



Air Drilling Specialties
 6750 South Hwy 87
 Duchesne UT 84021
 Office: 435-738-2517
 Fax: 435-738-2527
 Email: airdrilling@sbtnet.com
 www.airdrillingspecialties.com

Specifications on Keystone Gardner Denver 6.5" x 5" Two-Stage Air Booster - Heavy Duty Oil Field Skid

Booster	
Make	Gardner Denver
Frame	JY-500 (Joy WB-12)
Type	Two Stage "Y" Frame
RPM (Maximum)	700
Stroke (in)	7
Max Rated Rod Load (lbs)	15,000

1st Stage Cylinder	
Cylinder model (in)	6.5
Style	Double Acting
M.A.W.P. (psi)	1665
Cylinder Bore (in)	6.5

2nd Stage Cylinder	
Cylinder model (in)	5
Style	Double Acting
M.A.W.P. (psi)	2050
Cylinder Bore (in)	5

Coolers	
Construction	Steel Tube and Fin
Precooler M.A.W.P. (psi)	600
Intercooler M.A.W.P. (psi)	1200
Aftercooler M.A.W.P. (psi)	2200
ASME Code Stamp and National Board Registered	

Scrubber Bottles	
1st Stage M.A.W.P. (psi)	600
2nd Stage M.A.W.P. (psi)	1200
ASME Code Stamp and National Board Registered	

Pulsation Bottles	
1st Stage M.A.W.P. (psi)	1220
2nd Stage M.A.W.P. (psi)	1935
ASME Code Stamp and National Board Registered	

Engine	
Make	Caterpillar
Model	C-16
Speed Rated (rpm)	1800
Speed Idle (rpm)	700
BHP @ Rated Speed	630
Fuel/Cooling	Diesel/Water
Electrical System (volts)	24
Fuel Tank (or Day Tank)	Day Tank
Starting System	Electric

Heavy Duty Oil Field Skid Details	
(4) 12" wide flange beams	
Cross braced/reinforced	
Headache bar front/back	
Top plated 1/8" material	
Bottom plated 1/4" material	

Approximate Unit Dimensions	
Overall Length (in)	24' 5"
Overall Width (in)	8' 1"
Overall Height (in)	8' 9"
Weight (lbs)	33,900 (est.)

Miscellaneous	
Inlet Piping Size (in)	2" NPT
Number of Piping Inlets	3
Discharge Piping Size (in)	3" NPT
Number of Piping Outlets	1
Final Safety Relief Valve Setting (Booster MAWP) (psi)	1500

Unit Includes the Following Safety Shutdowns and Gauges:

Booster Shutdowns
High Discharge Temperature Shutdown (Each Stage)
Low Booster Oil Pressure Shutdown

Engine Shutdowns
Caterpillar ECM with Standard Shutdowns

Booster Gauges
Suction Pressure
Interstage Pressure
Discharge Pressure
Booster Oil Pressure
Booster Coolant Temperature (Each Cylinder)
Air Temperature (Each Scrubber & Pulsation Bottle)

Engine Gauges
Voltmeter
Tachometer/Hour Meter
Engine Oil Pressure
Engine Oil Temperature
Engine Water Temperature

Additional Comments

Booster set up for single or 2-stage operation (selectable)
Booster oil cooler and thermostatic valve included

Booster bypass piping included
All piping is hydrotested

Performance of Keystone Gardner Denver 6.5" x 5" Air Booster

Performance in Two-Stage Operation Mode				
Engine RPM	Booster RPM	Suction Pressure (PSI)	Disch. Pressure (PSI)	Flow (SCFM)
1800	600	350	800	3311
1800	600	350	1000	3296
1800	600	350	1200	3282
1800	600	350	1400	3270

Performance in Single-Stage Operation Mode				
Engine RPM	Booster RPM	Suction Pressure (PSI)	Disch. Pressure (PSI)	Flow (SCFM)
1800	600	350	600	5100
1800	600	350	800	4900
1800	600	350	1000	4700

Booster Rated Discharge Pressure (RDP) = 1400 psi