

# Typical Specifications

**Model:** QMX-HP

**Description:** Fan shall be a belt driven, tubular mixed-flow inline blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL/cUL 705) for US and Canada. For restaurant applications, fan shall be listed by Underwriters Laboratories (UL/cUL 762) for US and Canada. For smoke control applications, fan shall be listed by Underwriters Laboratories (Power Ventilator for Smoke Control Systems) for US and Canada. Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance. Performance shall be certified for both inlet and outlet sound.

**Construction:** The fan shall be of welded and bolted construction utilizing corrosion resistant fasteners. Housing shall be minimum 14 gauge Lorenized<sup>®</sup> steel with integral inlet and outlet collars for slip fit duct connections. Straightening vanes shall be included to assure maximum efficiency and low noise levels. Adjustable motor plate shall utilize threaded studs for positive belt tensioning. Copper extended lube lines shall be furnished for lubrication of fan bearings. Lifting lugs shall be provided for ease of installation. Adjustable mounting feet shall allow field adjustment of motor position. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure, and maximum fan RPM. Unit shall be shipped in ISTA certified transit tested packaging.

**Coating:** Steel fan components shall be Lorenized<sup>®</sup> with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

**Wheel:** Wheel shall be steel, non-overloading, high efficiency mixed-flow type. Airfoil blades shall be continuously welded to the backplate and inlet shroud. Hubs shall be keyed and securely attached to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans.

**Motor:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**Bearings:** Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

**Belts and Drives:** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower.

**Product:** Fan shall be model QMX-HP as manufactured by Loren Cook Company of Springfield, Missouri.