



## **Baghouse Best Practices: New Bag Start Up**

***Protecting new filter bags during initial start up is critical to optimizing bag life. This procedure focuses on protection using pre-coat and controlled dust velocity.***

### **Reverse Gas/Shaker Baghouses**

#### **1. Pre-heat**

If possible, pre-heat the compartment using hopper heaters before starting gas flow.

#### **2. Pre-coat**

Immediately before starting gas flow, inject a compatible pre-coat material into the compartment. This accomplishes two things: it provides a porous layer of protective dust on the new bags, and it absorbs moisture and acids that form as the compartment goes through the dew point stage.

#### **3. Restrict Gas Flow**

During the first 24-48 hours, restrict gas flow by either limiting the inlet or outlet damper (usually, closing it off to 20% of normal will do the trick), or slowing down the fan.

#### **4. Reduce or Stop Cleaning Energy**

During the first 8-12 hours of operation, reduce the cleaning energy (eliminate reverse gas, stop shaking). Isolating the compartment (gravity cleaning) reduces the dust level enough to maintain satisfactory differential pressure. When cleaning energy is needed, use a reduced amount to prevent over-cleaning. This preserves the layer of pre-coat.

### **Pulse Jet Baghouses**

#### **1. Pre-heat**

If possible, pre-heat the compartment using hopper heaters before starting gas flow.

#### **2. Pre-coat**

Immediately before starting gas flow, inject a compatible pre-coat material into the compartment. This accomplishes two things: it provides a porous layer of protective dust on the new bags, and it absorbs moisture and acids that form as the compartment goes through the dew point stage.

#### **3. Restrict Gas Flow**

During the first 8-12 hours, reduce gas flow by limiting the amount of compressed air pressure to the pulse header, or reducing fan speed. Limiting the damper opening to 20% of total usually does the trick. This controls incoming gas/dust velocity to a level at or near the design air-to-cloth ratio, allowing a dust cake to safely build up. Because new bags have high permeability, even limited flow volume is usually sufficient to ventilate the process or pickup point.

#### **4. Reduce Cleaning Energy**

During the first 8-12 hours of operation, limit cleaning energy by reducing compressed air pressure to the pulse header. A 30%-40% drop will reduce the dust level enough to maintain satisfactory differential without overcleaning. This preserves the layer of pre-coat.