



ShopTek[®]

Lubricated Rotary Screw Air Compressors

45–110 kW

CE

 **SULLAIR[®]**
Always air. Always there.[®]



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 leadership at Sullair 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.

All rotors are engineered and machined in the USA.

STATIONARY AIR POWER SYSTEMS

With our expertise in analyzing, managing and controlling compressed air, Sullair offers total compressed air solutions to help you reduce energy costs and improve productivity.

- *Plant air audit equipment*
- *Energy efficient products*
- *Compressed air system controls*
- *Equipment to monitor and manage air systems*
- *Air treatment products*
- *After-purchase support*

Plus a full complement of OEM parts and lubricants to help keep your compressors running optimally. Each component of the system is carefully matched for capacity and pressure to provide maximum performance and energy efficiency.



THE SULLAIR STANDARD HIGHER THAN THE INDUSTRY STANDARD

Sullair ShopTek® air compressors redefine industry standards for continuous duty compressors in the 4–110kW range. Designed with the end customer in mind, ShopTek compressors feature a small footprint and are built to provide exceptional reliability and extremely low maintenance.

The C.E. ShopTek air compressors come standard with:

- *Legendary Sullair air end*
- *10,000 hour Genuine Sullube® factory fill*
- *5-year Emerald Warranty* — providing coverage on major components including the air end; air/fluid receiver; main drive motor; fluid cooler; and aftercooler



45–110 kW SP



HOPTEK® LINE



1. Fluid and Air Coolers:

- Easy access for maintenance
- Air-cooled

2. Heavy Duty Air Filter:

- Protects key components from premature failure
- Extends separator, fluid filter and fluid life
- Easy access for maintenance

3. Separator:

- C.E. certified receiver
- High quality/low carryover
- Access panel for easy removal
- Fluid sight glass

4. IP 55 Motor:

- IE3

5. Direct-coupled Gear Drive

6. Sullair Air End

- Minimal maintenance

7. Control Panel

- Y-Delta starter (fixed speed)
- Easy access to controls
- Electronic Controller
 - Matches output to demand
 - Clear and concise graphic display
 - Monitors status of key operating parameters

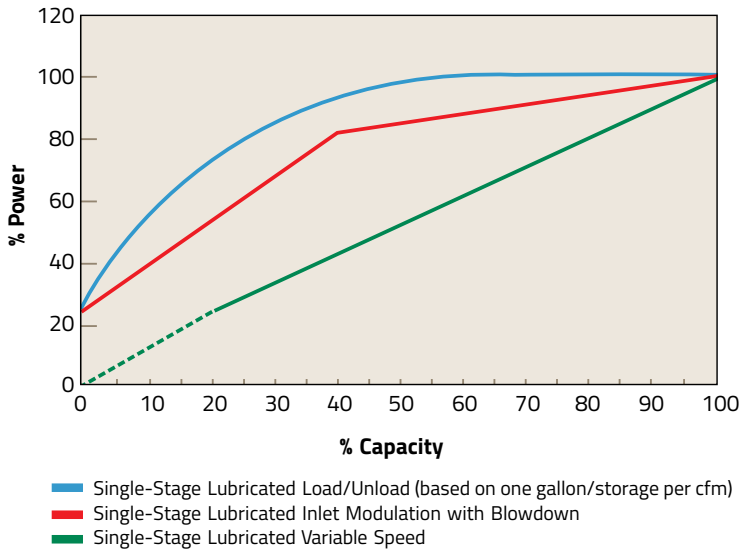
8. Optional VSD

Optional VSD available provides flexibility to vary both capacity and pressure to better match compressed air demand and supply. Sullair Compressors with VSD provide:

- Stable system pressure
- Flexibility for future growth
- Excellent energy savings

AIR COMPRESSORS WITH VSD

PART-LOAD PERFORMANCE ASSESSMENT



Reference: Compressed Air and Gas Handbook, 6th Edition, pages 221-223.

FOR MAXIMUM ENERGY EFFICIENCY AND OPERATING CONSISTENCY

Sullair Compressors with VSD Provide:

- Excellent energy savings
- Relief from potential peak demand charges
- Possible utility company rebates
- Stable system pressure
- Consistent product quality
- Reduced system air leaks
- Reduced storage requirements
- Flexibility for future growth
- Lowest life-cycle cost
- DC link choke

The chart above is a representation of nominal control systems for generic comparative purposes. A detailed and accurate comparison of specific compressor models is available from your authorized distributor.

VARIABLE CAPACITY CONTROL TECHNOLOGY

How the Spiral Valve Operation Works

The compression volume varies to suit the air demand by progressively opening or closing internal bypass ports on the air end.

Capacity is matched to system demand, reducing cycling time and extending component life.

Part-load capacity and efficiency can produce energy savings up to 17%.

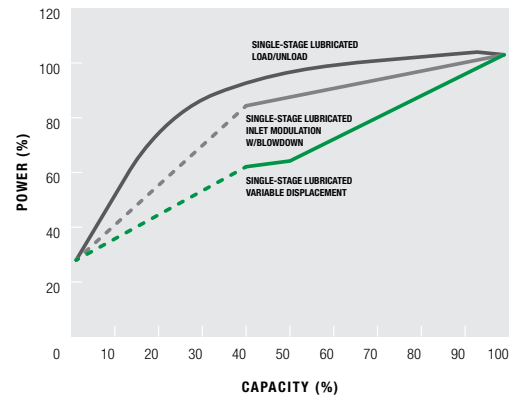
Variable Displacement Air End

Sullair's variable displacement air end maintains system pressure to the plant to match air demand. Since the VCC compressors use large, efficient, slow running rotors, a lower power consumption is achieved at the top end of capacity. Oil foaming does not occur, air is not wasted to atmosphere, and bearings last longer.

The motor and air end run at optimum speed and therefore maintain optimum efficiency throughout the full variable output range.

Sullair VCC compressors react quickly to rapid changes in demand. The effective rotor length is progressively reduced as the demand is reduced which provides the most efficient part load control system to 50% output. This system is extremely simple and provides a cost effective, energy efficient control alternative.

PART LOAD PERFORMANCE ASSESSMENT



BYPASS PORTS IN STATOR

Rotors removed to show Bypass Ports

ShopTek®

Model	8 Bar m ³ /min	50 Hz 10 Bar m ³ /min	kW	Starter	dbA Rating	Machine Weight (kg)	Length (mm)	Width (mm)	Height (mm)
ST45	7.8	6.9	45	Y-Delta	82	1425	2200	1200	1740
ST45V	7.93	6.9	45	VSD	82	1480	2250	1200	1690
ST55	9.5	8.6	55	Y-Delta	82	1455	2200	1200	1740
ST55V	9.85	8.6	55	VSD	82	1510	2250	1200	1690
ST75	12.5	11.1	75	Y-Delta	82	1565	2200	1200	1740
ST75V	12.55	11.1	75	VSD	82	1620	2250	1200	1690
ST90	15.5	14.2	90	Y-Delta	83	2130	2500	1400	1800
ST90PS	15.5	14.2	90	Y-Delta	83	2130	2500	1400	1800
ST90PSV	15.5	14.2	90	VSD	83	2350	3100	1400	2300
ST110	19.6	16.5	110	Y-Delta	83	2160	2500	1400	1800
ST110PS	19.6	16.5	110	Y-Delta	83	2160	2500	1400	1800
ST110PSV	19.6	16.5	110	VSD	83	2450	3100	1400	2300

* 380-415V Motor

* 50Hz

* Dimensions provided are unpackaged



All ShopTek compressors are factory-filled with biodegradable Genuine Sullube® 10,000-hour fluid.

- Protects and cleans (no varnish)
- Controls operating temperatures
- Optimal viscosity
- Environmentally friendly
- Reduces fluid loss
- High flash point (263° C)

WARRANTY INFORMATION

ShopTek compressors are covered by a 5-year warranty on major components including:

- Air end
- Air/fluid receiver
- Inverter (on VSD models)
- Controller
- Main Drive Motor
- Fluid cooler
- Aftercooler

For more information, contact your local authorized Sullair distributor.