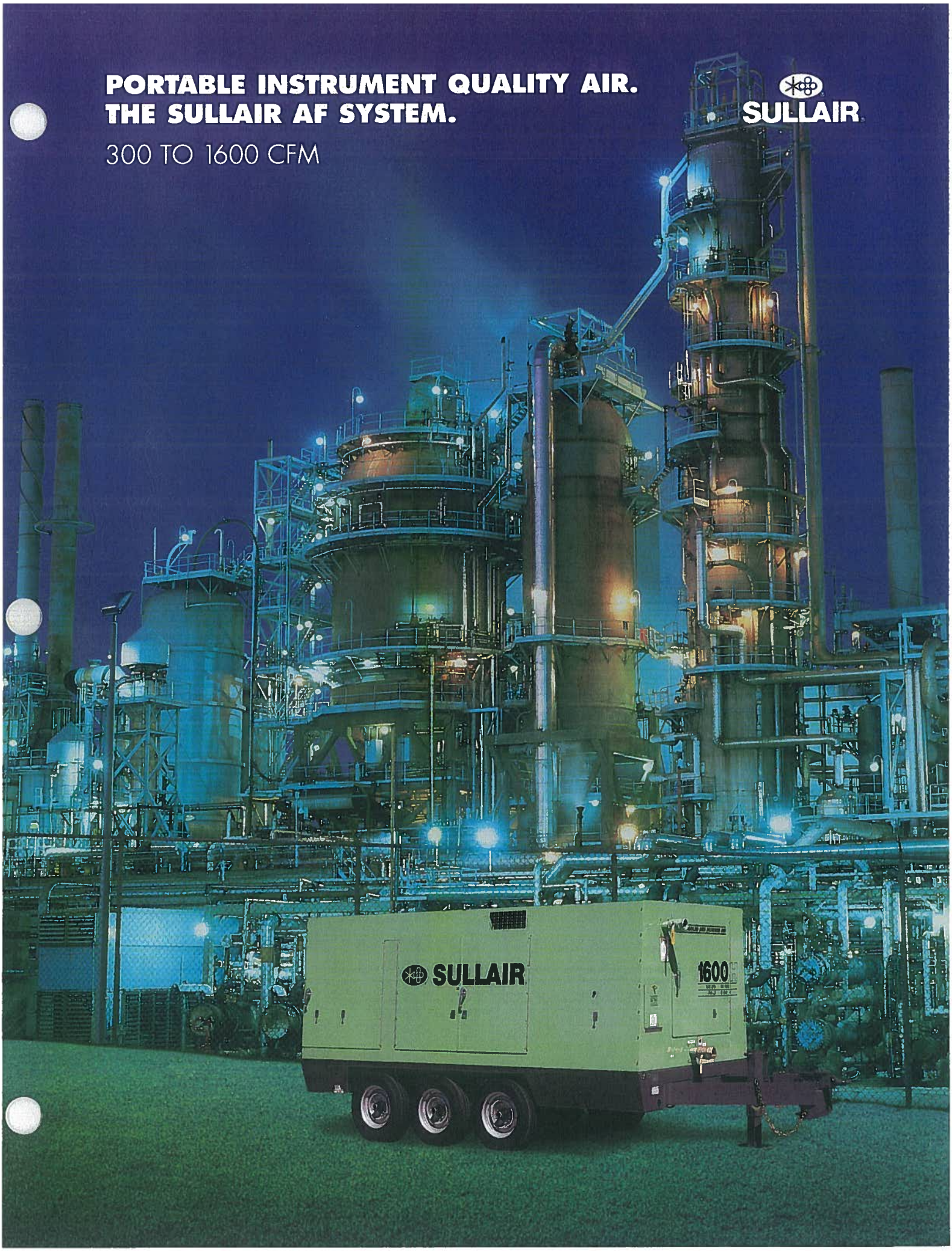
PORTABLE INSTRUMENT QUALITY AIR.
THE SULLAIR AF SYSTEM.

300 TO 1600 CFM

SULLAIR




SULLAIR
1600

The Sullair AF SYSTEM

INSTRUMENT QUALITY AIR

Clean, instrument quality air—wherever you need it.

AN INNOVATIVE SYSTEM—In today's industrial and construction workplaces, there is an increasing need for extremely clean, high quality compressed air that can be produced on-site. To meet this need, Sullair has developed the AF System. This innovative portable compressed air system delivers instrument quality air, conveniently and cost effectively, wherever it is needed.

INSTRUMENT QUALITY AIR—The Sullair AF System includes portable rotary screw compressors from 300 cfm up to 1600 cfm and rated pressures from 100 psig up to 200 psig. This system delivers aftercooled and filtered compressed air that meets or exceeds ISO 8573-1: Class 1.7.1 quality standards. (See chart on following page.) Sullair has offered the AF System since 1995.

WIDE-RANGING APPLICATIONS—The AF System's high quality air is ideal for instrumentation, process equipment and other sophisticated industrial applications. A mobile unit, the AF System is a convenient source of supplemental, replacement and emergency plant air. On construction sites, this system provides clean, instrument quality air for media blasting and painting/protective coating applications.

A completely portable system.

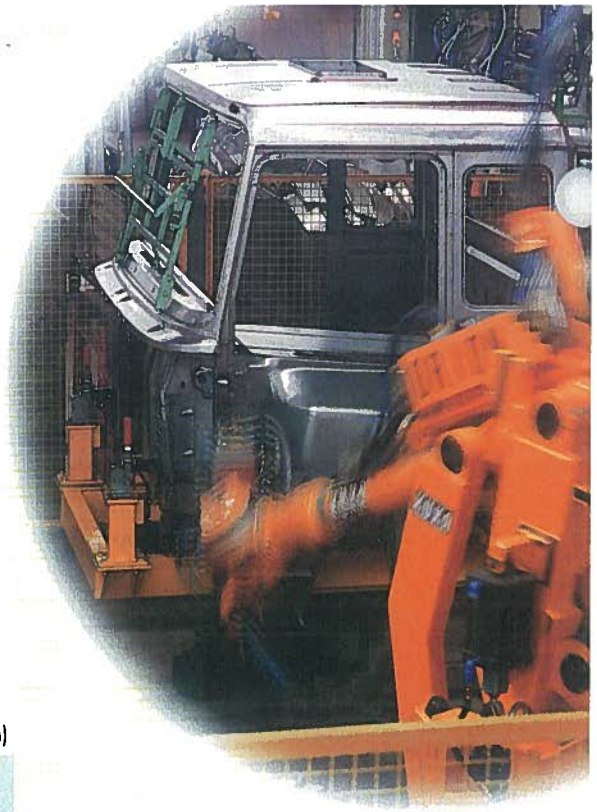
SYSTEM COMPONENTS—The AF System consists of a specially designed Sullair portable compressor with a built-in high-capacity, low-approach aftercooler, a water/condensate trap and a highly efficient contaminant-removal system.

The contaminant-removal system includes primary and secondary filters with condensate traps. The primary filter is a coalescing type filter which captures and removes particles down to 1.0 micron and larger in diameter, and maximum remaining aerosol content at 0.5 PPM. The secondary filter is a high efficiency coalescing type which removes particulate to 0.01 micron and larger in diameter, and maximum aerosol content of 0.01 PPM.

DUAL FUNCTION SYSTEM—The Sullair AF portable compressor has two service valves: one for standard air and one for instrument quality air. This dual valve system eliminates the need for a second compressor that might be required for standard-air-only applications.

AUTOMATIC DRAIN VALVE—The AF System's large capacity water/condensate trap features an automatic drain valve that continuously releases water while the machine is operating.

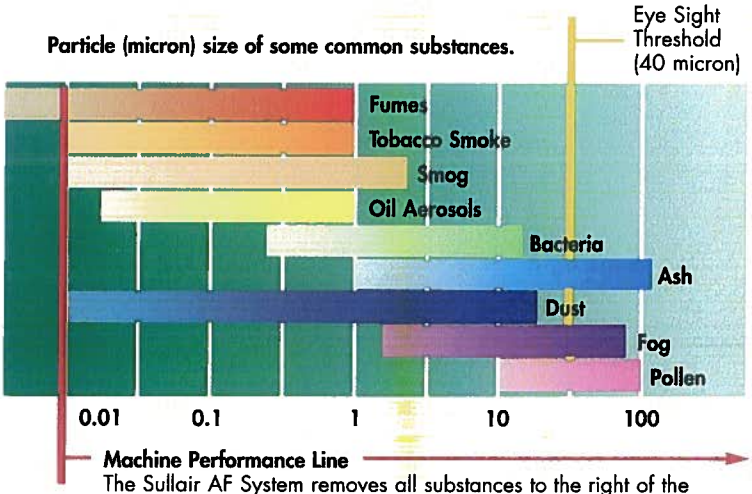
ENCLOSED FOR PROTECTION—All system components are located within the enclosure for weather and damage protection.



Why air filtration is essential.

ATMOSPHERIC CONTAMINATION—Under normal circumstances, the atmosphere contains dirt, water and hydrocarbon vapor from unburnt fuels and industrial processes. One cubic foot of air contains approximately 4 million particles–80% of them 2 microns or less in size. Since a compressor uses outside air, it constantly draws in atmospheric contaminants as well.

Particle (micron) size of some common substances.



The Sullair AF System removes all substances to the right of the Machine Performance Line.

MICRONS ARE MINUTE—A micron is one millionth of a meter, or 1/1000 millimeter. A 1.0 micron particle is invisible without magnification. (A 40-micron particle is the smallest size visible to the human eye.) Because micron particles are so small, air filtration is essential.

If .01 micron is this big... then .1 micron is this big... and this arc is just part of a full 1.0 micron.

When you realize it takes 10 million particles 1.0 micron in diameter to cover this 1/8 inch dot ● you can appreciate submicron particulate removal.

	ISO 8573-1: 1.7.1		
	Particle Size Class 1	Dew Point Class 7	Oil Content Class 1
Standard– Maximum Particle Size and Maximum Concentration	0.1 Micron	No Requirement	0.01 mg/cu m
Sullair AF Contaminant Removal Performance	0.01 Micron	No Requirement	0.009 mg/cu m

CLEAN AIR, VIRTUALLY FREE OF OIL AEROSOLS—With a Sullair AF System, the air that reaches the equipment, application or process is virtually free of oil aerosols, particulates and other contaminants 0.01 and larger. (However, the system is not intended to remove carbon monoxide, methyl isocyanate or any other noxious, corrosive, toxic gases, vapors or fumes that may be in the atmosphere at the machine site.)

COMPLETELY FREE OF CONDENSATE—The Sullair AF System delivers cool, compressed air that is free of condensate. In the AF portable enclosure, the compressed air leaving the aftercooler is reheated 5° to 7° F before it leaves the machine, thus providing some buffer from the dew point. If a dewpoint is required, a separate dryer may be required.

Portable convenience and instrument quality air.

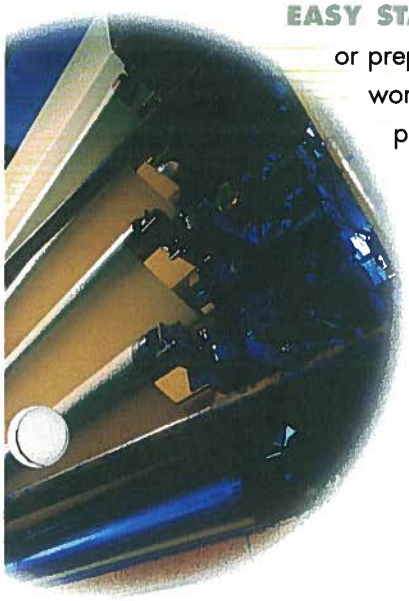
The Sullair AF System offers both.

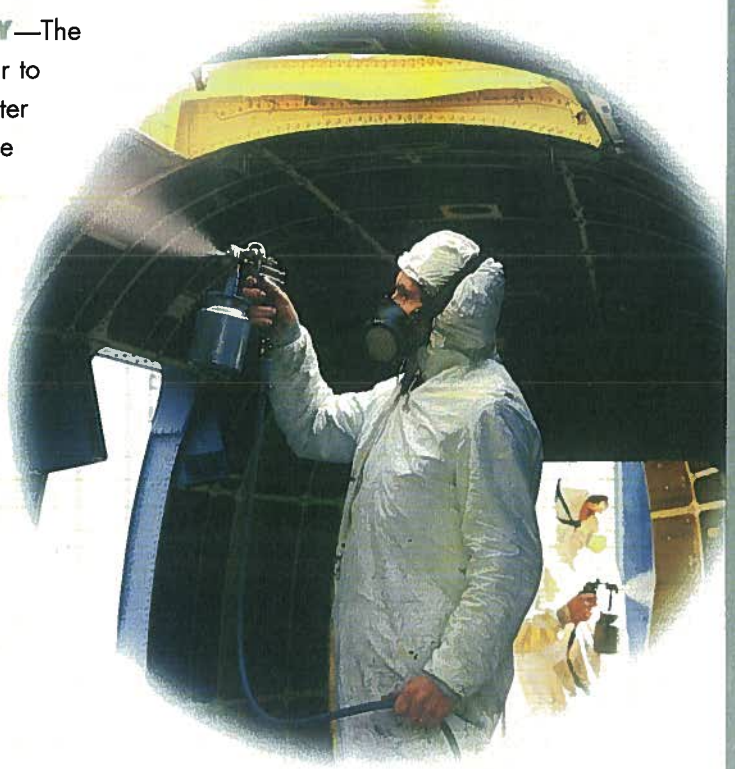
SULLAIR SYSTEM GOES ANYWHERE—From manufacturing plants to construction sites, the Sullair AF System provides "instant" instrument quality air in any work setting.

OPERATES EFFICIENTLY—The Sullair AF System uses no air to operate the aftercooler or filter system. Therefore none of the system's air is consumed or lost.

RUNS QUIETLY—The Sullair AF System meets EPA noise regulations of 76 dBA @ 7M.

EASY STARTUP—No special set-up or preparation is necessary at the work site. Normal start/run procedure is all that is required to obtain instrument quality air.





Package design features

The Sullair AF compressor.

DEPENDABLE ROTARY SCREW COMPRESSOR—Single-stage, fluid flooded, with cast iron housing.

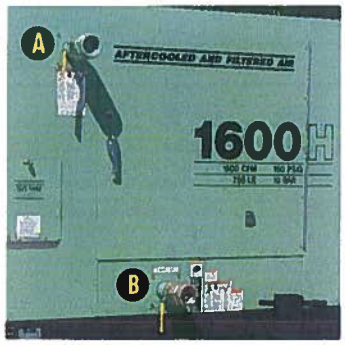
AMPLE PADLOCKABLE SERVICE DOORS—Front, side and rear doors provide easy access.

0 TO 100% CAPACITY CONTROL—Automatic inlet valve and unloaded starting.

TWO-STAGE DRY TYPE AIR FILTERS WITH SAFETY ELEMENT—Positioned to draw cool outside air.

INSTRUMENT PANEL—Equipped with top quality gauges, circuit breaker, idle warm-up valve and diagnostic shutdown indicator system.

DIAGNOSTIC SHUTDOWN INDICATOR SYSTEM—Lights indicate cause of shutdown; simplify troubleshooting.



Easy-to-operate valves allow the compressor to be used for both instrument quality air (A) and standard air (B).

A–Instrument Quality Air

Particles <0.01 micron
Oil content<0.01 micron

B–Standard Air

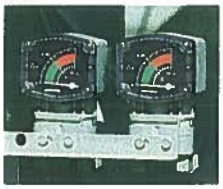
Not aftercooled or filtered

PROTECTIVE SHUTDOWN SWITCHES—Differential pressure, low engine oil pressure, high engine water temperature, low water level, high compressor temperature or low fuel level.

AWF COMPRESSOR FLUID—Provides faster, easier cold weather startups. Tolerates and separates water easily. Reduced fluid carryover extends filter life.

Aftercooler and filters

DIFFERENTIAL PRESSURE SHUTDOWN SYSTEM FOR FILTERS—This system senses buildup in the filters and sounds an alarm when filters require maintenance. If there is no response to the alarm, the system activates a warning light and automatically shuts down the machine, to ensure that no contaminant or oil is allowed to go beyond the filter. (Option on 300HH, 375, 375H and 425)

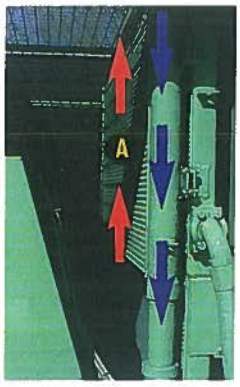


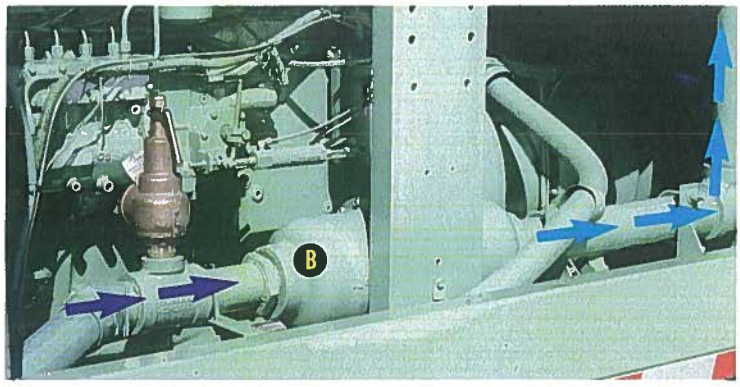
Primary and secondary filters with condensate trap remove particles and aerosols.

LOW-APPROACH AFTERCOOLER WITH CONDENSATE TRAP—This feature is incorporated into the portable cooling system. The discharge air temperature is compatible with inlet air temperature requirements of your downstream dryer.

AN ENVIRONMENTALLY-FRIENDLY SOLUTION FOR CONDENSATE REMOVAL—Sullair's standard condensate collection/disposal system, which consists of hoses from water and filter traps routed through the belly-pan of the machine, captures the condensate and allows you to dispose of it safely.

An alternate method allows the condensate to be deposited on the ground.





LEFT— Hot air enters air-to-air aftercooler (A). Aftercooled air and condensate.

MIDDLE— Cool air and condensate. Water trap (B) removes condensate. Cool and dry air (to filters).

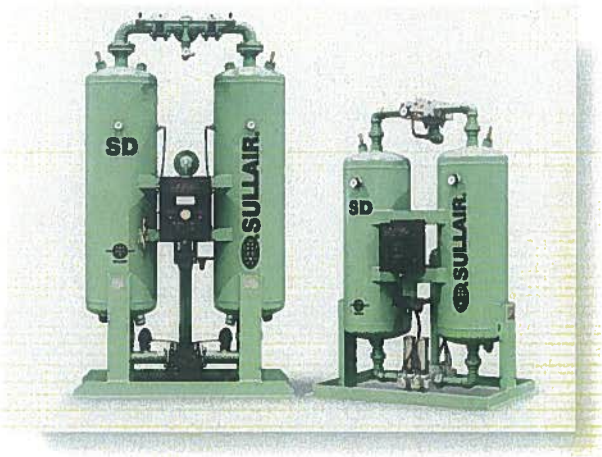
RIGHT—Optional "Cold Weather/Shutter" package, which lowers the low temperature capability to -20°F, can be installed to operate the AF System at 35°F and below. In sub-freezing ambient conditions, the thermostatically-controlled louvers open and close automatically to maintain above-freezing air temperature within the enclosure, thereby preventing ice from forming in the aftercooler/condensate-removal system. (Not available on 375, 375H and 425)

Specifications, Weights and Dimensions

THE SULLAIR 600H AF, 750 AF, 750H AF, 825 AF, 900 AF, 1300H AF AND 1600H AF PORTABLE AIR COMPRESSORS WITH AFTERCOOLER, WATER/CONDENSATE TRAPS AND FILTERS

Model			600H AF	750 AF	750H AF	825 AF	900 AF	1300H AF	1600H AF
Delivery@ Rated Pressure			**600 cfm** 283 L/S 17.0 m³/min	**750 cfm** 354 L/S 21.2 m³/min	**750 cfm** 354 L/S 21.2 m³/min	**825 cfm** 389 L/S 23.4 m³/min	**900 cfm** 425 L/S 25 m³/min	**1300 cfm** 614 L/S 36.8 m³/min	**1600 cfm** 755 L/S 45.3 m³/min
Rated Pressure	**psig**	(bar)	**150** (10)	**125** (8.5)	**150** (10)	**125** (8.5)	**100** (7)	**150** (10)	**150** (10)
Pressure Range	**psig**	(bar)	**80-150** (5.5-10)	**80-125** (5.5-8.5)	**80-150** (5.5-10)	**80-125** (5.5-8.5)	**80-125** (5.5-8.5)	**80-150** (5.5-10)	**80-150** (5.5-10)
Designated Model									
Tandem/Tri-Axle Mount									
Weight (wet*)	**lbs**	(kg)	**10350** (4695)	**10350** (4695)	**10600** (4808)	**10600** (4808)	**10600** (4808)	**16620** (7539)	**17320** (7856)
Length (drawbar)	**in**	(mm)	**191** (4851)	**191** (4851)	**191** (4851)	**191** (4851)	**191** (4851)	**238** (6045)	**238** (6045)
Length (canopy)	**in**	(mm)	**131** (3327)	**131** (3327)	**131** (3327)	**131** (3327)	**131** (3327)	**179** (4547)	**179** (4547)
Width	**in**	(mm)	**87** (2210)	**87** (2210)	**87** (2210)	**87** (2210)	**87** (2210)	**88** (2235)	**88** (2235)
Height (canopy)**	**in**	(mm)	**83** (2108)	**83** (2108)	**83** (2108)	**83** (2108)	**83** (2108)	**92** (2337)	**92** (2337)
Track Width	**in**	(mm)	**77** (1956)	**77** (1956)	**77** (1956)	**77** (1956)	**77** (1956)	**77** (1956)	**77** (1956)
Tire Size			**9.50 x 16.5 LT (E)**	**9.50 x 16.5 LT (E)**	**9.50 x 16.5 LT (E)**	**9.50 x 16.5 LT (E)**	**9.50 x 16.5 LT (E)**	**9.50 x 16.5 LT (E)**	**9.50 x 16.5 LT (E)**
4-Wheel Mount									
Weight (wet*)	**lbs**	(kg)	**10500** (4953)	**10500** (4763)	**10320** (4681)	**10750** (4876)	**10750** (4876)	**16290** (7389)	**16870** (7652)
Length (drawbar)	**in**	(mm)	**204** (5182)	**204** (5182)	**204** (5182)	**204** (5182)	**204** (5182)	**244** (6198)	**244** (6198)
Length (canopy)	**in**	(mm)	**131** (3327)	**131** (3327)	**131** (3327)	**131** (3327)	**131** (3327)	**179** (4547)	**179** (4547)
Width	**in**	(mm)	**87** (2210)	**87** (2210)	**87** (2210)	**87** (2210)	**87** (2210)	**88** (2235)	**88** (2235)
Height (canopy)**	**in**	(mm)	**89** (2261)	**89** (2261)	**89** (2261)	**89** (2261)	**89** (2261)	**99** (2515)	**99** (2515)
Track Width	**in**	(mm)	**79.5** (2019)	**79.5** (2019)	**79.5** (2019)	**79.5** (2019)	**79.5** (2019)	**78** (1981)	**78** (1981)
Tire Size			**8.75 x 16.5 (D)**	**8.75 x 16.5 (D)**	**8.75 x 16.5 (D)**	**8.75 x 16.5 (D)**	**8.75 x 16.5 (D)**	**8.25 x 15 TR (F)**	**8.25 x 15 TR (F)**
Less Running gear									
Weight (wet*)	**lbs**	(kg)	**9375** (4253)	**9375** (4253)	**9625** (4366)	**9625** (4366)	**9625** (4366)	**15640** (7094)	**16220** (7357)
Length (canopy)	**in**	(mm)	**131** (3327)	**131** (3327)	**131** (3327)	**131** (3327)	**131** (3327)	**179** (4547)	**179** (4547)
Width	**in**	(mm)	**87** (2210)	**87** (2210)	**87** (2210)	**87** (2210)	**87** (2210)	**88** (2235)	**88** (2235)
Height (canopy)**	**in**	(mm)	**72** (1829)	**72** (1829)	**72** (1829)	**72** (1829)	**72** (1829)	**83** (2108)	**83** (2108)
Engine Make			**Caterpillar**	**Caterpillar**	**Caterpillar**	**Caterpillar**	**Caterpillar**	**Caterpillar**	**Caterpillar**
Engine Type			**Diesel**	**Diesel**	**Diesel**	**Diesel**	**Diesel**	**Diesel**	**Diesel**
Engine Model			**C-9 ATAAC**	**C-9 ATAAC**	**C-9 ATAAC**	**C-9 ATAAC**	**C-9 ATAAC**	**C-15 ATAAC**	**C-15 ATAAC**
Displacement	**cu in**	(L)	**538** (8.8)	**538** (8.8)	**538** (8.8)	**538** (8.8)	**538** (8.8)	**893** (14.6)	**893** (14.6)
Cylinders			**6**	**6**	**6**	**6**	**6**	**6**	**6**
Cycles			**4**	**4**	**4**	**4**	**4**	**4**	**4**
Bore and Stroke	**in**		**4.41 x 5.87**	**4.41 x 5.87**	**4.41 x 5.87**	**4.41 x 5.87**	**4.41 x 5.87**	**5.40 x 6.50**	**5.40 x 6.50**
	(mm)		(112 x 149)	(112 x 149)	(112 x 149)	(112 x 149)	(112 x 149)	(137 x 165)	(137 x 165)
Rated Speed	**rpm**		**1800**	**1800**	**1800**	**1800**	**1800**	**1800**	**1800**
Rated Power	**hp**	(kW)	**275** (205)	**275** (205)	**275** (205)	**275** (205)	**275** (205)	**450** (336)	**525** (391)

* Weights include aftercooler, traps and filter.
** Add 8 inches for exhaust.



SD Regenerative Dryers

- Traditional twin tower desiccant regenerative adsorption dryer mounted on oil field skid.
- Pre- and after-filters are mounted and piped
- Instrument quality air that meets or exceeds ISO 8573.1
- Six models available with capacities ranging from 600 to 1710 SCFM
- -40°F pressure dewpoint means moisture-free air, even when air lines are outside in sub-freezing temperatures
- Proven valve design offers trouble free operation
- Towers are ASME code stamped and CRN approved

AWF and the 5-Year Air End Warranty

The Sullair portable compressor air end is warranted for 5-years or 10,000 hours, whichever comes first, when Sullair AWF fluid and genuine Sullair filters are used.

Portables compressors are usually operated and stored outside, often in extreme weather. Conventional rotary screw compressor fluids become thicker as temperatures drop. This causes a viscous drag on the rotors at startup, making it difficult for engines to generate enough power. In high temperatures and humid climates, conventional compressor fluids tend to lose viscosity and water tolerance, reducing service life.

To answer these problems, Sullair developed AWF, the All Weather Fluid. AWF allows easier cold weather starting and warmup, while providing exceptional lubrication during hot or severe service.

Sullair Parts and Aftermarket Support

Because Sullair believes that using Genuine Sullair Replacement Parts is critical for optimum compressor performance, we make them available on a global basis. Through our computer-based system, our distributors can procure Genuine Sullair Replacement Parts for any piece of Sullair equipment in any part of the world, quickly and efficiently.

ISO Certification

Sullair Corporation is one of the world's leading authorities on rotary screw compression technology. Since it began manufacturing rotary screw compressors in 1965, Sullair has focused on this area of specialization. Sullair uses its extensive resources in Michigan City, Indiana to further develop and advance compressed air technology.

Sullair products are manufactured to the highest quality standards in an ISO 9001 certified quality system.

SULLAIR®

www.sullair.com

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