The X-Air 375-150 compressor with PACE technology

John Deere powered high performance compressor 375cfm

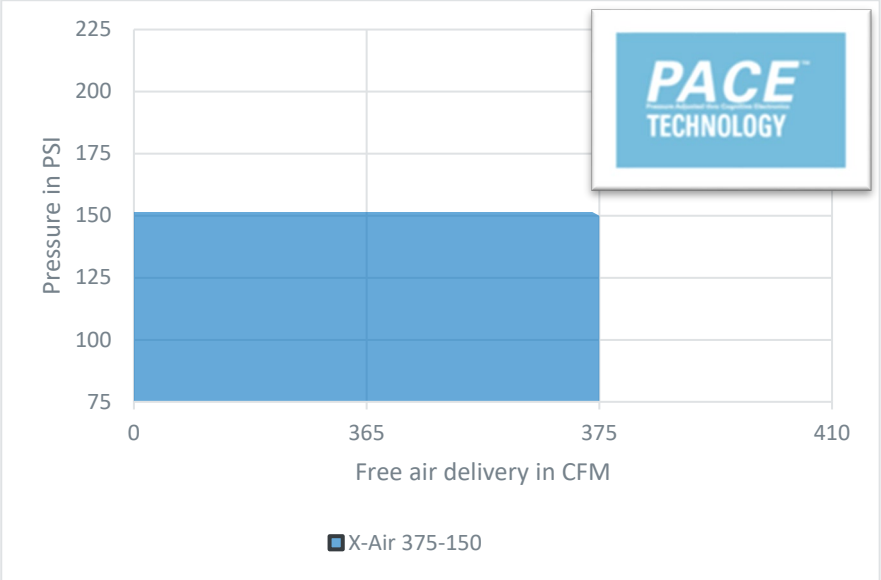
Standard features

The Atlas Copco X-Air 375-150 is a single-stage, oil-injected, rotary screw type air compressor, powered by a liquid-cooled, four-cylinder turbocharged T4F diesel engine.

The unit consists of an air end, diesel engine (with exhaust after treatment requiring no active regeneration due to no presence of DPF), cooling circuit, air/oil separation and PACE control systems - all enclosed within a sound dampening HardHat™ enclosure.

The design focus is overall product quality, extended service intervals, user friendliness, ease of serviceability, and economical operation to ensure best in class cost of ownership.

Pressure and Flow



Features	Benefits
• John Deere T4F engine	• Meets all current T4F emission regulations. • Integrated exhaust aftertreatment makes T4F integration easy and using the latest technology available in the market, it's possible to meet T4F standards with no DPF so there is no need for regeneration since particulate does not accumulate in the DOC/SCR parts. • 5 Year extended warranty from factory on John Deere Engine (must be registered with John Deere to qualify).
• Atlas Copco Controller XC2004 PACE Pressure Adjusted through Cognitive Electronics	• Proven controller for easy operation and diagnostics of the compressor and engine. • Allows operator to view compressor parameters including: Pressure settings, reading engine codes, two programmable service timers, all temperatures and pressure of compressor, fuel levels and consumptions, and load/unload compressor.
• Low Fuel Shutdown	• Reduces downtime on site when operator runs out of fuel as there is no longer a need to "re-prime" the fuel system.
• Heavy Duty Single Axle Trailer w/15" tires	• Well balanced for safer towing or moving around site • High ground clearance for rough site and road conditions
• HardHat™ enclosure	• Heavy ¼" double wall polyethylene enclosure • Dent and UV Resistant • Keeps looking new for longer and adds to resale value
• Cold Weather Package	• Features required for reliable cold weather operation. Including: synthetic compressor oil (Paroil S) and block heater.
• 110% Spillage Free Containment Frame	• Protects environment from spill/leaks, avoids costly clean up
• New Oil Separator Tank design	• Filter surface increased from 2000 to 2450 cm^2 • Easy to service with extended service intervals for the compressor oil system: 1500 h or 2 years

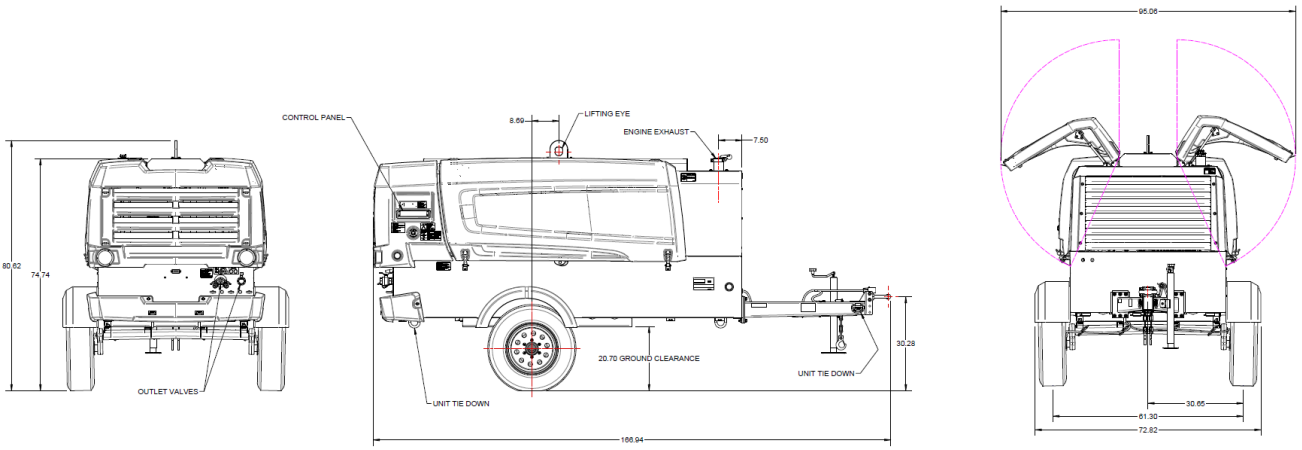
Compressor		X-Air 375-150–150	
Actual free air delivery[1] (FAD, without aftercooler)	Cfm	375	375
Normal effective working pressure	Psi	100	150
Minimum working pressure	Psi	72	
Max. sound pressure level @ 23' (7m) at normal working speed & pressure[2]	dB(a)	76	
Compression Stages		1	
Air Receiver Capacity	US Gal (L)	11 (41.6)	
Compressor oil capacity	US Gal (L)	6.7 (25.4)	
Approximate air outlet temperature (not aftercooled)	°F (°C)	200 (93)	
Air Compressor outlets		2 x ¾" & 1 x 1 ½"	
Max. ambient temperature (at sea level)[3]	°F (°C)	122 (50)	
Maximum altitude	Ft (m)	TBD	
Minimum starting temperature (cold weather)	°F (°C)	-13 (-25)	

Engine	John Deere	4045EWL	
Emissions Regulation	US EPA Tier	T4F	
Output at rated speed (2200 rpm)	HP	148	
Number of cylinders		4	
Aspiration		Turbocharged	
Displacement	cu in (L)	269 (4.5)	
Engine speed (Unloaded)	Rpm	1500	
Engine speed (Maximum loaded)	Rpm	2200	
Engine oil capacity	US Gal (L)	5.4 (20.4)	
Engine oil required		Low Ash Oil per API CJ-4, ACEA C9	
Engine coolant capacity	US Gal (L)	5.6 (21.3)	
Fuel tank capacity	US Gal (L)	52 (197)	
Fuel consumption at 0% load	Gal/Hr (L/Hr)	2 (7.6)	3 (11.4)
Fuel consumption at 100% load	Gal/Hr (L/Hr)	6 (22.7)	7 (26.5)
DEF tank capacity	US Gal (L)	5 (18.9)	
DEF consumption at 100% load	Gal/Hr (L/Hr)	0.33 (1,25)	
Battery Capacity (Cold Cranking Amps[4])	A	1150	

1 According to ISO 1217 ed.3 1996 annex D
2 Measured in accordance with ISO 2151 under free field conditions @ 7m distance
3 Consult Atlas Copco for proper de-rating instructions for operation beyond ambient limitations
4 According to DIN 72311

Dimensions

Trailer mounted

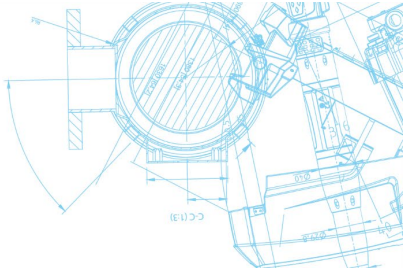


Weight (Wet - Ready-to-operate)

		X-Air 375-15
Trailer mounted	lb (Kg)	4700 (2132)

Dimensions

		X-Air 375-150
Trailer mounted (Inches)	L x W x H	167 x 72.8 x 80.6



Principle Data

New Design Vessel

- Filter surface increased from 2000 to 2450 cm^2
- Easy to service:
  - No sensors, valves, hoses at vessel lid
  - Low weight vessel lid
  - No need to dismount scavenge line
  - Bolt at top of OSE ensures proper grounding and firm connection
  - Handle integrated in top plate of OSE
  - Springs at bottom of OSE for grounding

Compressor Element

The quality of a compressor can be measured through the reliability, efficiency and durability of the compressor element used. Through decades of expertise in the design of compressor elements, Atlas Copco remains a world leader in designing the most efficient and reliable compressors on the market. With air-end efficiency, maintenance intervals are extended and fuel consumption is reduced.

The X-Air 375-150 compressor utilizes Atlas Copco's C106 element and is driven from the diesel engine through a gear box with a rubber disc coupler.

The compressor system comes with Atlas Copco ParOil compressor oil. The oil cooler comes equipped with a standard thermostatic by-pass valve for superior cold weather lubrication.

Air/Oil Separator

Air and oil separation is achieved through a centrifugal oil separator combined with a filter element. Separators are available in ASME/CRN approved versions and are stamped accordingly.

Designed for a higher maximum working pressure, the separator is equipped with a sealed high pressure safety relief valve, minimum pressure valve, automatic blow-down valve, and pressure regulator.

Air/Oil Separator Tank:	
Volume	11 US Gal / 42 L
Certifications	ASME / CRN
MAWP	261psi @ 266°F

Cooling System

The cooling system consists of integrated side-by-side aluminium oil cooler with axial fan to ensure optimum cooling. The cooling system is suitably designed for continuous operation in ambient conditions up to 125°F, with canopy door closed for the X-Air 375-150.

Compressor Regulating System

The compressor regulating system consists of an air filter, air receiver/oil separator, compressor element, unloader assembly with unloader valve, blow down valve and loading valve.

Economic power consumption is assured by the fully automatic 100% step-less speed regulator that adapts engine speed to air demand.

Discharge Outlets

Compressed air is available from (2) 3/4” claw type (Chicago) outlet valves and (1) 1 ½” NPT valve.

Engine

John Deere 4045EWL

John Deere 4045EWL T4F turbo charged four-cylinder, liquid-cooled diesel engine provides ample power to operate the compressor continuously at full-load.

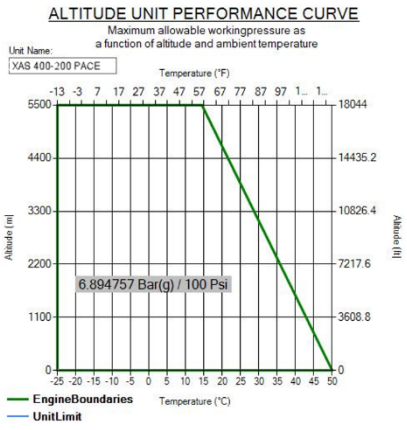
Meets all US EPA and Environment Canada exhaust legislations with Final Tier 4 compliance.

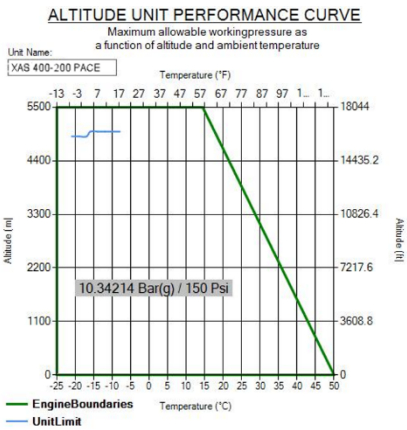
The US EPA engine family is “EJDXL04.5315” and rated at 148hp at 2200 rpm, in accordance to SAE Standard.

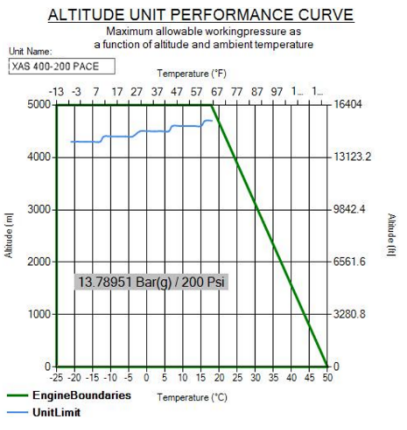
Engine starting capacity at -13°F (-25°C) without the addition of cold start options.

The 52Gal (192L) fuel tank enables operation for over 8 hours at full load and comes standard with a low fuel shutdown at 6%.

Altitude Curve TBD







Emissions Treatment

The John Deere 4045EWL after treatment consists of a Diesel Oxidization Catalyst (DOC), Selective Catalytic Reduction (SCR). The SCR utilizes the temperature of the exhaust to passively regenerate during normal use eliminate (subliminate) DEF deposits. Sublimination is lower temperature and shorter duration than a typical regeneration used for a standard DPF and is done passively.

Electrical System

The **X-Air 375-150** is equipped with a 12 Volt negative ground electrical starting system.

Instrumentation

The instrument control panel is located on the back, of the compressor canopy with easy access.

Standard instrument package includes fully diagnostic ECU controller with large 3.5” display. The intuitive Atlas Copco XC2004 controller is easy to operate with all functions conveniently at your fingertips. The controller also manages the engine ECU operating system, and a number of safety warnings, shut downs on various parameters (listed below) and full digital pressure control with PACE.

XC2004 Controller Functionality:

- Displayed while running
- Hours
- Fuel level
- RPM
- Outlet pressure

- Compressor measurements displayed
- Running hours
- Fuel level
- Clock
- Battery voltage
- Running hours
- Regulating pressure
- Emergency stop count
- Average fuel consumption
- Minor and major service counters in hours and days

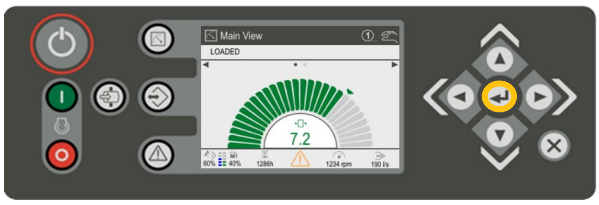
- Warnings and Shutdowns
- High temperature engine coolant
- High temperature compressor oil
- Engine oil pressure
- Low fuel level
- Low coolant

- Settings
- Reset service timers
- Diagnostics for engine ECU
- Language settings
- Unit of measure changes
- Electronic pressure adjustment (**PACE**)
- Presetting two (high/low) pressure settings

- Operational Buttons
- Start and stop of the unit
- View measurements, settings and alarms
- Multi position cursor to navigate menus
- PACE digital pressure control

- Engine measurements displayed
- Current fuel rate
- Engine coolant temperature
- Engine oil pressure
- Engine RPM

- Alarms
- View current & historical alarms present
- History of last 20 alarms and events with time and date stamps
- DM1 & DM2: View current engine codes (SPN/FMI)



Bodywork

HardHat™: Our HardHat™ version comes standard with dual wall, 0.2’’ thick, Polyethylene material providing superior corrosion, and UV protection against fading and discoloration. As well as unmatched dent and damage resistance. The canopy is sound attenuated to meet the most current legal noise requirements. A clamshell style hood offers easy service access to all components.

Warranty Coverage

John Deere Engine: John Deere Diesel engines are warranted to be free from defects with regard to materials and workmanship for the period of twelve (12) months from the date of initial start-up, prior to the accumulation of 2000 running hours. All John Deere powered air compressors are subject to a 5 year (5,000hr) limited extended warranty. The extended warranty must be registered with John Deere by the original purchaser, at time of purchase, in order to qualify. Please see John Deere's air compressor extended warranty terms, conditions and further details.

Atlas Copco Compressor: Warrantied to be free from defects with regard to material and workmanship for the period of eighteen (18) months from date of shipment from the factory, or twelve (12) months from date of initial start-up, whichever occurs first, without limitation of running hours.

Air compressor element assemblies used in Atlas Copco portable air compressors, is warranted to be free from defects with regard to materials and workmanship for the period of thirty (30) months from date of shipment from the factory, or twenty-four (24) months from date of initial start-up, whichever occurs first, without limitation of running hours. Atlas Copco service kits including parts and oils (PAR Oil's) must be used to maintain warranty. Failure to register warranty upon initial start-up may cause warranty claim delays or rejection of claims.

PRODUCT: Portable Compressors	EXTENDED WARRANTY PERIOD*: 24 months from date of end of initial standard warranty term. For the compressor's air system **, the warranty period is an additional 96 months from the end of the 24 month extended warranty term. For the engine, see Footnote 1 below.
* Requirements for Extended Warranty; · Service maintenance must be completed according to published intervals while utilizing genuine Atlas Copco/Chicago Pneumatic/American Pneumatic Tool parts and lubricants. Record of such maintenance must be entered onto Machines Online for the specific serial number and include all required information including date service performed, service interval performed, and part numbers used. · Oil sample (engine or compressor) to be taken at any time of failure and available upon request · Oil sample kit part number 9753300442 available for purchase · Unit must be available for onsite inspection by a representative of Power Technique North America if required · Unit must be available for transport to a Power Technique North America service center location if required · Failed components must be retained and available for return and inspection if required	
** Air end system component exclusions: Electrical components (i.e. Sensors, wiring), Perishable items (i.e. Rubber, plastics), Wear and air regulation items (i.e. Check valves, couplings)	
Note: End users are authorized to complete the required preventative maintenance utilizing genuine parts and lubricants purchased from an authorized dealer. Service maintenance recorded into Machines Online are to be completed by the authorized dealer where products purchased or another authorized dealer after providing proof of purchase for genuine parts and fluids utilized..	
Note: Equipment/machinery/components/Accessories/parts/items sold by SELLER but not manufactured by SELLER or an affiliate (including but not limited to a Product's engine, alternator, tires, battery, carrier, electrical equipment, and hydraulic transmission, if applicable) are not warranted by SELLER and shall carry whatever warranty (if any) which the manufacturer has conveyed to SELLER to the extent it can be passed on to the purchaser.	