

The Importance of Cleaning your Drainac™

Introduction

Your Drainac has been designed to give you years of trouble free service. With no moving parts, the Drainac has the least required maintenance of any freeness analyzer. Proper and reliable operation of the Drainac, however, does require periodic cleaning of certain components.

The Drainac functions by establishing a very precisely-controlled pressure differential across the pad screen which separates the process from the analysis chamber. Measurements are made on the ability of the stock to filter through a pad of fibers formed below the screen as the process forces its way into analysis chamber as a result of the pressure differential. This ability is a function of the freeness of the stock and the flow resistance of the pad screen.

As the pad screen becomes clogged with fibers and other contaminants, the flow resistance of the pad screen will increase. This increase will lengthen measurement cycles times and cause measured freeness levels to be slower than actual. In order to eliminate this error, it is necessary to periodically clean the screen.

How often do I need to clean the Drainac?

It depends on your furnish. If you have a clean process, you will likely have to clean the instrument less often than if you have a process with sap, additives or coatings. As part of your startup procedure, we ask that you begin by cleaning the instrument at least once a day. We have provided you with a log sheet with which to record the measurement times before and after cleaning. We can use this data to predict how often you will need to clean the instrument. Typical scheduled cleaning times range from once per day to once every two weeks.

A good rule of thumb to follow is to clean the Drainac often enough that no change in instrument performance is noticed following a cleaning. If you notice that the instrument produces a significant difference in analysis following a cleaning, then you should clean it more often than you have been.

Cleaning the Drainac

By design, we have made cleaning the Drainac an easy thing to do. The Drainac is fitted with a ball valve which will allow it to be isolated from the process. Once the valve has been closed, the instrument can be opened and the screen removed for cleaning.

Use this procedure to clean the Drainac screen and probes:

Solutions for Process Industries

Place the unit in **Exhaust Hold** mode by pressing the F4 key on the panel. Allow the unit to complete its flush cycle before proceeding further.

Close the two inch ball valve on the front of the riser. This will expose the butterfly nut. Release pressure in the chamber by disconnecting the air line at the side of the chamber. A quick disconnect fitting is provided to make this easy.

Loosen the butterfly nut and gently swing the top of the unit until it rests on its stop. The pad screen is exposed.

Remove the dirty pad screen and replace it with a clean one. Also, using the bottle brush provided with the Drainac, gently brush the bottom of both analysis probes to remove any process residue which may have precipitated on them. A light scrubbing will normally remove most deposited materials.

Swing the unit shut and tighten the butterfly nut. Reconnect the air line and open the process valve. Place the unit back in **Cycle** mode by again pressing the F4 key on the panel.

With practice, this procedure can be completed quickly with minimum downtime of the instrument.

