



SERIES 54H GUIDE SPECIFICATION

HEAVY DUTY, BELT DRIVE VANEAXIAL FAN

The Belt Drive Vaneaxial Fan shall be manufactured by Hartzell Air Movement Series 54. Standard sizes are 12" through 60". This fan is available with a VA or a VB propeller. The fan shall be a rugged one piece design. This design contains the propeller, the motor and the aerodynamically designed guide vanes. The fan shall be packaged, completely assembled and ready to install.

The belt drive vaneaxial propeller shall be an airfoil design, 7-bladed, one-piece cast of 319 aluminum in compliance with Federal Specification QQ-A-601E and ASTM B26. The VA propeller shall be mounted utilizing a split taper bushing. The VB propeller shall be straight bored and attached to the fan shaft utilizing a key and setscrews. A safety plate, bolted to the fan shaft shall also provide additional attachment.

Fan housing shall be minimum 10 gauge rolled commercial quality, carbon steel, continuously welded in compliance with AWS D1.1 standard. Standard surface coating system shall include a phosphatized surface preparation with industrial grade air dry enamel paint. Extended lube tubes and grease fittings shall be standard when relubricable motors are specified. All sizes shall have steel flanges continuously welded to the steel drum.

Fan shafts shall be ground and polished carbon steel. Bearings shall be located in a drive compartment out of the airstream. Bearings shall be heavy duty, self-aligning, ball or roller type, depending on fan size, motor horsepower and performance. Bearings shall have extended lube tubes and be relubricable for continuous service and have minimum L10 bearing life of 50,000 hours. Fixed pitch drives standard. Belts shall be "V" type, heat, oil and static resistant and be sized for continuous service. Motor position shall be adjustable for belt tensioning.

The fan assembly shall be dynamically balanced at the Hartzell factory prior to shipping. Fans shall be balanced in accordance with AMCA Standard 204, fan application category BV-3 (comparable to Grade G6.3). Fans shall be manufactured in accordance with Hartzell's standard quality assurance procedures. Fan performance shall be based on tests conducted in Hartzell's AMCA accredited test laboratory in accordance with the latest revision of AMCA Standard 210 for air performance and AMCA Standard 300 for sound performance. Fans shall be licensed to bear the AMCA Certified Air Performance Rating Seal, on the VA only.

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ACCESSORIES:

- Special Construction - Available in stainless steel, aluminum.
- Protective Coatings - Hot dipped galvanized, Nupon epoxy, inorganic zinc, and catalyzed coal tar epoxy are available upon request.
- Inlet/Outlet Bell - Minimizes inlet and outlet pressure losses, thus optimizing airflow.
- Inlet/Outlet Cone - Available for adapting fans to different size duct diameters.

- Inlet/Outlet Guard - Prevents access to rotating propeller.
- Companion Flanges - Mating flanges for duct fan.
- Access Door - For inspection of the propeller and fan bearings.
- Mounting Feet - To facilitate floor, ceiling, or wall mounting.
- Vibration Isolators (Horizontal or Vertical Mount) - Rubber-in-shear or spring type available.
- Stack Cap and Curb Panel - Converts duct fan to upblast roof ventilator with backdraft dampers.
- Sound Muffler - Provides attenuation of excessive noise.
- Lifting Lugs - Provides means to lift and handle fans.
- Combination Motor Cover and Belt Guard - Covers are vented. Specify horizontal or vertical mounting.
- Bomb Bay Doors - Provide easy access to propeller and motor and facilitates maintenance.