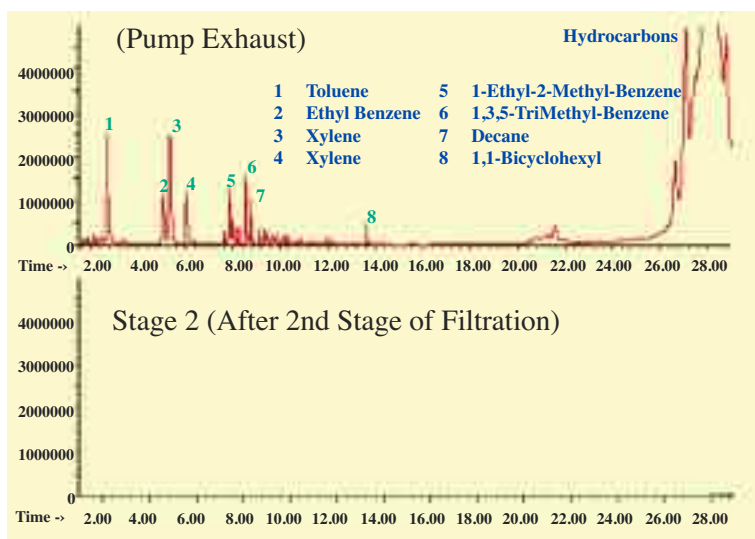


Figure 1 - Efficiency of Vacuum Pump Exhaust Filters

### Alcatel Pump Filter Kit

For all Models of Alcatel Vacuum Pumps with NW25 Flange.



The Alcatel Vacuum Pump Kit (Kit FK101) contains the S.I.S. All-In-One Filter and the fittings shown below. This kit is all you need to install the All-In-One Exhaust Filter to your Alcatel vacuum pump. It can also be used with any other manufacturers pumps that have an NW25 flange type fitting on the exhaust port and has a pumping capacity of up to 12 SCFM output.

#### Kit Part # FK101B



Part No	Description
FK101B	S.I.S.™ All-In-One Filter Kit for Alcatel Vacuum Pumps
AC-10S	Replacement Charcoal Filter Element
GL915R	Replacement Coalescing Filter (Oil Mist Eliminator)

### Edwards Large Filter Kit

For Edwards Models E1M5/8/12, E2M3/5/8/12 and RV3/5/8/12 Pumps



The Pump Filter Kit for the Edwards Pump includes the S.I.S. All-In-One Filter and all the fittings needed to attach this All-In-One Filter on the larger Edwards vacuum pumps. This kit is to be used with Edwards models E1M5/8/12, E2M3/5/8/12 and RV3/5/8/12 vacuum pumps. There is an optional 1/2" adaptor fitting available for those pumps without an NW25 fitting already on the exhaust port. The kit can also be used with any other manufacturers pumps that have an NW25 flange type fitting on the exhaust port.

#### Kit Part # FK101B



Optional Adaptor Part # C10501014 (Not Included in Kit)

Part No	Description
FK101B	S.I.S.™ All-In-One Filter Kit for Edwards Pumps Models E1M5/8/12, E2M2/3/5/8/12, RV3/5/8/12
C10501014	1/2" BSP to NW25 Adaptor
AC-10S	Replacement Charcoal Filter Element
GL915R	Replacement Coalescing Filter (Oil Mist Eliminator)

### Edwards Small Filter Kit

For Edwards Models E2M0.7, E2M1 and E2M1.5 Pumps



The Pump Filter Kit for the Edwards Pump includes the S.I.S. All-In-One Filter and all fittings needed to attach the All-In-One Filter on the Edwards series vacuum pumps. This kit is to be used with Edwards models E2M0.7, E2M1 and E2M1.5 vacuum pumps. It contains an adaptor fitting which screws into the Edwards pump exhaust port.

#### Kit Part # FK251B



Adaptor Included in Kit

Part No	Description
FK251B	S.I.S.™ All-In-One Filter Kit for Edwards Pumps Models E2M0.7, E2M1, E2M1.5
AC-10S	Replacement Charcoal Filter Element
GL915R	Replacement Coalescing Filter (Oil Mist Eliminator)

# RECOMMENDED INTERVALS FOR ELEMENT REPLACEMENT



→ **Top Half of Shell**

→ **Part # AC-10S - S.I.S. Activated Carbon Element.**  
Recommended Replacement - Every 30 Days.

→ **Part # GL915R - S.I.S. Oil Mist Eliminator Element.**  
Recommended Replacement - Every 6 Months.

→ **Bottom Half of Shell**

→ **Clamp & Centering Ring Adapter**

→ **Part # C10501014 - Optional for Edwards Large Filter Kit**  
**Part # SISC10501213 - Included in Edwards Small Filter Kit**

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