

## APPLICATION NOTE: DUSTCOUNT® CONSUMABLES

### OVERVIEW

The operation and maintenance of the DustCount products requires a consumable component. This application note outlines these items, recommended manufacturer if applicable, their use, and outlines a schedule for the most common maintenance items for the DustCount product.

### CELLULOSE SUPPORT PADS 25MM DIAMETER

Support pads are to be installed in the cassette and provide backing support to the filter. These are required to be installed in Nanozen Black & White cassette assemblies.

Can be purchased from Nanozen in 100-unit quantities.  
Nanozen Part Number: DFT-0000-BK

#### Notes:

- ❖ Refer to the DustCount user guide for procedure.
- ❖ Refer to Maintenance Schedule below for maintenance frequency guidance.



Manufacturer: Zefon, Part Number: P/N FSP25

### 5.0 UM, PVC, 25MM FILTER

These filters are to be installed in the cassette to provide protection to the pump. These filters can also be used for sample analysis, either gravimetric or composition.

Can be purchased from Nanozen in 100-unit quantities.  
Nanozen Part Number: DFT-0000-PP.

#### Notes:

- ❖ Refer to the DustCount user guide for maintenance procedure.
- ❖ Refer to Maintenance Schedule below for maintenance frequency guidance.
- ❖ A filter is always required to be installed within the cassette to protect the pump.



Manufacturer: Zefon, Part Number: P/N FPVC525

## CASSETTES & SLEEVES:

Should the cassette with filter be required to be transported, a rubber cassette sleeve should be used to seal the ports on the cassette to avoid contamination of the filter and support pad.



## IMPACTOR MAINTENANCE

The DustCount comes equipped with a particle impactor installed inline at the air inlet. This allows the DustCount to measure dust mass concentrations according to the EPA guidelines. The impactor plate comes oiled from the factory, but to operate properly, the impactor plate must be cleaned and have its oil replenished, which is recommended to be performed before every sampling test.

1. Alcohol wipes such as those manufactured by Allegro industries can be used to clean the impactor plate.
2. A light lubrication oil such as 3-IN-ONE multi-purpose oil is recommended for the oiling of the impactor plate.
3. Non-Fibrous paper such as Kimwipes are recommended to clean the impactor plate with rubbing alcohol if alcohol wipes are not available, and to wipe any excess oil off the impactor plate.



Manufacturer - Allegro Industries



Manufacturer - 3-IN-ONE



Manufacturer - Kimtech Science

### Notes:

- ❖ Refer to user guide for maintenance procedure.
- ❖ Refer to Maintenance Schedule below for maintenance frequency guidance.

## COMPRESSED AIR ELECTRONICS DUSTER

If the DustCount has been exposed to high dust concentrations for prolonged periods, its inlet channel may need to be cleaned. A small percentage of dust can accumulate on the walls of the inlet channel over time. To ensure accuracy, these deposits should be removed periodically. A can of compressed-air duster with a flexible tube less than 3mm in diameter such as a keyboard duster available from office, or electronics supply stores is recommended.



### Notes:

- ❖ Refer to user guide for maintenance procedure.
- ❖ Refer to Maintenance Schedule below for maintenance frequency guidance.

## DUSTCOUNT RECOMMENDED MAINTENANCE SCHEDULE

The table below outlines a recommended frequency for the most common maintenance items required for the DustCount.

Item	Frequency
Perform Zero Check	Before each use.
Clean and Oil Impactor	<b>DustCount 88xx Models:</b> Before each sampling session (recommended) or 10 hr at 0.5mg/m <sup>3</sup> * <b>DustCount 9000 Models:</b> Before each sampling session (recommended) or when IMP alert is raised.
Clean Air Inlet	Before each sampling session (recommended), OR when performing Impactor maintenance.
Replace Protective Filter	<b>DustCount 88xx Models:</b> 500 hr at 1mg/m <sup>3</sup> * <b>DustCount 9000 Models:</b> When FILT alert is raised.
Replace Support Filter	When replacing either sampling or protective filter.
Return to Factory for Cleaning & Calibration	Annually.

\*prorated – 10 hours at 0.5mg/m<sup>3</sup> is the same amount of aerosol as 5 hours at 1.0mg/m<sup>3</sup> or 20 hours at 0.25mg/m<sup>3</sup>

\*prorated – 500 hours at 1.0 mg/m<sup>3</sup> is the same amount of aerosol as 1000 hours at 0.5 mg/m<sup>3</sup> or 250 hours at 2.0 mg/m<sup>3</sup>