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GUIDE SPEC
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SPECIFYING Arr-9 BELT DRIVE INDUSTRIAL DUCT FANS

GENERAL

The fans shall be size_____Industrial Duct Fans as designed and manufactured by The New York Blower Company. Fan impeller material is either steel or aluminum and will vary based on wheel code selection for all sizes. Unless otherwise directed, fans shall be in compliance with the layout shown on the drawings.

PERFORMANCE

Fan ratings shall be based on tests made in accordance with AMCA Standard 210 and performed in an accredited AMCA laboratory. Fan brake horsepower shall be equal to or less than _____BHP at_____ inches static pressure and _____ CFM at _____ density.

SOUND

Fan manufacturers shall provide sound power level ratings for fans tested and rated in accordance with AMCA Standards 300 and 301. Tests shall be performed in an accredited AMCA laboratory. Sound power ratings shall be in decibels (reference 10^{-12} watts) in eight octave bands. Sound power levels will be corrected for installation by the specifying engineer…dBA levels only are not acceptable.

CONSTRUCTION

Fan housings are to be heavy gauge, continuously welded construction. Housings with lock seams or partially welded construction are not acceptable.

BEARINGS

Bearings are to be standard duty, grease lubricated, concentric lock ball bearing, self-aligning design. Bearings shall be designed for an average minimum L-10 life of 40,000 hours (200,000 hour L-50 life) when rated at the fan's maximum cataloged operating speed.

SHAFT

Shafts are to be ASTM A-108 steel, grade 1040/1045, precision turned, ground and polished. Grade 1018 steel is not acceptable. The shaft's first critical speed shall be at least 130% of the fan's maximum operating speed. The drive end of the fan shaft shall be counter-sunk for tachometer readings.

PAINT

All fan surfaces are to be thoroughly prepared prior to painting using a combination of abrasive blast and power tool cleaning as required. After cleaning, all surfaces are to be coated with an industrial grade enamel. Surfaces of bolted components are coated prior to final assembly. Primer only will not be accepted.

BALANCE AND RUN TEST

All fan wheels shall be precision balanced prior to assembly. Fans complete with motors and drives shall receive a final test balance at the specified operating speed.

ACCESSORIES

Accessories shall be provided as called for in the plans and specifications.

Standard accessories include:

- External Bearing Lubrication Fittings
- Inlet Flange
- Outlet Flange
- Access/Inspection Door

Optional accessories include:

- Mounting Arrangement - Floor, Vertical, Duct, Suspended
- Drain, Drain Plug
- Outlet Guard
- Inlet Bell with Guard
- Inlet Guard
- Silencer
- High Moisture Construction – Up to 200°F.
- High Temperature Construction – 201°F. to 375°F.
- High Temp/Moisture Construction – 201°F. to 375°F.
- Companion Flange
- Belt Guard
- Weather Cover
- Vibration Isolation - Spring - Rubber-In-Shear
- V-Belt Drives – Constant Speed

FINAL INSPECTION

All fans shall receive a final inspection by a qualified inspector prior to shipment. Inspection to include: fan description and accessories, balance, welding, dimensions, bearings, duct and base connection points, paint finish and overall workmanship.