



Technical & Performance Data LAMSON 1870 Series Centrifugal Products

DESIGN STANDARD

Number of Stages	2-7 (60 Hz & 50 Hz)
Inlet Connection	20" Flange, ANSI 125# Drilling
Outlet Connection	18" Flange, ANSI 125# Drilling
Operating Speed	3550 RPM (60 Hz), 2925 RPM (50 Hz)
Casing Pressure	25 PSIG (1.73 bar)
Air Seals	Labyrinth Type - Carbon Ring Optional
Bearings	Anti-friction, designed for extended L ₁₀ life
Lubrication	AEON [®] CF Oil
Impeller	30.5 inches (775 millimeters) Diameter (statically balanced)
Impeller Tip Speed	475 feet/second (145 meters/second)
Drive Type	Direct Coupled (Inlet drive is standard)
Drive Shaft Diameter	2 nd Stage: 1.8745 inches (47.61 millimeters) 3-5 Stage: 2.8745 inches (73.03 millimeters) 6-7 Stage: 3.3745 inches (85.71 millimeters)
Vibration	.235 in/sec. (5.97 mm/sec.) Peak Velocity
Rotor	Balanced Per ISO 1940, ANSI S2.19

MATERIAL STANDARD

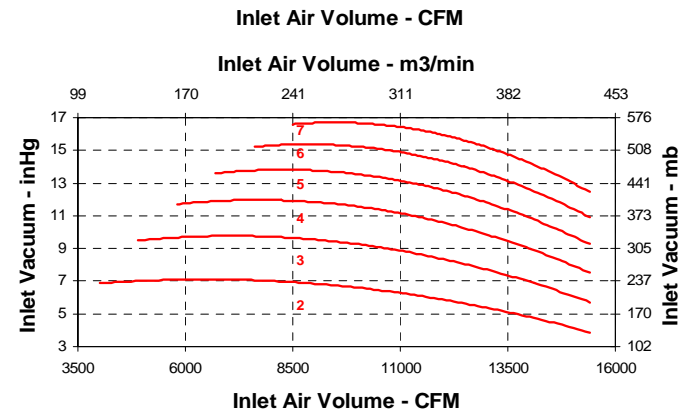
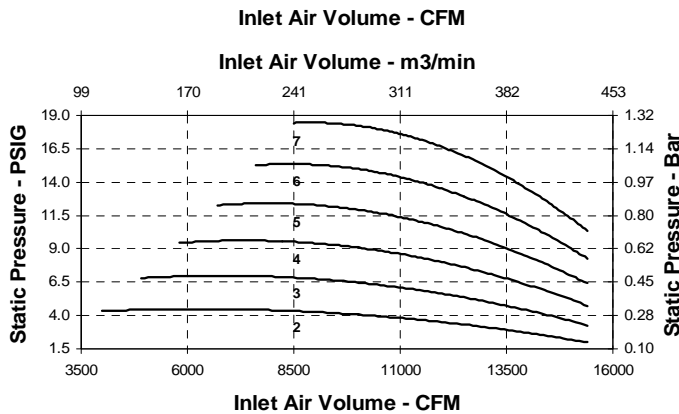
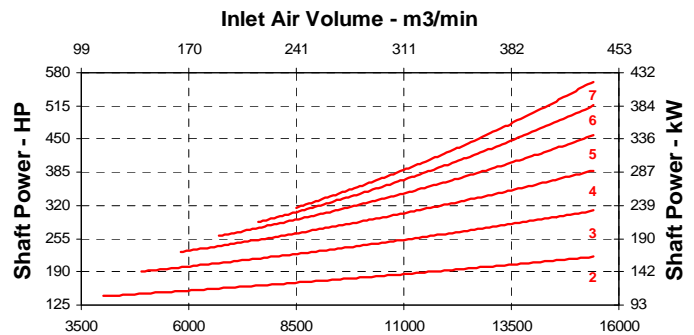
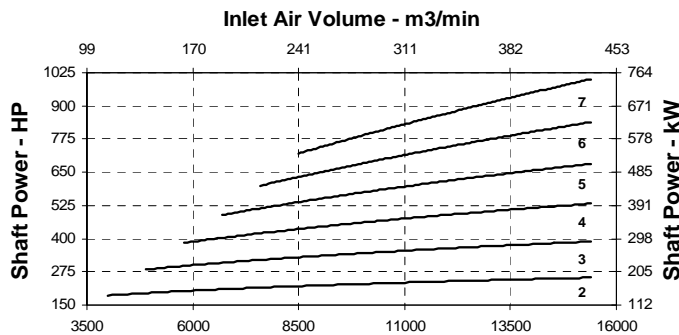
Casing	ASTM A48 Class 30 Cast Iron
Bearing Housings	ASTM A48 Class 30 Cast Iron
Bearing Housing Inserts	ASTM B505 Bearing Grade Bronze
Tie Rods	ASTM A108 C1045 Steel (1-4 Stage) ASTM A322 C4142 Steel (5-9 Stage)
Labyrinth Seal	ASTM B86 Z35631 Alloy Zinc Aluminum 12 Carbon Ring Seal Optional
Joint Sealing	RTV Silicone Compound
MBR™ Baffle Rings	ASTM A36 Electroless Nickel Plated Steel
Balance Piston	ASTM A36 HR Structural Steel (3-7 Stage)
Shaft	ASTM A322 Grade 4140CT HRS Stainless Steel Optional
Impeller	ASTM B26 A355-T6 Cast Aluminum
Base & Motor Pedestal	ASTM A36 Hot Rolled Structural Steel
Isolation Base Pads	Suitable Resilient Material
Finish	Universal Primer - Acrylic Topcoat

PRESSURE PERFORMANCE

14.7 PSIA [1 Bar], 68°F [20°C],
36% RH, Speed: 3550 RPM

VACUUM PERFORMANCE

29.9 inHg [1 Bar], 68°F [20°C],
36% RH, Speed: 3550 RPM



PRODUCT NOTES

- Information is approximate and subject to change without notice
- Performances noted above are typical and not job specific
- Consult authorized Hoffman/Lamson sales representative for job specific blower or exhauster performance sizing
- Factory ASME PTC-10 test offered for performance verification

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