

# SULLAIR ROTARY SCREW VACUUM SYSTEM

5–200 hp | 4–150 kW



**SULLAIR**<sup>®</sup>

*Always air. Always there.*<sup>®</sup>

# ABOUT SULLAIR

For more than 50 years, Sullair has been on the leading edge of compressed air solutions. We were one of the first to execute rotary screw technology in our air compressors. And our machines are famous all over the world for their legendary durability. As the industry moves forward, Sullair will always be at the forefront with quality people, innovative solutions, and air compressors that are built to last.

*Sullair was founded in Michigan City, Indiana in 1965, and has since expanded with a broad international network to serve customers in every corner of the globe. Sullair has offices in Chicago and manufacturing facilities in the United States, China and India — all ISO 9001 certified to assure the highest quality standards in manufacturing. In addition, Sullair Suzhou and Shenzhen facilities are ISO 9001, ISO 14001 and OHSAS 18001 certified.*

## SULLAIR AN INDUSTRY LEADER

### LEADERSHIP

Since 1965, Sullair has been recognized worldwide as an innovator and leader in rotary screw compression and vacuum technology. Sullair designs and manufactures its own rotors and air end assemblies. The award-winning rotary screw design sets the industry standard and delivers the quality and reliability you expect from a leader.

### TECHNOLOGY

Using the most modern technologies, equipment and advanced manufacturing techniques, Sullair designs, manufactures, assembles, and tests the most innovative compressed air and vacuum products in the industry. Sullair products are known around the world for their universally applicable design, outstanding craftsmanship and superior quality.

### COMMITMENT TO INNOVATION

Underlying Sullair leadership is a dedication to excellence and a commitment to innovation. We are constantly exploring new ideas and seeking new ways to meet the industry's need for increasingly energy efficient compressed air and vacuum solutions.

# SULLAIR VACUUM SYSTEM



## THE SULLAIR VACUUM SYSTEM IS A COMPLETE PACKAGE

### Complete Packaged System

- No additional components to purchase
- Reduces start-up time and costs
- Entire package is tested
- Simplifies installation
- Built-in full-voltage starter

### Instrumentation and Monitoring

- Simplified and reliable electro-mechanical panel
- Takes the guesswork out of maintenance
- Inlet filter  $\Delta P$
- Sump separator  $\Delta P$
- Discharge temperature
- Injection pressure gauge\*

### Capacity Modulation

- Matches capacity to demand
- Stabilizes system vacuum
- Reduces wear caused by start/stop

### High Pressure Shutdown Switch

- Eliminates activating pressure relief device
- Prevents loss of fluid

### Protective Shutdown System

- Shuts down machine before major damage occurs:
  - High temperature shutdown
  - Low oil pressure shutdown\*
- Increases productivity and equipment life

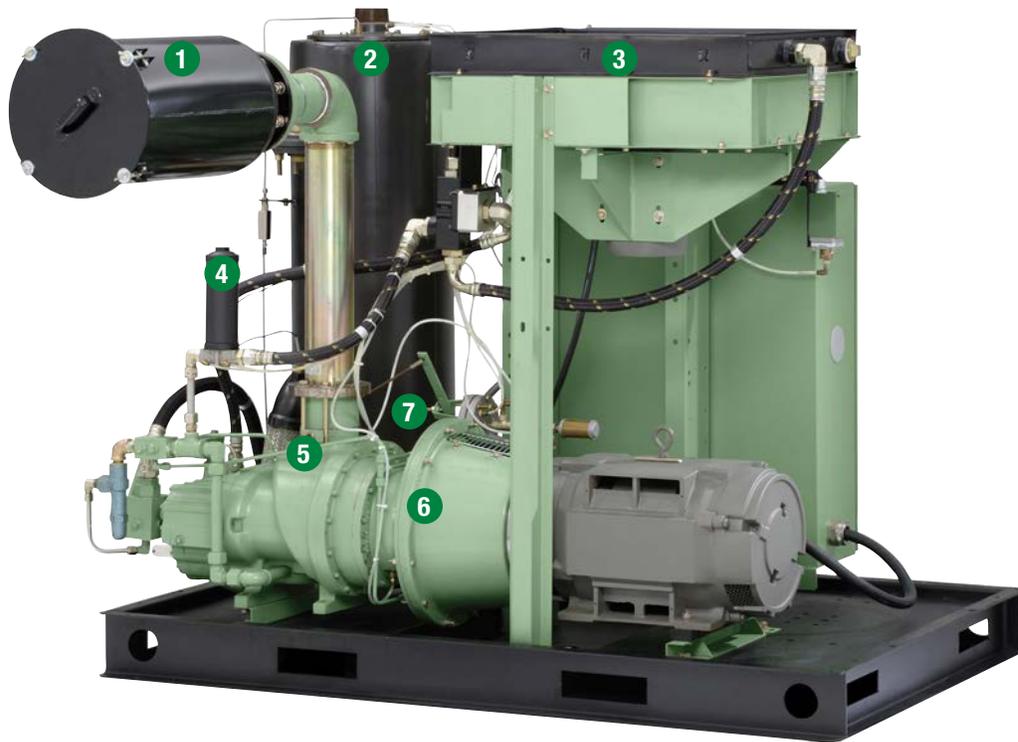
### Options

- Enclosure
- Dual control
- NEMA 4
- Power failure auto restart
- TEFC or ODP premium efficiency motors

*Contact Sullair for additional options available.*

*\* On VS-16, VS-20, VS-25 and VS-32 models.*

# SULLAIR VACUUM SYSTEM



## 1. Air Inlet Filter

- Protects pump from contamination
- Horizontally mounted
- Includes NPT or flanged suction pipe connections

## 2. Highly Efficient Air-Fluid Separation

- Replaceable cartridge-type element
- Reduces fluid carryover
- Lowers make-up fluid cost
- Reduces labor costs and downtime
- Two-stage separation on 50 hp to 200 hp (36.8 kW to 147 kW)

## 3. Cooling Alternatives

- Air- or water-cooled models (VS-10 available air-cooled only)
- Choose most cost effective method for your environment
- Air-cooled models eliminate need for costly seal water treatment and disposal

## 4. Spin-On Fiberglass Fluid Filter

- Aircraft-quality media provides better filtration
- Up to 20% more efficient
- Lengthens life of the vacuum pump

## 5. Air End ("The Pump")

- Longer average bearing life, designed for 100,000+ hours of service

## 6. Motor and Vacuum Pump are Flange Mounted (VS-10 through VS-20)

- 5% energy savings over belt drive
- Eliminates maintenance expense associated with V-belts
- Provides positive alignment
- Optimizes bearing life of air end (pump) and motor

## 7. Select One of Two Long-Life Fluids for Factory Fill

- SRF1/4000®— one-year or 4000 hours
- Sullube®— one-year or 10,000 hours
- Both result in fewer fluid changes
- Both reduce fluid disposal costs, downtime and associated labor

# HOSPITAL SUCTION PACKAGES (HSP)

## A Vacuum System You Can Count On

Sullair Hospital Suction Packages (HSP) are specifically designed to provide continuous vacuum for hospital applications. Manufactured from the proven rotary screw vacuum system of Sullair, these pumps meet or exceed the requirements for packaged vacuum pumps per NFPA 99: Health Care Facilities Code, 2015 Edition. Simplex packages have a capacity range from 78 to 1000 acfm (2.2 to 28.3 m<sup>3</sup>/min); duplex packages are available from 78 to 300 acfm (2.2 to 8.5 m<sup>3</sup>/min) per pump. HSP systems are warranted for two years. All packages are equipped with base load transfer switches for alternating purposes.

## Cost Effective

Requiring less power than conventional pumps, HSP systems offer low operating costs. The inherent high efficiency of the rotary screw mechanism, combined with 0 to 100% capacity control which matches throughput to demand, provides significant energy savings.

## Duplex Hospital Suction Package

VS-10 and VS-12 models are designed for hospital applications (HSP) that meet or exceed NFPA 99, 2015 Edition standards for Health Care Facilities.



Not for Waste Anesthetic Gas Disposal (WAGD) use. WAGD use poses potential fire and explosion hazards. See website and product for more information.

### Industry Leading Technology

Sullair vacuum packages deliver smooth, pulse-free operation and long term reliability. The vacuum systems are constructed with high-quality components to ensure optimal performance and dependability. In addition to being engineered to deliver reduced noise levels, the packages are designed for simple maintenance. The systems can be customized to fit nearly any customer need.

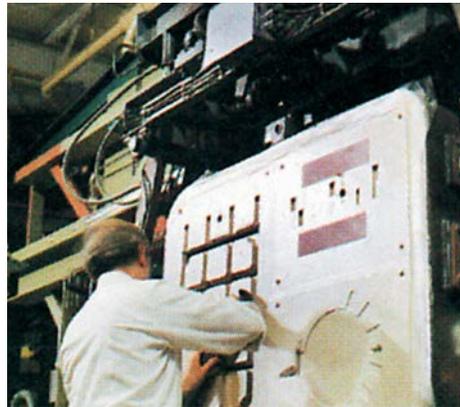
### Superior Operating Efficiency

Sullair vacuum systems incorporate proven rotary screw technology to deliver a stable vacuum at unrivaled efficiencies. The package's constant control system ensures optimal performance throughout the operating range. In addition, Sullair systems do not require water to operate — all acquisition, treatment and disposal costs are eliminated. Comparisons with competitive technology demonstrate a 50% operating cost advantage for the Sullair Vacuum Systems — a fact that's tough to ignore.

# APPLICATIONS THROUGHOUT HISTORY



**(Left)** A room in the Intensive Care Unit at a Hospital, where vacuum is used for patient care.



**(Right)** Operators at an aluminum casting manufacturer inspect molding while vacuum is applied.



**(Left)** A machine operator at a plastics manufacturer removes a thermoformed shipping container for automobile headlights from a rotary vacuum press.



**(Right)** A plastics manufacturer uses vacuum during the extrusion process to rid PVS pipe of process contaminants.



**(Left)** This envelope converter at an envelope plant uses vacuum from the centralized RSVS system for spacing, folding & delivering.



**(Right)** Furniture manufacturers use vacuum in place of traditional clamping methods to avoid damage.

# TECHNICAL SPECIFICATIONS

60HZ MOTOR FREQUENCY							ENCLOSED DIMENSIONS AND WEIGHT			
MODEL	MOTOR		CAPACITY *		INLET	DISCHARGE CONNECTION	LENGTH	WIDTH	HEIGHT	WEIGHT
	hp	kW	acfm	m <sup>3</sup> /min	in	in	in (mm)	in (mm)	in (mm)	lbs (kg)
VS-10	5	3.7	80	2.26	2.5	3	66 (1676)	36 (914)	54 (1372)	890 (404)
VS-10	7.5	5.5	120	3.40	2.5	3	66 (1676)	36 (914)	54 (1372)	940 (426)
VS-10	10	7.4	150	4.24	2.5	3	66 (1676)	36 (914)	54 (1372)	970 (440)
VS-10	15	11	200	5.66	2.5	3	66 (1676)	36 (914)	54 (1372)	970 (440)
VS-12	15	11	250	7.08	2.5	3	66 (1676)	36 (914)	54 (1372)	1400 (635)
VS-12	20	14.7	310	8.50	2.5	3	66 (1676)	36 (914)	54 (1372)	890 (404)
VS-16	30	22.1	430	12.18	4	3	72 (1829)	48 (1219)	62 (1575)	2495 (1132)
VS-16	40	29.4	540	15.29	4	3	72 (1829)	48 (1219)	62 (1575)	2695 (1191)
VS-16	50	36.8	630	17.84	4	5	72 (1829)	48 (1219)	62 (1575)	3135 (1422)
VS-20	60	44.1	795	22.51	5	5	84 (2134)	48 (1219)	63 (1600)	3820 (1733)
VS-20	75	55.2	1034	29.28	5	5	84 (2134)	48 (1219)	63 (1600)	3820 (1733)
VS-25	75	55.2	1348	38.17	6**	6**	110 (2794)	72 (1828)	84 (2133)	6560 (2975)
VS-25	100	73.5	1695	48	8**	8**	110 (2794)	72 (1828)	84 (2133)	7050 (3198)
VS-32	125	91.9	2056	58.22	8**	2 x 8**	110 (2794)	72 (1828)	96 (2438)	9600 (4354)
VS-32	150	110.3	2546	72.09	8**	2 x 8**	151 (3835)	72 (1828)	96 (2438)	9850 (4468)
VS-32	200	145	3095	88	10**	2 x 8**	151 (3835)	72 (1828)	96 (2438)	10,200 (4627)

50HZ MOTOR FREQUENCY							ENCLOSED DIMENSIONS AND WEIGHT			
MODEL	MOTOR		CAPACITY *		INLET	DISCHARGE CONNECTION	LENGTH	WIDTH	HEIGHT	WEIGHT
	hp	kW	acfm	m <sup>3</sup> /min	in	in	in (mm)	in (mm)	in (mm)	lbs (kg)
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\* To 28 inches Hg (711 mm Hg), based on standard sea level conditions.  
 \*\* Flange mount.  
 Data subject to change without notice.

For more information, contact your local authorized Sullair distributor.