

Regenerative Blower Sample Specification - Aeration Blowers
For Waste Water Treatment Applications

FREE FOR USE

SECTION 1 - General

- 1.1 The Contractor shall furnish and install _____ complete blower assemblies including the electric motors, blowers and accessories as herein specified. The manufacturer of the aeration equipment shall furnish and warrant the blowers as part of the aeration system to assure system performance.
- 1.2 The equipment manufacturer shall furnish _____ sets of equipment "Submittals" to be sent to the engineer for approval prior to fabrication. The following items shall be included in the submittal package.
 - 1.2.1 Complete shop drawings detailing blower layout and system piping with all appurtenances. Detail drawings of individual components showing dimensions and materials of construction of all components shall be provided.
 - 1.2.2 Engineering calculations as detailed in these specifications shall be provided to demonstrate compliance with these specifications.
 - 1.2.3 Blower system calculations are to include blower performance curves at design conditions as well as at maximum flow and pressure conditions. If v-belts are used, these calculations shall demonstrate compliance with the equipment specifications.
 - 1.2.4 Blowers provided for use with the aeration system shall show calculations by the aeration system manufacturer re in compliance with these performance specifications and as a minimum, shall include: Air flows required; headless calculations through all air piping; headloss through diffuser and orifice; and system operating pressures at normal and maximum airflows. These calculations assure that the system pressures are within the rated operating limits of the blower and motor at the normal and peak conditions, as well as assuring system compatibility.
- 1.3 The aeration system manufacturer shall furnish the Contractor _____ sets of equipment "Installation, Operation and Maintenance manuals upon Engineer's approval of Submittals. The manuals for the aeration and blower system shall detail all components and include initial installation instructions, start-up procedure and normal operation and maintenance procedures. One copy of the manual shall be provided to the Owner or Plant Superintendent, prior to installation of the blower system.
- 1.4 The aeration equipment manufacturer shall provide the services of a factory/field service engineer for _____ period, totaling _____ working days at the job site. The first trip is to deliver the equipment and to provide preliminary installation instructions to the Contractor and Owner. Subsequent trips are to inspect the overall aeration and blower system as well as to oversee the blower service and start-up with the diffusers underwater. Operator shall be instructed on proper start-up, operation and maintenance procedures.
- 1.5 A written report by the aeration system manufacturer covering the manufacturer's factory/field service engineers' findings and installation approval shall be supplied to the Plant Engineer covering all inspections and outlining, in detail, any and all deficiencies noted.

SECTION 2 Equipment

- 2.1 Blower assembly: Contractor is to supply _____ integral regenerative blowers with motor mounted directly onto the blower housing as one unit and as manufactured by All Star Products or equal.