# **Pipeline Service Compressor (PSC)**





The PS175 Pipeline Service Compressor is a 2–stage (reciprocating and rotary screw) natural gas compressor for evacuating natural gas pipelines with pressures up to 1,200 psi (8,275 kPa). Isolated sections of pipeline are evacuated and discharged into an adjacent section of pipeline.

The PS175 compressor completely eliminates flaring, venting and the associated environmental impacts while conserving saleable natural gas. As gas is not released during the evacuation process, the compressor can be operated in built up and urban areas, reducing the length of pipeline isolation required and allowing for faster service with less disruption to customers.

Trailer mounted and engine powered from pipeline gas, performance can be monitored remotely with real-time status on any web-enabled device. Operation is fully PLC controlled and automated based upon user configured parameters and setpoints.

#### 800 800 psig initial pressure, 1 km length 30 in 700 24 in 12 in 600 Pipeline Pressure (psig) 6 in 500 400 300 200 100 0 0 2 3 5 6 8 9 10 11 12 1 7 Time (hours)

#### Time to evacuate various pipeline diameters

### **Applications**

- Gas pipeline evacuation
- Inline Inspections
- Maintenance and Repair
- MAOP testing
- Pig pushing
- Pressure boosting
- Decommissioning

#### Standard Features

- 2-stage compression for ΔP up to 900 psi (6,200 kPa)
- Natural Gas powered; no external fuel or power source required
- Rapid setup and breakdown
- Aftercooler limits discharge temperature to protect plastic / composite pipe
- Intuitive web browser based HMI
- Fully controllable based on user parameters and stop conditions
- Automatic operation and remote monitoring capability allowing unsupervised operation
- EPA / CARB Certified Natural Gas engine

#### **Benefits**

- Energy savings and conservation of gas
- Completely eliminate flaring and venting
- Minimize CO<sub>2</sub> and methane emissions
- Reduce isolated pipeline pressure to 0 psig
- Ability to reach vacuum pressure of -3.0 psig
- Able to locate in urban areas to minimize service disruption
- Alternative to nitrogen displacement
- Inline compressors can remain in operation

# www.compactcompression.com

# **Performance Chart**

DISCHARGE PRESSURE Max ΔP: 900 psi / 6205 kPa									
SUCTION PRESSURE	<b>PSI</b> kPa	<b>300</b> 2070	<b>400</b> 2760	<b>500</b> 3445	<b>600</b> 4135	<b>700</b> 4825	<b>800</b> 5515	<b>900</b> 6205	<b>1000</b> 6895
	<b>100</b> 690	<b>885</b> 25.1	<b>818</b> 23.2	<b>745</b> 21.1	<b>744</b> 21.1	<b>677</b> 19.2	<b>660</b> 18.7	<b>630</b> 17.8	
	<b>200</b> 1380	<b>1535</b> 43.5	<b>1391</b> 39.4	<b>1256</b> 35.6	<b>1130</b> 32.0	<b>1017</b> 28.8	<b>660</b> 18.7	<b>630</b> 17.8	<b>787</b> 22.3
	<b>300</b> 2070	<b>2530</b> 71.6	<b>2372</b> 67.2	<b>2222</b> 62.9	<b>2081</b> 58.9	<b>1946</b> 55.1	<b>1817</b> 51.5	<b>1691</b> 47.9	<b>1577</b> 44.7
	<b>400</b> 2760		<b>3389</b> 96.0	<b>3227</b> 91.4	<b>3075</b> 87.1	<b>2929</b> 82.9	<b>2788</b> 78.9	<b>2652</b> 75.1	<b>2310</b> 65.4
	<b>500</b> 3445			<b>4276</b> 121.1	<b>4113</b> <i>116.5</i>	<b>3957</b> 112.0	<b>3807</b> 107.8	<b>3662</b> 103.7	<b>2934</b> 83.1
	<b>600</b> 4135				<b>5210</b> 147.5	<b>5044</b> 142.8	<b>4885</b> 138.3	<b>4731</b> 134.0	<b>3818</b> 108.1
	<b>700</b> 4825					<b>6168</b> 174.7	<b>6001</b> 169.9	<b>5840</b> 165.4	<b>5051</b> 143.0
	<b>800</b> 5515						<b>7153</b> 202.6	<b>6984</b> 197.8	<b>6820</b> 193.1
	<b>900</b> 6205							<b>8192</b> 232.0	<b>8008</b> 226.8
	<b>1000</b> 6895								<b>9191</b> 260.2

Projected Performance based on 2500 ft, gas density .665, temp 68°F – Flow Rates in **mscfd** e3m3/day . Dual stage operation. Steady state flow rate. Flow rate reduces with pipeline pressure during evacuation.

\*Contact Compact Compression for applications over 1000 psig.