

# Premium Rotary Screw Compressors

## SX - HS Series

Capacities from: 4.5 to 3308 cfm

Pressures from: 50 to 217 psig



# Kaeser Compressors, Inc.

## **A global force in the compressed air industry**

*Kaeser Compressors, Inc., the US subsidiary of Germany's Kaeser Kompressoren GmbH, opened its Western Hemisphere headquarters in 1982. With over 85 years of air system experience, we pride ourselves on being the leading innovator in air system technology and precision manufacturing.*

*Kaeser specializes in individually evaluating each customer's compressed air application, and providing the most efficient and effective air system solution. Prompt and dependable customer service, quality assurance, training, and engineering support contribute to the value customers have come to expect from us. We aim for excellence in everything we do.*

*Today, Kaeser employs over 3,000 people and, through our subsidiaries and distribution, exports compressors and air treatment systems to virtually every country in the world.*





### Worldwide Locations

|                |             |                 |                          |
|----------------|-------------|-----------------|--------------------------|
| Argentina      | Ecuador     | Korea           | Slovenia                 |
| Australia      | Egypt       | Lebanon         | Slovakia                 |
| Austria        | El Salvador | Luxembourg      | Spain                    |
| Bangladesh     | Estonia     | Malaysia        | Sweden                   |
| Belgium        | Finland     | Mexico          | Switzerland              |
| Brazil         | France      | Morocco         | Syria                    |
| Bulgaria       | Germany     | The Netherlands | Taiwan                   |
| Canada         | Greece      | Norway          | Thailand                 |
| Chile          | Guatemala   | Pakistan        | Tunisia                  |
| China          | Hungary     | Panama          | Turkey                   |
| Colombia       | India       | Philippines     | Ukraine                  |
| Costa Rica     | Indonesia   | Poland          | United Arab Emirates     |
| Croatia        | Iran        | Portugal        | United Kingdom           |
| Cyprus         | Ireland     | Romania         | United States of America |
| Czech Republic | Italy       | Saudi Arabia    | Vietnam                  |
| Denmark        | Japan       | Singapore       |                          |



*Our global headquarters, Kaeser Kompressoren GmbH in Coburg Germany, consists of several plants covering over 25 acres.*

# Energy Saving Design

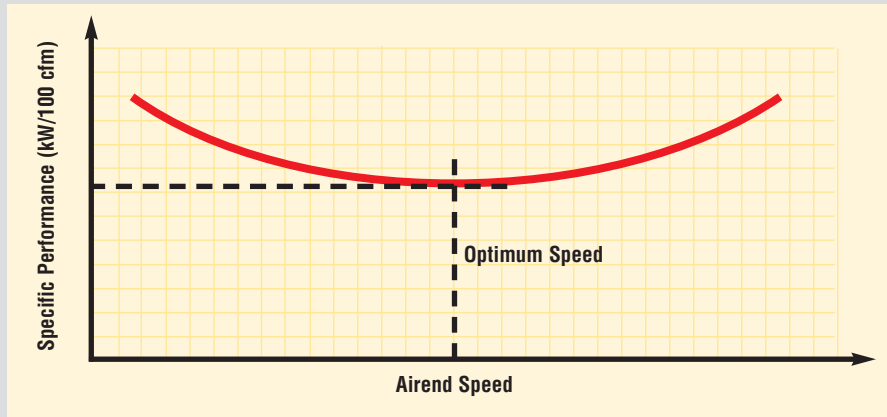
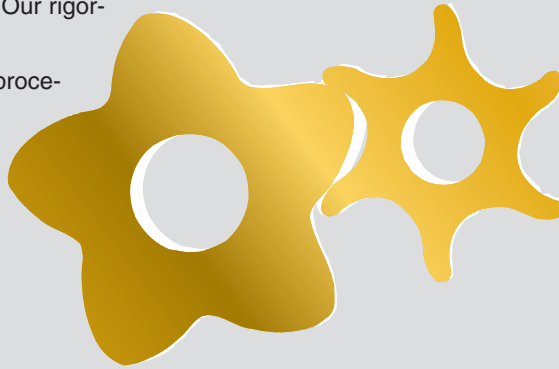
## The Sigma Profile

Kaeser's proprietary Sigma Profile airend was introduced in 1975. It continues to be more efficient than conventional rotary screw designs, offering more compressed air per horsepower.

Efficiency and reliability are designed into the Sigma Profile airend with excellent inlet channel flow characteristics and a five-to-six lobe asymmetrical design. Kaeser also uses precision-aligned, high-quality roller bearings designed to withstand the most demanding conditions and extend service life.

Kaeser continues to refine and improve the airend design, and as a result, the optimized Sigma Profile airends offer unparalleled performance.

To ensure the highest quality and the closest tolerances, Kaeser's Sigma airends are precision machined in state-of-the-art machining centers that are climate-controlled. Our rigorous quality control and testing procedures ensure optimum performance.



## A Perfect Match

Larger airends turning at slower speeds are more efficient and deliver more compressed air for the same drive power. Kaeser's design philosophy is to develop slower running airends with optimized profiles that can pay for themselves in a short period of time with increased energy savings.



## Sigma Control™

Developed by Kaeser in conjunction with Siemens AG, this patented compressor control features an industrial-based PC with an Intel® microprocessor inside. Five different compressor control configurations are available to precisely match compressor performance to air demand and increase energy savings.

With Sigma Control compressor systems can be monitored and adjusted from any location worldwide. Sigma Control also features extensive capabilities for maintenance trending and air demand tracking.



# V-Belt Drive Compressors



## How do Kaeser screw compressors work?

Atmospheric air is drawn through the inlet filter **1** into the airend **2** where it is compressed. The airend is driven by an electric motor **3**.

Synthetic cooling fluid, Sigma Premium Fluid, is injected into the airend to serve as coolant, lubricant and sealant. Under normal conditions the air reaches a temperature of about 180°F during compression.

A three-stage separator **4** removes the coolant from the compressed air. The fluid passes through the cooler **5**, the microfilter **6** and back to the point of injection. A thermostatic valve regulates and optimizes the fluid temperature. The air emerges from the separator cartridge **7** with a remaining fluid content of less than 2 ppm, passes through the

minimum pressure / check valve **8** and finally through the aftercooler **9**.

In the aftercooler, air is cooled to around 9°F to 18°F above ambient temperature and most of the moisture is removed.

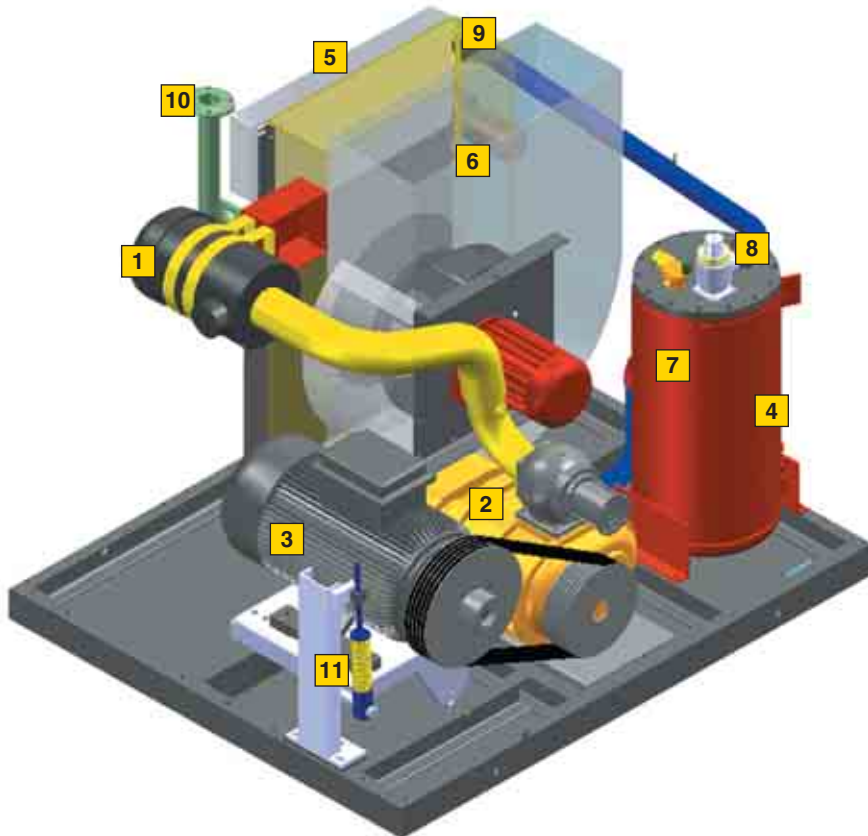
The air finally leaves the compressor at the outlet **10**.

## Versatile V-belt Drive

Kaeser was one of the first compressor manufacturers to implement the V-belt drive. Kaeser screw compressors with V-belt drive are economical and reliable.

An important feature is the automatic tensioning device **11**, which

ensures excellent transmission efficiency and reduced maintenance costs. Screw compressors with V-belt drives are also especially flexible and can be easily modified if a change in working pressure becomes necessary.



## Sigma Profile airend

Kaeser uses a number of newly designed airends. They are precision-machined to close tolerances and optimized in size and profile to match the low airend speeds with their best specific performance (see *A Perfect Match* curve on Page 4).



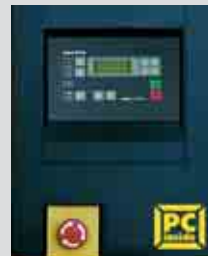
## Sigma Control Basic (SX to AS)

A simple and reliable interface offers convenient pressure control and system monitoring with status displays and service indicators. Displays include discharge pressure and temperature, load and service hours as well as fault indicators.



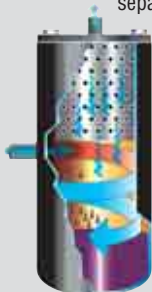
## Sigma Control (FS and larger)

Developed by Kaeser in conjunction with Siemens AG, this patent-pending compressor control features an industrial based PC with an Intel® microprocessor inside. Five different compressor control configurations are available to precisely match compressor performance to air demand and increase energy savings.



## Efficient separator system

Units are fitted with a redesigned, high-efficiency separator system. Most of the cooling fluid is initially separated from the air by centrifugal force in the separator tank. Any remaining fluid is separated by a 2-stage filter in the separator cartridge. This triple action doubles the cartridge service life and reduces fluid carry-over to 2 ppm or less.



## Cooling air filter mats

Ambient air used for cooling is usually contaminated. Models SX-AS feature enclosure filter mats, through which cooling air is drawn into the cabinet to prevent clogging of the cooler.



## Motor

TEFC, high efficiency, 460 or 575 V, 3-phase, 60 Hz, 1800 or 3600 rpm, class F insulation, and EPAAct compliant. Tri-voltage on SK and AS units. Other voltages are available. Easy access grease fittings make maintenance a breeze.



# One-to-One Direct Drive Compressors



## Optimized Efficiency

In Kaeser packages, one-to-one drive reduces the number of components needed compared to a gear-driven unit thus increasing reliability and service life.

Kaeser has selected oversized airends specifically matched to produce the required output in flow and pressure. Compared to compressors using small, high-speed, gear-driven airends, the one-to-one drive provides triple savings: no-loss power transmission, lower power consumption, and reduced maintenance and related downtime costs.

$$\text{Airend RPM} = \text{Motor RPM}$$



**Airend**

**Drive Motor**

## Unique Air Flow Design



The one-to-one direct drive units feature a low noise radial fan and a new "split cooling air flow" design that dramatically reduces noise levels and provides optimum cooling. Cooling air is drawn directly from ambient air, routed through the coolers and exhausted upward through the cooler box.

Plus, the coolers are conveniently located on the outside of the unit so that dust and dirt build-up are easily monitored, accessed and removed without dismantling the coolers.

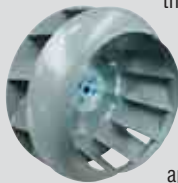
### One-to-one drive

Some compressors are called direct drive but are really gear-driven units. In Kaeser's direct drive units, the motor is directly connected to the airend with a maintenance-free coupling, providing maximum transmission efficiency. The airend and motor are connected by a casting which is doweled and pinned to assure perfect alignment.



### Radial fan

A powerful radial fan draws cool ambient air through the cooler. It is designed to provide higher static pressure which is ideally suited for ducting and heat recovery applications. The radial fan is extremely quiet and consumes less power than conventional axial fans, providing additional energy savings.



### Sigma Profile airend

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### Sigma Control

Developed by Kaeser in conjunction with Siemens AG, this patent-pending compressor control features an industrial-based PC with an Intel® microprocessor inside. Five different compressor control configurations are available to precisely match compressor performance to air demand and increase energy savings.



### Motor

TEFC, high efficiency, 460 or 575 V, 3-phase, 60 Hz, 1200, 1800, or 3600 rpm, class F insulation, and EPA compliant. Other voltages are available. Grease fittings make maintenance a breeze.



### Efficient separator system

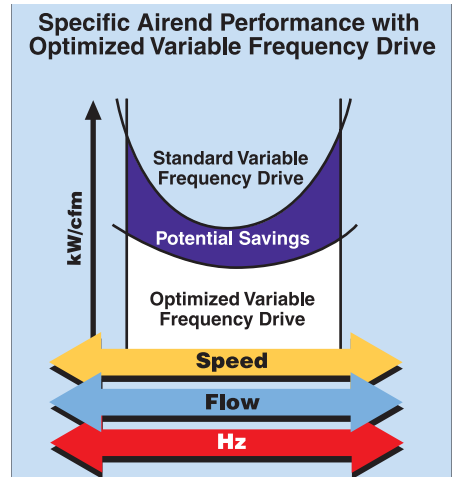
Units are fitted with a redesigned, high-efficiency separator system. Most of the cooling fluid is initially separated from the air by centrifugal force in the separator tank. Any remaining fluid is separated by a 2-stage filter in the separator cartridge. This *triple* action doubles the cartridge service life and reduces fluid carryover to less than 2ppm. The separator lid swings out for easy maintenance on DSD and ESD units.



# Sigma Frequency Control

## Unmatched Performance

Kaeser Sigma Frequency Control combines Siemens AG drive technology with our proprietary Sigma Profile airend and Sigma Control system. Our engineers have optimized airend design to accommodate a wide flow range with unmatched efficiency. Drive motor and airend operate at low rotational speeds, resulting in exceptional reliability and long life. Kaeser's SFC units range from 11 to 250 kW and are incredibly quiet, with noise levels as low as 67 dB(A). Many SFC models are also available with integrated dryers.



## Integrated System Design

Even though variable frequency drive compressors can have an effective flow range of 20% to 100%, the efficiency (kW/cfm) is not constant over the whole speed range. The best efficiency is normally between 40% and 85%. As the graph illustrates, the Sigma Profile airend has a clear efficiency advantage over a wider flow range than its competition.



# Compressor Packages

Kaeser rotary screw compressors are also available in a variety of configurations. These package systems can be customized to suit your specific compressed air and clean air treatment needs.



*Simplex packaged compressor system*



*AS Series with integrated refrigerated air dryer*



*CSD Series direct drive compressor with integrated refrigerated dryer and Sigma Frequency Control*

## Simplex and Duplex units

These packaged compressed air systems include one or two Sigma rotary screw compressors, and a refrigerated air dryer mounted on a horizontal receiver tank. Available in a range of sizes, these units are perfect for small shops or plants. All systems are completely piped and wired, and ready for installation. Coalescing filters and condensate drains are available options.

## “T” Series

The “T” series rotary screw compressors are available in 15 and 20 (SK-T) and 20-25 (AS-T) hp models. They feature integral refrigerated dryers and condensate drains to improve product quality and help reduce wear on production equipment.

These units feature Kaeser's superior "split cooling air flow" design that significantly improves cooling and reduces noise levels. All units feature our Sigma Profile™ airend and deliver flows from 40-112 cfm and pressures from 80 to 217 psig. The T models include a new space-saving cabinet that reduces overall footprint and provides easy access to service points.

## Direct drive units with integral dryer

Our ASD, BSD and CSD direct drive compressors are available with an integral refrigerated dryer. These single hook-up compressor units feature stainless steel, plate-type heat exchangers on the dryer and include moisture separators and Eco-Drain condensate drains.

# State-of-the-Art Manufacturing



## Precision milling and grinding

Sigma Profile rotors are precision-machined and finished on a CNC grinder to an accuracy of 1/1000 mm.



## Continuous quality control

The airend's finished dimensions are measured and verified using the latest in 3-D computer technology.



## Meticulous airend assembly

Highly trained specialists assemble each airend according to our strict ISO 9001:2000 standards.

Kaeser's extensive manufacturing facilities in Coburg, Germany, cover over 25 acres. State-of-the-art Computer Numerically Controlled (CNC) machining equipment and highly accurate lathe, milling and grinding machines produce our proprietary airends, housings and other components to very precise tolerances.

The assembly facilities are carefully planned to produce large numbers of compressors in the most efficient and expedient manner. Highly skilled technicians assemble each unit according to our ISO 9001:2000/14001 procedures. The finished products must meet strict quality standards and pass through a rigorous inspection and testing program before shipment.





## Research and development

Kaeser's research and development team continues to produce industry leading air system technology. All of our products are designed individually for efficiency, reliability and minimal maintenance, and are built to work together for an unparalleled systems and solutions approach to each application.



## Advanced machining centers

State-of-the-art machining centers in climate-controlled rooms produce the Sigma Profile rotors and casings. These machining centers operate 24 hours a day to keep up with demand for Kaeser premium quality compressors.



## Environmentally friendly powder coating system

All Kaeser rotary screw compressors feature powder-coated enclosures. Our unique powder coating technique applies a super fine glaze to each individual enclosure panel without polluting the surrounding environment. The panels are baked at 350°F for a corrosion-proof and scratch-resistant finish.



## Comprehensive unit testing

Once the manufacturing and assembly process is complete, each screw compressor undergoes a comprehensive testing schedule to verify its mechanical and electrical operation prior to shipment. These strict testing standards ensure the highest product quality available.

## Compressed air system analysis

Both new installations and system optimizations require a complete and thorough application

and system analysis. Once the actual compressed air usage and clean air treatment requirements have been determined, the system can be

designed and installed to achieve maximum efficiency. Once a complete Compressed Air System Analysis has been performed, Kaeser's factory-trained representatives can make recommendations for optimizing the compressed air system.

## Energy consumption measurement

A compressor's energy consumption should be continuously monitored over a specific period of

time to accurately capture and record the actual kilowatt usage including periods of peak demand. This information provides feedback for process

improvement and production strategies. A Kaeser air system specialist will be able to evaluate all data and identify the correct and most efficient compressor control system for the application.

## Air flow measurement

Kaeser's air flow measurement system uses mass flow meters to record the actual amount

of compressed air being used at any given time - not just an average flow. An accurate air demand profile is essential to improving an air

system's productivity, reliability and efficiency.

# Comprehensive Consulting Services & After-Sales Service

Kaeser Compressors is more than just high quality air compressors. Kaeser offers a complete air system analysis and a wide range of consulting services in conjunction with our national distributor network. Understanding the specific compressed air need is essential to an efficient system. Kaeser provides comprehensive solutions to complex compressed air systems with innovative services including:

- Air system design
- Maintenance and service training
- Seminars on system design
- System audit services:
  - ✓ Air Demand Analysis (ADA)
  - ✓ Air flow measurement
  - ✓ Air quality analysis
  - ✓ Energy consumption
  - ✓ Leak detection
  - ✓ Compressor fluid analysis





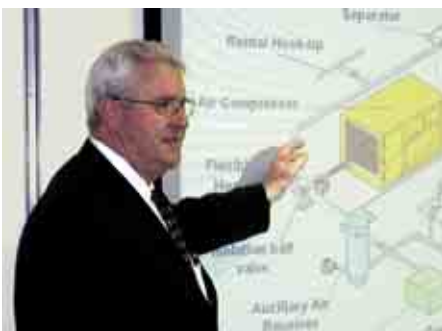
### Factory-trained Sales and Service

Kaeser is committed to providing the best after-sales service in the industry through our factory-trained, national distribution network. We have implemented the Kaeser Factory Certified Training (KFaCT) program to ensure the highest standards in local service.

KFaCT incorporates information on system basics, air system installation, maintenance, troubleshooting and clean air treatment.

### Kaeser Compressed Air Seminars

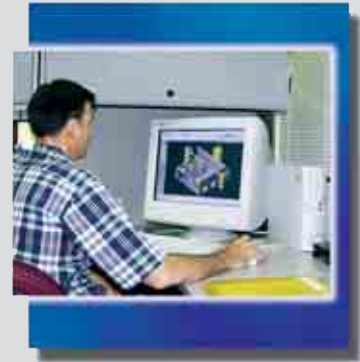
Kaeser's Compressed Air Seminars are designed to provide helpful information for air system specifiers and end users. These seminars are available on both general and industry specific levels, depending on the customer's need.



Kaeser's training program was developed in conjunction with standards from the Department of Energy's Compressed Air Challenge and the Compressed Air and Gas Institute and includes non-Kaeser training materials to give technicians quality, unbiased education in compressed air systems.

Focused on system design with an emphasis on reliability and energy efficiency, Kaeser's seminars are intended for plant engineers and maintenance managers. Topics include installation considerations, system audits, and suggestions for preventive maintenance.

Kaeser also offers Service Schools designed specifically for existing Kaeser owners to train users on preventive maintenance, troubleshooting and repair. Each seminar is tailored to meet the customers' needs and includes classroom lectures and hands-on training. Our schools are conducted at our training facility or on-site at the customer's facility.



### Compressed air system design

For specialized systems or unique requirements, Kaeser's highly trained engineers provide expert applications assistance. Kaeser uses state-of-the-art CAD systems to lay out the proposed system and produce traditional two-dimensional drawings for project execution. Plus, a three-dimensional, virtual walk through tour of the proposed system allows the end user to better visualize the complete installation. The virtual modeling allows all options to be considered.



### Kaeser Genuine Parts

Kaeser Genuine Parts are engineered to keep your compressed air system running at peak performance. From seals and gaskets, to belts and hoses, and valves and pumps, each part must meet Kaeser's stringent ISO 9001:2000 quality manufacturing requirements. This quality commitment ensures that each Kaeser Genuine Part will maximize equipment service life. Kaeser Genuine Parts ensures the correct fit, proper performance and maximum efficiency for your compressed air system.

## System Controls

### Sigma Air Manager



Sigma Air Manager (SAM) is the first master controller to combine the benefits of a modern industrial PC with Internet technology in a compressed air system.

Sigma Air Manager uniquely provides energy-saving, demand-related pressure band control with a clear visualization of operational data.

### Sigma Air Control



Sigma Air Manager features Sigma Air Control *basic*, a software interface that displays a compressed air system's real-time operational status through a standard Internet browser. The optional Sigma Air Control *plus* adds the ability to store operational data and make it available for reporting, system audits, control optimization and long term trending.

## Custom Designed Solutions

Kaeser products can be found in every area of manufacturing and processing including the metal, automotive, chemical, plastic, printing, woodworking and textile industries. Non-industrial facilities such as hospitals, laboratories and high-rise buildings frequently rely on Kaeser to supply their compressed air needs.

Our factory-trained representatives work closely with our application engineers to design a complete, custom system tailored to the end-user's requirements. Whether it's a systems enhancement for a small collision center or a complete turnkey installation for a chemical processing plant, Kaeser will recommend the right solution based on operating conditions, air quality needs, capacity and pressure requirements, and application-specific regulations.



# Installations and Applications



## Direct drive compressors

Kaeser one-to-one drive technology is bringing improved efficiency and energy savings to facilities all over the world. Located at high altitude, this 250 hp ESD unit provides efficient plant air at a specialty water bottler. Part of the ESD's output feeds a high pressure PET bottling process.



## Frequency Control compressors

Some compressed air applications require reliable and consistent air pressure, but have large fluctuations in air flow demand. This is the perfect application for Kaeser's Sigma Frequency Control compressors. Whether used as a trim machine for a multiple unit installation, or as the sole source of compressed air, these reliable units offer unparalleled efficiency and extremely low noise levels.



## Desiccant dryers

For applications that require extremely low pressure dewpoints, Kaeser offers a complete line of desiccant dryers and clean air treatment equipment. The Kaeser Adsorption Desiccant dryer shown in this micro-chip manufacturing plant produces dewpoints as low as  $-100^{\circ}\text{F}$ .



## Mobilair™ portable compressors

Kaeser offers a complete line of portable rotary screw compressors to the mining, construction and rental markets. Designed to offer more cfm per fuel consumption, Mobilair™ compressors offer rugged dependability and consistent performance for applications such as demolition, sandblasting and on-site service.



# Rotary Screw Compressors

## SX Series



| Model | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|-------|---------------------------|--------------------------------------|------------|--|--------------|
| SX 3  | 100                       | 13                                   | 3          | 26 <sup>3</sup> / <sub>8</sub> x 24 <sup>5</sup> / <sub>8</sub> x 32                             | 364          |
|       | 110                       | 11.5                                 |            |  |              |
|       | 145                       | 8.5                                  |            |  |              |
|       | 190                       | 5.5                                  |            |  |              |
| SX 4  | 100                       | 17                                   | 4          | 26 <sup>3</sup> / <sub>8</sub> x 24 <sup>5</sup> / <sub>8</sub> x 32                             | 364          |
|       | 110                       | 15.5                                 |            |  |              |
|       | 145                       | 12                                   |            |  |              |
|       | 190                       | 9                                    |            |  |              |
| SX 6  | 100                       | 23                                   | 5          | 23 x 22 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>2</sub>                             | 276          |
|       | 110                       | 21                                   |            |  |              |
|       | 145                       | 17                                   |            |  |              |
|       | 190                       | 13                                   |            |  |              |
| SX 7  | 100                       | 32                                   | 7.5        | 24 <sup>1</sup> / <sub>4</sub> x 24 <sup>1</sup> / <sub>2</sub> x 31 <sup>1</sup> / <sub>2</sub> | 353          |
|       | 110                       | 30                                   |            |  |              |
|       | 145                       | 25                                   |            |  |              |
|       | 190                       | 20                                   |            |  |              |

## SM Series



| Model | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|-------|---------------------------|--------------------------------------|------------|--|--------------|
| SM 8  | 100                       | 32                                   | 7.5        | 26 <sup>1</sup> / <sub>2</sub> x 24 <sup>3</sup> / <sub>4</sub> x 31 <sup>3</sup> / <sub>4</sub> | 353          |
|       | 110                       | 30                                   |            |  |              |
|       | 145                       | 25                                   |            |  |              |
|       | 190                       | 20                                   |            |  |              |
| SM 11 | 100                       | 44                                   | 10         | 26 <sup>1</sup> / <sub>2</sub> x 24 <sup>3</sup> / <sub>4</sub> x 31 <sup>3</sup> / <sub>4</sub> | 375          |
|       | 110                       | 42                                   |            |  |              |
|       | 145                       | 36                                   |            |  |              |
|       | 190                       | 29                                   |            |  |              |

## SK Series\*



| Model | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|-------|---------------------------|--------------------------------------|------------|--|--------------|
| SK 15 | 125                       | 64                                   | 15         | 39 <sup>3</sup> / <sub>4</sub> x 29 <sup>1</sup> / <sub>8</sub> x 47 <sup>1</sup> / <sub>4</sub> | 705          |
|       | 160                       | 54                                   |            |  |              |
|       | 217                       | 40                                   |            |  |              |
| SK 20 | 125                       | 78                                   | 20         | 39 <sup>3</sup> / <sub>4</sub> x 29 <sup>1</sup> / <sub>8</sub> x 47 <sup>1</sup> / <sub>4</sub> | 705          |
|       | 160                       | 65                                   |            |  |              |
|       | 217                       | 48                                   |            |  |              |

\*Also available with integral dryer.

## AS Series



| Model  | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|--------|---------------------------|--------------------------------------|------------|--|--------------|
| AS 20* | 125                       | 92                                   | 20         | 44 <sup>1</sup> / <sub>2</sub> x 32 <sup>5</sup> / <sub>8</sub> x 47 <sup>3</sup> / <sub>4</sub> | 860          |
|        | 160                       | 77                                   |            |  |              |
|        | 217                       | 58                                   |            |  |              |
| AS 25* | 125                       | 111                                  | 25         | 44 <sup>1</sup> / <sub>2</sub> x 32 <sup>5</sup> / <sub>8</sub> x 47 <sup>3</sup> / <sub>4</sub> | 893          |
|        | 160                       | 94                                   |            |  |              |
|        | 217                       | 72                                   |            |  |              |
| AS 30  | 125                       | 124                                  | 30         | 44 <sup>1</sup> / <sub>2</sub> x 32 <sup>5</sup> / <sub>8</sub> x 47 <sup>3</sup> / <sub>4</sub> | 926          |
|        | 160                       | 104                                  |            |  |              |
|        | 217                       | 83                                   |            |  |              |

\*Also available with integral dryer.

## ASD Series\*



| Model   | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|---------|---------------------------|--------------------------------------|------------|--|--------------|
| ASD 25  | 125                       | 115                                  | 25         | 53 <sup>1</sup> / <sub>8</sub> x 36 <sup>1</sup> / <sub>4</sub> x 59 <sup>1</sup> / <sub>4</sub> | 1280         |
|         | 175                       | 92                                   |            |  |              |
|         | 217                       | 72                                   |            |  |              |
| ASD 30  | 125                       | 134                                  | 30         | 53 <sup>1</sup> / <sub>8</sub> x 36 <sup>1</sup> / <sub>4</sub> x 59 <sup>1</sup> / <sub>4</sub> | 1440         |
|         | 175                       | 113                                  |            |  |              |
|         | 217                       | 90                                   |            |  |              |
| ASD 40S | 125                       | 166                                  | 40         | 53 <sup>1</sup> / <sub>8</sub> x 36 <sup>1</sup> / <sub>4</sub> x 59 <sup>1</sup> / <sub>4</sub> | 1470         |
|         | 175                       | 129                                  |            |  |              |
|         | 217                       | 110                                  |            |  |              |
| ASD 40  | 125                       | 191                                  | 40         | 53 <sup>1</sup> / <sub>8</sub> x 36 <sup>1</sup> / <sub>4</sub> x 59 <sup>1</sup> / <sub>4</sub> | 1480         |
|         | 175                       | 159                                  |            |  |              |
|         | 217                       | 125                                  |            |  |              |

\*Also available with integral dryer.

## BSD Series\*



| Model  | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|--------|---------------------------|--------------------------------------|------------|--|--------------|
| BSD 40 | 125                       | 195                                  | 40         | 60 <sup>1</sup> / <sub>4</sub> x 40 <sup>1</sup> / <sub>2</sub> x 67 | 2130         |
|        | 175                       | 162                                  |            |  |              |
| BSD 50 | 125                       | 241                                  | 50         | 60 <sup>1</sup> / <sub>4</sub> x 40 <sup>1</sup> / <sub>2</sub> x 67 | 2200         |
|        | 175                       | 192                                  |            |  |              |
|        | 217                       | 158                                  |            |  |              |
| BSD 60 | 125                       | 294                                  | 60         | 60 <sup>1</sup> / <sub>4</sub> x 40 <sup>1</sup> / <sub>2</sub> x 67 | 2360         |
|        | 175                       | 230                                  |            |  |              |
|        | 217                       | 185                                  |            |  |              |

\*Also available with integral dryer.

## CSD Series\*



| Model    | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|----------|---------------------------|--------------------------------------|------------|--|--------------|
| CSD 60   | 125                       | 298                                  | 60         | 65 x 41 <sup>3</sup> / <sub>8</sub> x 73 <sup>1</sup> / <sub>2</sub>                             | 2780         |
|          | 175                       | 234                                  |            |  |              |
|          | 217                       | 188                                  |            |  |              |
| CSD 75   | 125                       | 361                                  | 75         | 65 x 41 <sup>3</sup> / <sub>8</sub> x 73 <sup>1</sup> / <sub>2</sub>                             | 2870         |
|          | 175                       | 292                                  |            |  |              |
|          | 217                       | 229                                  |            |  |              |
| CSD 100S | 125                       | 425                                  | 100        | 65 x 41 <sup>3</sup> / <sub>8</sub> x 73 <sup>1</sup> / <sub>2</sub>                             | 2930         |
|          | 175                       | 348                                  |            |  |              |
|          | 217                       | 288                                  |            |  |              |
| CSD 100  | 125                       | 503                                  | 100        | 76 <sup>1</sup> / <sub>4</sub> x 51 <sup>1</sup> / <sub>8</sub> x 79 <sup>3</sup> / <sub>4</sub> | 4200         |
|          | 160                       | 417                                  |            |  |              |
|          | 217                       | 337                                  |            |  |              |
| CSD 125  | 125                       | 581                                  | 125        | 76 <sup>1</sup> / <sub>4</sub> x 51 <sup>1</sup> / <sub>8</sub> x 79 <sup>3</sup> / <sub>4</sub> | 4410         |
|          | 160                       | 494                                  |            |  |              |
|          | 217                       | 406                                  |            |  |              |

\*Also available with integral dryer.

## DSD Series



| Model    | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|----------|---------------------------|--------------------------------------|------------|--|--------------|
| DSD 100S | 110                       | 481                                  | 100        | 87 <sup>3</sup> / <sub>4</sub> x 77 <sup>1</sup> / <sub>4</sub> x 74 <sup>1</sup> / <sub>4</sub> | 6940         |
|          | 125                       | 476                                  |            |  |              |
|          | 145                       | 382                                  |            |  |              |
| DSD 100  | 110                       | 563                                  | 100        | 87 <sup>3</sup> / <sub>4</sub> x 77 <sup>1</sup> / <sub>4</sub> x 74 <sup>1</sup> / <sub>4</sub> | 6940         |
|          | 125                       | 562                                  |            |  |              |
|          | 145                       | 455                                  |            |  |              |
| DSD 125  | 110                       | 691                                  | 125        | 87 <sup>3</sup> / <sub>4</sub> x 77 <sup>1</sup> / <sub>4</sub> x 74 <sup>1</sup> / <sub>4</sub> | 7280         |
|          | 125                       | 688                                  |            |  |              |
|          | 145                       | 556                                  |            |  |              |
| DSD 150  | 110                       | 883                                  | 150        | 87 <sup>1</sup> / <sub>2</sub> x 77 <sup>1</sup> / <sub>4</sub> x 74 <sup>1</sup> / <sub>4</sub> | 7500         |
|          | 125                       | 688                                  |            |  |              |
|          | 145                       | 682                                  |            |  |              |
|          | 190                       | 547                                  |            |  |              |
| DSD 200  | 110                       | 992                                  | 200        | 87 <sup>3</sup> / <sub>4</sub> x 77 <sup>1</sup> / <sub>4</sub> x 74 <sup>1</sup> / <sub>4</sub> | 7630         |
|          | 125                       | 877                                  |            |  |              |
|          | 145                       | 865                                  |            |  |              |
|          | 190                       | 671                                  |            |  |              |



### ESD Series

| Model   | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)  | Weight (lb.) |
|---------|---------------------------|--------------------------------------|------------|---|--------------|
| ESD 250 | 110                       | 1298                                 | 250        | 104-3/8 x 85 <sup>3</sup> / <sub>4</sub> x 83 <sup>1</sup> / <sub>2</sub> | 11,200       |
|         | 125                       | 1293                                 |            |   |              |
|         | 145                       | 989                                  |            |   |              |
|         | 190                       | 865                                  |            |   |              |
| ESD 300 | 110                       | 1490                                 | 300        | 104-3/8 x 85 <sup>3</sup> / <sub>4</sub> x 83 <sup>1</sup> / <sub>2</sub> | 12,000       |
|         | 125                       | 1293                                 |            |   |              |
|         | 145                       | 1284                                 |            |   |              |
|         | 190                       | 977                                  |            |   |              |



### FS Series

| Model  | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)<br><i>Standard Super Sound Proof</i>                                   | Weight (lb.) |
|--------|---------------------------|--------------------------------------|------------|---|--------------|
| FS 440 | 100                       | 1703                                 | 335        | 127 <sup>1</sup> / <sub>2</sub> x 76 <sup>1</sup> / <sub>4</sub> x 77 <sup>1</sup> / <sub>4</sub> | 13,890       |
|        | 110                       | 1645                                 |            |   |              |
|        | 145                       | 1445                                 |            |   |              |
|        | 190                       | 1225                                 |            |   |              |
| FS 460 | 100                       | 1749                                 | 350        | 127 <sup>1</sup> / <sub>2</sub> x 76 <sup>1</sup> / <sub>4</sub> x 77 <sup>1</sup> / <sub>4</sub> | 12,291       |
|        | 110                       | 1700                                 |            |   |              |
|        | 145                       | 1530                                 |            |   |              |
|        | 190                       | 1270                                 |            |   |              |



### GS Series

| Model  | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)<br><i>Standard Super Sound Proof</i>       | Weight (lb.) |
|--------|---------------------------|--------------------------------------|------------|---|--------------|
| GS 520 | 100                       | 1800                                 | 400        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 18,520       |
|        | 110                       | 1746                                 |            |   |              |
|        | 145                       | 1535                                 |            |   |              |
|        | 190                       | 1300                                 |            |   |              |
| GS 525 | 100                       | 1975                                 | 400        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 18,520       |
|        | 110                       | 1985                                 |            |   |              |
|        | 145                       | 1635                                 |            |   |              |
|        | 190                       | 1380                                 |            |   |              |
| GS 580 | 100                       | 1920                                 | 425        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 18,520       |
|        | 110                       | 1855                                 |            |   |              |
|        | 145                       | 1630                                 |            |   |              |
|        | 190                       | 1380                                 |            |   |              |
| GS 590 | 100                       | 2148                                 | 425        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 18,520       |
|        | 110                       | 2065                                 |            |   |              |
|        | 145                       | 1776                                 |            |   |              |
|        | 190                       | 1501                                 |            |   |              |
| GS 610 | 100                       | 2020                                 | 450        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 18,960       |
|        | 110                       | 1950                                 |            |   |              |
|        | 145                       | 1715                                 |            |   |              |
|        | 190                       | 1455                                 |            |   |              |
| GS 620 | 100                       | 2288                                 | 450        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 18,960       |
|        | 110                       | 2196                                 |            |   |              |
|        | 145                       | 1875                                 |            |   |              |
|        | 190                       | 1620                                 |            |   |              |
| GS 640 | 100                       | 2180                                 | 475        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 18,960       |
|        | 110                       | 2055                                 |            |   |              |
|        | 145                       | 1805                                 |            |   |              |
|        | 190                       | 1530                                 |            |   |              |
| GS 650 | 100                       | 2402                                 | 475        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 18,960       |
|        | 110                       | 2305                                 |            |   |              |
|        | 145                       | 1966                                 |            |   |              |
|        | 190                       | 1715                                 |            |   |              |



### HS Series

| Model  | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)<br><i>Standard Super Sound Proof</i>       | Weight (lb.) |
|--------|---------------------------|--------------------------------------|------------|---|--------------|
| HS 670 | 100                       | 2470                                 | 500        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 19,180       |
|        | 110                       | 2375                                 |            |   |              |
|        | 145                       | 2046                                 |            |   |              |
|        | 190                       | 1775                                 |            |   |              |
| HS 690 | 100                       | 2652                                 | 535        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 19,180       |
|        | 110                       | 2550                                 |            |   |              |
|        | 145                       | 2195                                 |            |   |              |
|        | 190                       | 1905                                 |            |   |              |
| HS 760 | 100                       | 2913                                 | 605        | 160 x 93 <sup>1</sup> / <sub>2</sub> x 92 <sup>1</sup> / <sub>2</sub> | 19,620       |
|        | 110                       | 2800                                 |            |   |              |
|        | 145                       | 2405                                 |            |   |              |
|        | 190                       | 2115                                 |            |   |              |

## Airtower



### Airtower Series

| Model       | Operating Pressure (psig) | Capacity at Operating Pressure (cfm) | Motor (hp) | Dimensions L x W x H (in.)   | Weight (lb.) |
|-------------|---------------------------|--------------------------------------|------------|--|--------------|
| Airtower 3  | 110                       | 11.5                                 | 3          | 27 <sup>1</sup> / <sub>4</sub> x 28 x 50 <sup>1</sup> / <sub>2</sub> | 573          |
|             | 145                       | 8.5                                  |            |  |              |
|             | 190                       | 5.5                                  |            |  |              |
| Airtower 4  | 110                       | 15.5                                 | 4          | 27 <sup>1</sup> / <sub>4</sub> x 28 x 50 <sup>1</sup> / <sub>2</sub> | 573          |
|             | 145                       | 12                                   |            |  |              |
|             | 190                       | 9                                    |            |  |              |
| Airtower 6  | 110                       | 21                                   | 5          | 27 <sup>1</sup> / <sub>4</sub> x 28 x 50 <sup>1</sup> / <sub>2</sub> | 573          |
|             | 145                       | 17                                   |            |  |              |
|             | 190                       | 13                                   |            |  |              |
| Airtower 8  | 110                       | 30                                   | 7.5        | 27 <sup>1</sup> / <sub>4</sub> x 28 x 50 <sup>1</sup> / <sub>2</sub> | 595          |
|             | 145                       | 25                                   |            |  |              |
|             | 190                       | 20                                   |            |  |              |
| Airtower 11 | 110                       | 42                                   | 10         | 27 <sup>1</sup> / <sub>4</sub> x 28 x 50 <sup>1</sup> / <sub>2</sub> | 618          |
|             | 145                       | 36                                   |            |  |              |
|             | 190                       | 29                                   |            |  |              |

## Variable Speed Drive



### SFC Series

| Model     | Operating Pressure (psig) |     | Capacity at 110 psig (cfm) |      | Motor (kW) | Dimensions L x W x H (in.)   | Weight (lb.) |
|-----------|---------------------------|-----|----------------------------|------|------------|--|--------------|
|           | Min                       | Max | Min                        | Max  |            |  |              |
| SFC 11*   | 80                        | 217 | 18                         | 75   | 11         | 39 <sup>3</sup> / <sub>4</sub> X 29 <sup>1</sup> / <sub>8</sub> X 47 <sup>1</sup> / <sub>4</sub>   | 730          |
| SFC 18*   | 80                        | 145 | 24                         | 129  | 18         | 78 <sup>7</sup> / <sub>8</sub> x 36 <sup>1</sup> / <sub>4</sub> x 59 <sup>1</sup> / <sub>4</sub>   | 1,580        |
| SFC 22*   | 80                        | 217 | 29                         | 158  | 22         |  | 1,740        |
| SFC 30S*  |                           |     | 38                         | 203  | 30         |  | 1,760        |
| SFC 37*   | 80                        | 217 | 55                         | 242  | 37         | 81 <sup>7</sup> / <sub>8</sub> x 40 <sup>1</sup> / <sub>2</sub> x 67                               | 2,510        |
| SFC 45*   |                           |     | 69                         | 311  | 45         | 86 <sup>5</sup> / <sub>8</sub> x 41 <sup>3</sup> / <sub>8</sub> x 73 <sup>1</sup> / <sub>2</sub>   | 3,150        |
| SFC 55*   |                           |     | 82                         | 381  | 55         |  | 3,240        |
| SFC 75S*  |                           |     | 102                        | 469  | 75         |  | 3,310        |
| SFC 75    | 80                        | 145 | 128                        | 544  | 75         | 111 <sup>1</sup> / <sub>4</sub> x 76 x 89 <sup>3</sup> / <sub>4</sub>                              | 7,000        |
| SFC 90S*  | 80                        | 217 | 120                        | 515  | 75         | 102 <sup>3</sup> / <sub>8</sub> x 51 <sup>1</sup> / <sub>8</sub> x 79 <sup>3</sup> / <sub>4</sub>  | 4,850        |
| SFC 90    | 80                        | 160 | 128                        | 620  | 90         | 111 <sup>1</sup> / <sub>4</sub> x 76 x 89 <sup>3</sup> / <sub>4</sub>                              | 7,230        |
| SFC 110S* | 80                        | 217 | 139                        | 633  | 90         | 102 <sup>3</sup> / <sub>8</sub> x 51 <sup>1</sup> / <sub>8</sub> x 79 <sup>3</sup> / <sub>4</sub>  | 5,300        |
| SFC 110   |                           |     | 151                        | 722  | 110        | 111 <sup>1</sup> / <sub>4</sub> x 76 x 89 <sup>3</sup> / <sub>4</sub>                              | 7,570        |
| SFC 132   |                           |     | 213                        | 816  | 132        |  | 7,880        |
| SFC 160   | 80                        | 175 | 213                        | 1001 | 160        | 129 <sup>1</sup> / <sub>4</sub> x 84 <sup>1</sup> / <sub>2</sub> x 103 <sup>1</sup> / <sub>2</sub> | 9,259        |
| SFC 200   |                           |     | 298                        | 1222 | 200        |  | 12,790       |
| SFC 250   | 80                        | 175 | 360                        | 1430 | 250        | 129 <sup>1</sup> / <sub>4</sub> x 84 <sup>1</sup> / <sub>2</sub> x 103 <sup>1</sup> / <sub>2</sub> | 13,660       |

\*Also available with integral dryer. Other pressures available, up to 217 psig.

Other pressures available.  
Specifications are subject to change without notice.



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