Rugged, energy efficient multistage blowers and exhausters

The Power Mizer® Series 3500 employs proven Spencer technology to meet heavy-duty air and gas handling requirements at peak energy efficiency.

Spencer’s multistage centrifugal blowers and exhausters have a long track record of performance. The product line can be paired with Spencer’s variable frequency drives (VFD), operator interface, a variety of control system options, and blower protection devices for optimum energy efficiency. It is ideal for maximum uptime in demanding environments.

Applications include petrochemical refineries/sulfur recovery; mining/flotation; chemical/combustion air or process air; and municipal and industrial wastewater treatment/aeration.

Spencer’s specially engineered aerodynamic components mean smoother, more efficient airflow from blower inlet to discharge. The Power Mizer Series 3500 is a cost-effective solution providing long-term power savings.

Performance Range

Performance at Standard Density

(Air at 68°F, Relative Humidity of 36%, Inlet Pressure 14.7 psia) 3550 rpm

- Number of stages: 2-9
- Operating speed: 3550 rpm
- Casing design pressure: 25 psig
- Inlet connection: 8" (203mm) flange 125lb/150lb ANSI drilled and tapped
- Outlet connection: 8" (203mm) flange 125lb/150lb ANSI drilled and tapped
- Seals: labyrinth (single carbon ring available)
- Bearings: 6 3/12/63 1/2 ball, minimum L10 bearing life of ten years per AFBMA
- Lubrication: grease (standard) or oil (optional)
- Drains: 3/8 NPT with plugs
- Impeller diameter: 24" (610mm)
- Impeller tip speed: 372 ft/sec (113 m/sec)
- First critical speed: 4150 rpm for maximum stages
- Vibration: 0.23 in/sec

Accessories

- Full line of standard and custom electrical control panels for packaged systems – UL and CUL Listed available
- Dissolved oxygen control system
- Flexible sleeve connectors and expansion joints
- Filters and silencers
- Butterfly valves and check valves

Note: Specifications may vary and change without notice.

Materials of Construction

- Casing and heads: cast iron Class 30
- Tie rods: AISI 1035 carbon steel
- Interstage sealing: silicone rubber
- Shaft: AISI 1144 carbon steel
- Impellers: ASTM A319 cast aluminum
- Base: A36 structural steel
- Finish: epoxy primer with urethane topcoat
- Isolation pads: synthetic rubber
### Dimensions: Shown in inches / (mm)

**Outlet Position (As viewed from outlet end)**

- CS32: 2 stages, 15.69 in (399 mm), 72 in (1829 mm), 9.17 in (233 mm), 1980 lb (898 kg)
- CS33: 3 stages, 19.81 in (503 mm), 72 in (1829 mm), 5.07 in (129 mm), 2319 lb (1052 kg)
- CS34: 4 stages, 23.94 in (608 mm), 92 in (2337 mm), 13.27 in (337 mm), 2823 lb (1281 kg)
- CS35: 5 stages, 28.06 in (713 mm), 92 in (2337 mm), 9.17 in (233 mm), 3162 lb (1434 kg)
- CS36: 6 stages, 32.19 in (818 mm), 92 in (2337 mm), 5.07 in (129 mm), 3501 lb (1588 kg)
- CS37: 7 stages, 36.31 in (922 mm), 112 in (2845 mm), 13.27 in (337 mm), 4019 lb (1823 kg)
- CS38: 8 stages, 40.44 in (1027 mm), 112 in (2845 mm), 9.17 in (233 mm), 4358 lb (1977 kg)
- CS39: 9 stages, 44.56 in (1132 mm), 112 in (2845 mm), 5.07 in (129 mm), 4697 lb (2131 kg)

**Inlet Position (As viewed from inlet end)**

- CS32: 2 stages, 15.69 in (399 mm), 72 in (1829 mm), 9.17 in (233 mm), 1980 lb (898 kg)
- CS33: 3 stages, 19.81 in (503 mm), 72 in (1829 mm), 5.07 in (129 mm), 2319 lb (1052 kg)
- CS34: 4 stages, 23.94 in (608 mm), 92 in (2337 mm), 13.27 in (337 mm), 2823 lb (1281 kg)
- CS35: 5 stages, 28.06 in (713 mm), 92 in (2337 mm), 9.17 in (233 mm), 3162 lb (1434 kg)
- CS36: 6 stages, 32.19 in (818 mm), 92 in (2337 mm), 5.07 in (129 mm), 3501 lb (1588 kg)
- CS37: 7 stages, 36.31 in (922 mm), 112 in (2845 mm), 13.27 in (337 mm), 4019 lb (1823 kg)
- CS38: 8 stages, 40.44 in (1027 mm), 112 in (2845 mm), 9.17 in (233 mm), 4358 lb (1977 kg)
- CS39: 9 stages, 44.56 in (1132 mm), 112 in (2845 mm), 5.07 in (129 mm), 4697 lb (2131 kg)

**Note:** Spencer may make improvements and dimensional changes to equipment designs based on market trends and requirements.

*For product selection assistance, please email marketing@spencer-air.com or visit our website at www.spencerturbine.com to locate the Spencer representative in your area.*