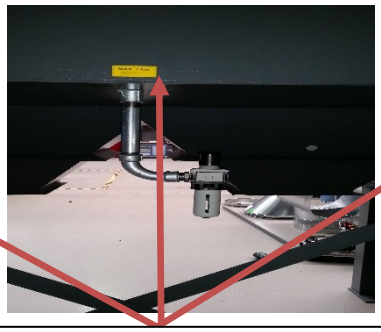
Donaldson FILTRATION SOLUTIONS	**Donaldson TORIT® Europe Document** **Technical Specification Dust collector** **DFPRO 6,8 12 & 16 Cyclopeel**
	Rev 2 DD 29/06/2016

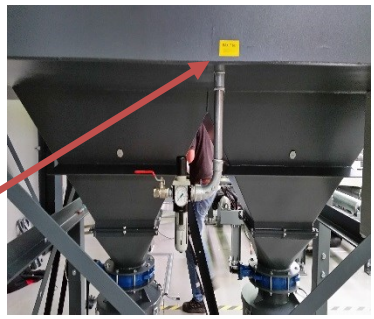
Model / Title: **DFPRO 6,8 12 & 16 Cyclopeel**		**Ref No.** **Filter: DFPRO Cyclopeel** **Design volume: 6, 8 12 & 15.000 m³/HR** **Dust: Metal oxide** **Application: Plasma cutting**

Start – Up sequence Dustcollector;

- With first operation or new elements

- Turn on compressed air supply & check that the compressed air supply is maintained at the recommended pressure





⚠ Working compressed air pressure 6 – 7

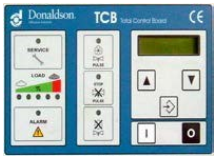
- Switch on control

- Set controller to continuos cleaning
- Adjust airflow by using the damper valve to the capacities mentioned below,
- By preference using a good measuring device see picture.
- Mark this spot so that you know every time when you have to start up with new elements, you always know which position you need for the damper valve.

Damper valve with start – up 50 % or more closed

Precoat with Lime.

1. Switch of compressed air cleaning, by means of closing the compressed air valve or via controller settings



2. Start fan set.
3. Add 1 kg of lime per element through a feed hole in the suction pipe. A light emission from the discharge is normal for new elements.
4. Close hole and switch off the fan set.
5. Clean every element ont time (Off-line cleaning setting in controller)

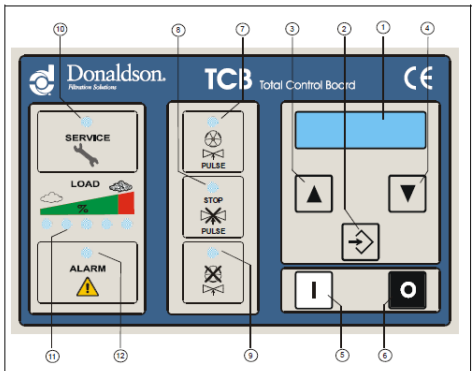
6. Is emission still visible through the discharge, repeat steps 1 to 5 one or two more times.
7. As soon as no emission is visible, the elements are optimally conditioned, and the dust collector can be set for continuous cleaning , via the controller.

If the pressure is increased to approx. 25 daPa *(Visible in LCD display ①)*, the damper valve continue to be set up further, until the desired capacity is reached;

- *11 – LED bar-graph indication of differential pressure; indicates the degree of pollution in % of the cartridges, if 150 daPa is exceeded the cartridges must be replaced.*

- DFPRO 6 > 6.000 m³/hr, DN 350 = 17,0 m/s
- DFPRO 8 > 8.000 m³/hr, DN 400 = 17,5 m/s
- DFPRO 12 > 12.000 m³/hr, DN 450 = 19,0 m/s
- DFPRO 16 > 15.000 m³/hr, DN 500 = 21,0 m/s

When the dust collector has reached a pressure drop of 25 daPa *(Visible in LCD display ①)*, the cleaning may, if desired, be changed from continuous cleaning to Delta P (Delta P 40 – 80) cleaning



1. LCD-display 2. ENTER-button 3. Scroll UP button 4. Scroll DOWN button	5. Push Button fan ON 6. Push button fan OFF 7. LED 'FAN ON / PULSE' 8. LED 'Cleaning stopped'	9. LED 'Off-line Cleaning' 10. LED 'Service' 11. LED bar-graph indication of differential pressure 12. 'Alarm' LED

Figure 1: TCB front panel

Factory adjustments;

- By default the unit will start pulsing when the threshold value of 80 daPa is exceeded. A cleaning cyle normally pulses all valves of the unit in sequence with an intertval of 10 seconds between every pulse. As soon as the differential pressure drops below 40 daPa, the controller will stop the cleaning when a full cycle is completed, this is called " Stop & End" cleaning.
- Other fractory adjustments are;
  - If unit is switched of i.e. fan out but still power on the TCB unit will start Off line cleaning , two complete cycles. I.e all cartrigdes will be cleaned twice.
  - Delta P Min 40 daPa, shows Delta P Min. value
  - Delta P Max 80 daPa, shows Delta P Max. value
  - Delta P Max Alarm 160 daPa, shows Delta P max Alarm Value

Shut – Down sequence;

- Stop the fan only leaving controller and compressed air supply switched on to allow to be cleaned "Off-Line". *(For dust collectors, equipped with explosion panels, this is also not a problem. Because the internal volume of the dust collector is too big and the effect of the pulse too small to damage the panels)*
- After 10 – 15 minutes switch of controller and compressor