



March 21, 2018

Mr. Jody Hooks
City of League City, TX
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League City, TX 77573

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RE: Howden-Turblex Replacement Blowers for the South West WWTP

Dear Mr. Hooks:

Howden-Turblex prepared a proposal for new single stage integrally geared blowers dated January 29, 2018. Please be assured that the blower nomenclature (STC-GO-5-SV-GK200) that was referenced in the proposal is the same as a KA-5-SV-GK200 blower. The replacement KA-5-SV-GK200 blowers offered for the South West WWTP will have the same pressure and flow generating capability as the originally supplied direct drive air bearing blowers (Model SC-50) installed approximately six years ago.

We also want to point out that plant staff at the Dallas Salmon WWTP have operated the existing Turblex KA-5-SV-GK200 blowers for the past nine years. They are familiar with the parts, its integration with other systems at the plant, and its maintenance. Purchasing matching blowers for the South West WWTP from Turblex would eliminate the additional time and effort required to learn a new system, integrate that system into current practices, and reduce the possibility of unforeseeable complications due to plant staff's unfamiliarity with a different manufacturer's equipment.

Singe stage integrally geared blower equipment is a specialty product designed to efficiently produce airflow at a given pressure for a particular operating environment. Our blower cores are manufactured at our factory located in Germany. Once the core is completed, it is shipped to our factory located in Springfield, MO where we package the blower system by adding items such as: inlet air filter/silencer, core, coupling, motor, skid, control panel with PLC and HMI, discharge cone silencer, blow off valves, etc. We also have a local service center in Houston.

The scope of the South West WWTP project includes the supply of local control panels (LCP) for each blower and integration with an existing master control panel (MCP) for sequencing and loading all blowers in response to oxygen demand at the aeration basins. For the aeration system to function as intended, it is necessary that the controls of the LCPs and MCP be tightly integrated. To this end, it is essential that the existing MCP and LCPs for the new blowers be provided by a single manufacturer with a proven track record of delivering equipment control programs that are stable and optimized for efficiency. Moreover, Turblex control panels are all based on the same programmable logic controller (PLC) and operator interface hardware. Control panels provided by other vendors would likely be dissimilar and based on different components and programming standards.



Looking into the future, the South West WWTP will be able to adjust to future needs more effectively and reliably if they have three replacement single stage integrally geared blowers known to operate similarly and are backed by a well-reputed manufacturer. Each blower can be used interchangeably when portions of the aeration basin system must be taken offline for maintenance. Additionally, interchangeability of parts between the blowers and streamlined maintenance operations contribute to the efficient utilization that would come from matching blowers.

Please understand that Howden owns the Turblex blower product line and Hartwell Environmental located in Tomball, TX is the exclusive manufacturer's representative for this equipment in the Houston area. We very much appreciate the opportunity to provide this feedback and look forward to working with everyone on this project.

Best regards,

Mitch Hylen

Mitch Hylen, P.E.
Project Development Manager

Copy: Tim Hilgart; Howden
Chris Varnon; CDM Smith
Matt Davis; Hartwell Environmental