

Pipeline Service Compressor



CHZERO
EMISSIONS

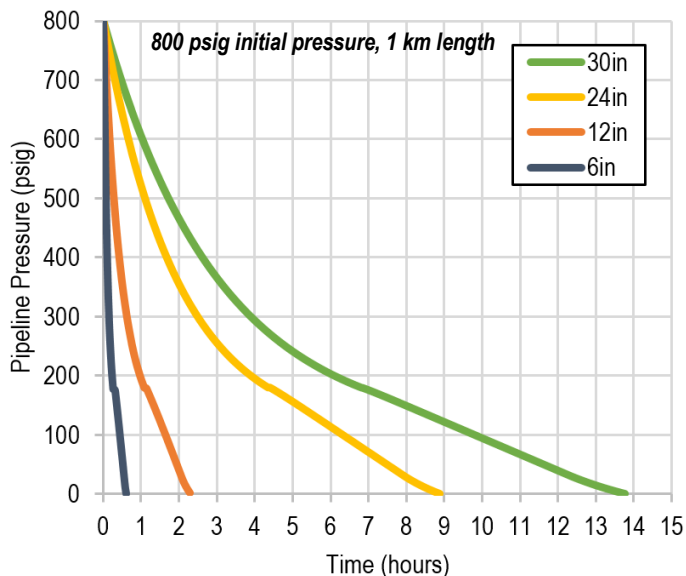


The PS175 Pipeline Service Compressor is a 2-stage (reciprocating and rotary screw) natural gas compressor for evacuating natural gas pipelines with pressures up to 1,100 psi (7585 kPa). Isolated sections of pipeline are evacuated and discharged into an adjacent section of pipeline.

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.

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 1,100 psi (7585 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 CO₂ 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

Performance Chart

DISCHARGE PRESSURE Max ΔP: 1100 psi / 7585 kPa										
SUCTION PRESSURE	PSI	300	400	500	600	700	800	900	1000	1100
	kPa	2070	2760	3445	4135	4825	5515	6205	6895	7585
0		575	560	520	500	460	450	430	400	380
0	16.3	15.9	14.7	14.2	13.0	12.7	12.7	12.2	11.3	10.8
100		1050	1050	1000	930	850	830	800	760	720
690	29.7	29.7	28.3	26.3	24.1	23.5	23.5	22.7	21.5	20.4
200		1512	1371	1239	1115	1017	896	800	760	720
1380	42.8	39.4	35.1	31.6	28.8	25.4	22.7	21.5	20.4	20.4
300		2489	2333	2186	2048	1916	1788	1665	1554	1445
2070	70.5	66.1	61.9	58.0	54.3	50.6	47.1	44.0	40.9	40.9
400		3329	3171	3022	2879	2741	2607	2478	2478	1960
2760		94.3	89.8	85.6	81.5	77.6	73.8	70.2	55.5	55.5
500			4196	4037	3884	3738	3596	2690	1661	1661
3445			118.8	114.3	110.0	105.8	101.8	76.2	47.0	47.0
600				5107	4945	4790	4639	3683	2176	2176
4135				144.6	140.0	135.6	131.4	104.3	61.6	61.6
700					6041	5878	5719	5212	3461	3461
4825					177.1	166.4	161.9	147.6	98.0	98.0
800						6998	6833	6673	5432	5432
5515						198.2	193.5	189.0	153.8	153.8
900							7976	7810	7435	7435
6205							225.9	221.2	210.5	210.5
1000								8973	8804	8804
6895								254.1	249.3	249.3

Projected Performance based on 2500 ft, gas density .656, temp 68°F – Flow Rates in **mscfd** e3m3/day . Steady state flow rate.

Flow rate reduces with pipeline pressure during evacuation.

 Two stage operation.