

Instructions for Precoating Cartridges

Opti-coat is a chemically inert, light density powder that is injected into the cartridge collector to establish a uniform, porous dust cake on the filter cartridge for maximum, even air flow with enhanced operational efficiency and unequaled filter protection from moisture, particulate bleed-through, hydrocarbon carry-over, blinding, oil, and tacky or viscous contaminants. (For more information, please contact ECO Environmental Filtration.)

PROCEDURE FOR FILTER PRECOATING:

1. *The amount of Opti-coat utilized should be a minimum of 0.03 lbs per sq.ft. of filter cloth area.*
2. *Prior to injection of Opti-coat:*
 - a) *Ensure that all previous dust has been evacuated from collector hoppers, then turn off hopper dust removal equipment.*
 - b) *Deactivate (lockout) the filter cleaning cycle to prevent filter cleaning during the pre-coat period.*
 - c) *Operate the system at approximately 50% of design airflow to the collector for a resulting air flow velocity of approximately 2000 ft/min through the inlet duct, but not less than 2000 ft/min (typical minimum dust carrying air velocity).*
3. *Inject Opti-coat at a feed rate of 0.3 lbs per minute per 1000 acfm of reduced gas flow to the collector:*

$$\begin{aligned} 50,000 \text{ acfm to collector divided by } 1,000 \text{ acfm} &= 50 \\ 50 \times 0.3 \text{ lbs/min} &= 15 \text{ lbs/min} \end{aligned}$$

For collectors operating under suction, the Opti-coat can be injected through ports or inspection doors in ducts or hoppers. For positive pressure collectors, the Opti-coat should be injected into a duct at the suction side of the positive pressure system fan.

4. *Isolate each compartment and inspect the filters for adequate pre-coat cake (approximately 1/16"), and check inside of hopper to be sure there is not a large amount of pre-coat dropout.*
5. *Once filter pre-coating with Opti-coat is complete, increase the air volume for normal design flow levels to the collector. Turn on the hopper dust removal equipment. However, do not reactivate the filter cleaning cycle until a minimal differential pressure of 2" – 3" is measured across the filters (this is to ensure that a seasoned cake of Opti-coat has been achieved on the filters prior to activation of the initial cleaning cycle).*