



SX

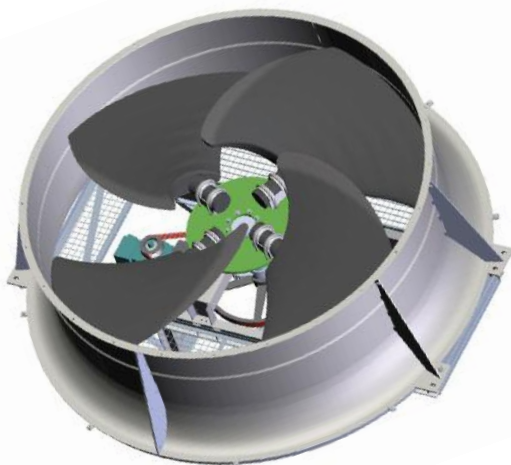
ACHIEVING **SOUND REDUCTIONS OF UP TO 20 DB (A)**, HOWDEN'S RENOWNED **SX ULTRA-LOW NOISE COOLING FAN** HAS SET A NEW STANDARD FOR APPLICATIONS WITH STRINGENT NOISE LIMITS.

SOUND EMISSION LEGISLATION HAS BECOME INCREASINGLY STRICT AS INDUSTRIAL ZONES AND RESIDENTIAL AREAS HAVE GROWN CLOSER TO EACH OTHER. AT THE SAME TIME, PUBLIC AWARENESS – AND INTOLERANCE – OF NOISE IN THE WORKPLACE HAS INCREASED.

Cooling fans are often identified as one of the more significant sources of industrial noise. To alleviate the problem, Howden has dedicated considerable time and expertise to the continuous development of cooling fans with outstanding low-noise characteristics. Our SX Ultra Low-noise fan is the result of years of experience in fan technology.

APPLICATIONS

- Air-cooled heat exchangers.
- Cooling towers (both field erected and factory assembled).
- Air-cooled condensers.
- Climate control systems (HVAC).
- Ventilation systems.



FEATURES

- The SX has a specially shaped aerofoil design for clockwise rotation in the horizontal or vertical plane, developed to meet the strict demands of ultra-low noise applications.
- With an operating temperature range of -20°C to $+65^{\circ}\text{C}$ (-4°F to $+149^{\circ}\text{F}$), the SX is applicable to a wide range of operating conditions. (Up to 120°C with special modifications).
- The SX is available in a range of diameters from 710 mm to 10,400 mm (28 inch to 34 ft.), making it the right choice for various cooling and ventilation applications.
- The steel fan hub is polyurethane coated, with aluminium blade supports and stainless steel U-bolts, nuts and washers.

OPTIONAL FEATURES

- Leading edge protection can be applied to the blade for use in wet cooling applications.
- Cast iron, polyurethane coated coupling flanges can be supplied to mate with drive shafts featuring either a cylindrical bore or a tapered bushing connection.
- Materials can be upgraded for sea water cooling tower applications.

ADVANTAGES

- SX fans reduce fan noise by up to 20 dB (A) compared with standard cooling fans.
- The SX offers the opportunity to build a compact installation, occupying a smaller space and reducing materials costs.
- The material used for the SX blade is FRP, which offers superior damping of mechanical vibrations and good chemical resistance.
- The SX fan blades have an integral shaft. This eliminates concentrations of stress at mechanical joints, which is a major cause of operational failures in fans with blades bolted on to the shafts.
- Howden's reliable fan selection data minimises the need to adjust the blade pitch during commissioning.
- The SX is designed for simple field assembly.
- The reduced fan noise can be exploited to enhance the cooling capacity within an application by increasing fan speed, giving greater air volume at acceptable noise levels.
- Howden can supply you with a complete SX cooling unit including fan casing, drive, and full suspension, enabling you to deal with a single supplier for the entire system.

