



## Landscape Services

# Safety Standard Operating Procedure

(Revised 9/2023)

## Theta Pond Aeration

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This SSOP provides guidance on the safe operation of scheduled maintenance for the Theta Pond aeration pump. As with any equipment or tools, the most basic premise for safe operation is reading and adhering to the manufacturer's instructions and warnings. This SSOP is not a substitute for the owner's manual produced by the manufacturer.

**Schedule:** Per Operating Manual Recommendations listed below.

**PPE Requirements:** ear plugs, gloves, safety glasses, warning signage, pants, closed toe shoes.

**Safety Requirements:** Watch for slippery conditions and overhead as entering and exiting the room. Use extreme caution and be weather temperature alert. Proper use of PPE and Winter clothing when necessary. Equipment maintenance and inspection for proper operation. Watch for pedestrians, vehicles, and objects as access doors are open.

**Safety Hazards:** pedestrian traffic, slips and falls, chemical exposure, overhead, lifting, bending, dust, noise, sharp objects, blind spots, equipment malfunction, pinch points, cold to freezing temperatures, and inclement weather.

## Maintenance Intervals on Becker KDT 3.100/140 Series Pumps

\*Every 40 to 200 Hours

\*Check and clean air intake filter. Every 4 filter cleanings a new filter should be installed and minimally every year. (C & D)

\*Blow dust and debris off outside of pump

\*Blow out dust separation element. Every 4 filter cleanings a new filter should be installed and minimally every year. (F)

\*Every 2000 Hours

\*Grease bearings (O)

KDT 3.100 place grease in bearings by pumping gun 10 times in each fitting

KDT 3.140 place grease in bearings by pumping gun 15 times in each fitting

\*Every 3000 Hours

\*Check Vanes for minimum width. Replace if necessary. (K & L)

KDT 3.100 – 26mm minimum width

KDT 3.140 – 31mm minimum width

\*Inspect vanes for improper wear (cupping or uneven wear). Replace if necessary.

\*Some cupping of the flat surface of the vane is normal. If cupping exceeds 25% of the original thickness, replace the vanes. Make sure to replace the vanes so the beveled edge rides smoothly against the cylinder wall. If the vanes are installed backwards the vane only contacts the cylinder wall at one point.

\*Check and clean the end shield for heat damage or scoring. If any exists, contact your factory representative. Wipe grease off rotor shaft before re-installing the end shield. Inspect teflon tube seals in end shield. If the hollow center shows through, replace them.

(X) Refers to pictures in operating instructions

### **Tips for Increasing Vane Life**

Vane life depends mostly on two factors: temperature and vacuum level. Run the pump as cool as possible by installing the pumps in an ambient environment that has adequate air flow and reasonable temperatures. Also, keep dirt and debris off the pump and motor using compressed air every 2000 hours when performing other maintenance procedures. Starting and stopping more than 3 times per hour will also deteriorate vane life. Run the pump at the lowest acceptable pressure level.

*\* These intervals are basic guidelines. You may find either more or less frequent attention is needed, depending on your application.*

**MAINTENANCE KIT KVT/KDT 3.100 P/N 338034M0000**

**MAINTENANCE KIT KVT/KDT 3.140 P/N 338036M0000**