Pall-style Filter Decontamination/Sterilization

Background:
Pall-style cannister style filters are typically decontaminated by filling them with a liquid sterilizing solution or steam. Occasionally the installation prohibits using the conventional methods requiring a novel approach. Gaseous chlorine dioxide (CD) has been proven to effectively decontaminate/sterilize both the filter hosing and element.

Equipment Required:
The equipment required to decontaminate Pall-style Filters consists of:

- Minidox-M/Cloridox-GMP Portable CD Generator
- ClorDiSys Mix Box with Diaphragm pump
- Carbon Scrubber System

Equipment Setup:
The setup of the equipment can be seen in the diagram on the following page.

- For most applications, it has been determined that the regenerative blower pictured below should be replaced with a diaphragm pump and the hose with 3/8” tubing.
- The flow path should remain the same.
- Both gas and humidity should be injected into the mix box directly.
- The red aeration valves will have different configurations for the gassing step and for the aeration step. These are described in the diagram below.

Minidox Parameters:
Certain Minidox parameters should be modified due the fact that the Pall filters can suck up the humidity and you run the risk of overshooting humidity if this is not addressed. The following parameters are a suggestion and the actual values needed will depened on the size and amount of your filters as well as the size of your loop and the type of humidifier used.

Below are some suggested values to get you started:
Parameter #3 (Humidity add to Setpoint - X ) – 30%
Parameter #4 (Pause for RH Settle ) – 30 sec
Parameter #5 (At Condition RH SP for X ) – 60 sec
Parameter #6 ( RH burst time) – 10 sec