

CO₂ Solutions

PUMPS ■ ACCESSORIES ■ CUSTOM UNITS

Possible Applications:

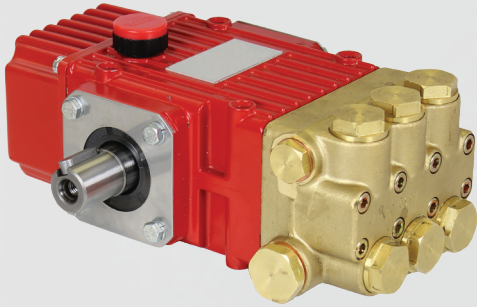
- Bottle and Vessel Filling
- CO₂ Jet Cleaning
- Decaffeination
- Deoiling of Fast Foods
- Disinfection
- Disinsection
- Dry Cleaning
- Extraction Processes
- Oil Production
- Parts Cleaning
- Textile Cleaning
- Textile Dyeing
- Other Applications Available



GIANT

Performance Under Pressure

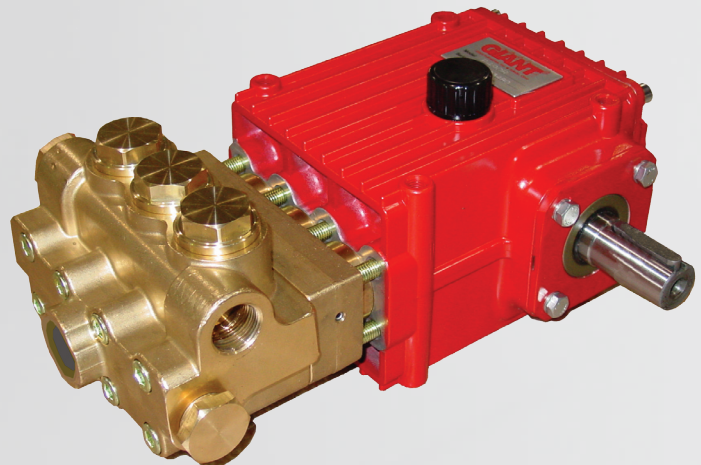
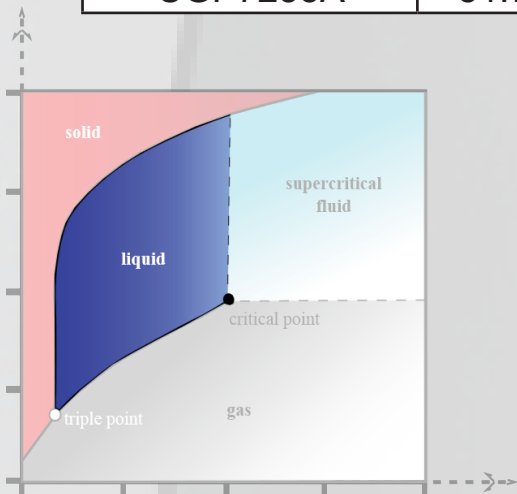
Standard CO₂ Pumps



Your growth depends on providing a quality product with the engineering to withstand the harshest conditions. With a German/American background Giant's CO₂ line of pumps not only meets your needs, but they provide solutions that help your company grow.

Giant Industries is pleased to offer specialized solutions to your CO₂ needs. Any flow and pressure available. We can create custom units. Contact us for help with any application and let us work for you.

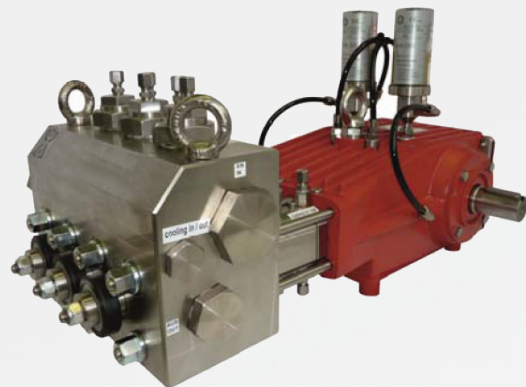
Standard CO ₂ Pumps					
Pump Model	Maximum Volume		Maximum Pressure		Speed
	GPM	LPM	PSI	bar	RPM
CP230	0.5	1.8	2000	140	780
CP218	1.4	5.3	2000	140	780
CP220	1.9	7.3	2000	140	780
CP425	5.5	21.0	2000	140	780
CP420	6.4	24.3	1740	120	780
CP470	9.2	35.0	1740	120	780
CLP200	9.5	36.1	1740	120	500
CLP121A	16.3	61.6	1740	120	500
CLP121A-4000	16.3	61.6	1740	120	500
CGP7255A	51.7	195.0	1450	100	550



Performance Under Pressure

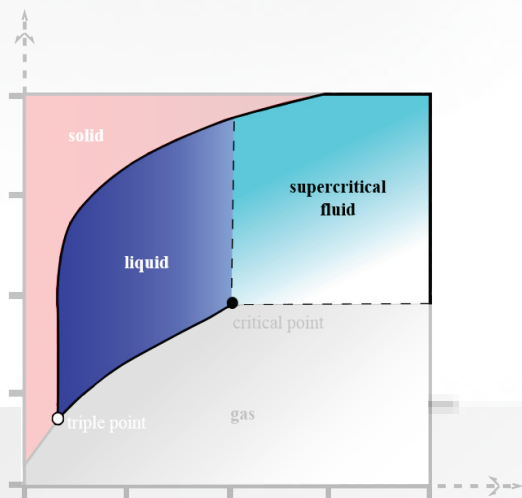
Supercritical / Circulation CO₂ Pumps

Pumps have been developed for the **supercritical area** which can pump CO₂ up to 4350 PSI (300 bar) and can also circulate it in this pressure range (i.e. an input and output pressure up to 4350 PSI [300 bar] at 0-13.5 GPM [0-51 L/min]). These pumps have a small dead space ratio which enables CO₂ to be pumped at large pressure ratios in the supercritical/elastic range. These pumps come with 5 cooling circuits. These circuits allow frictional heat from the seals to be carried away and protect the CO₂ in the suction channel from becoming warm. In addition, it is possible to liquefy gaseous CO₂ to start the pump again after it has been stopped. The seals as well as the valves are compact, closed units which allow for quick and easy servicing. These pumps come with the additional new feature of a grease-lubricated drive fitted with anti-friction bearings. The drive allows for a control range of 0-100% and works without oil. This pump has been developed for all processes where CO₂ is circulated under high pressure (extraction, impregnation, etc).



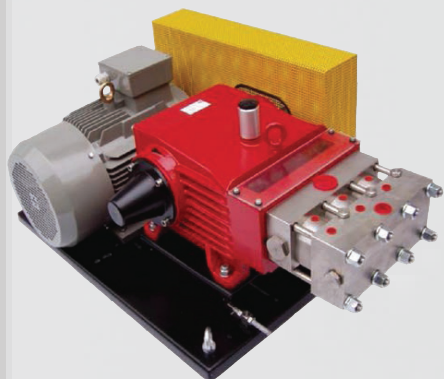
Supercritical Circulation CO ₂ Pump					
Pump Model	Maximum Volume		Maximum Pressure		Speed
	GPM	LPM	PSI	bar	RPM
CLP124C	13.5	51	4350	300	1000
CLP124G	13.5	51	4350	300	1000

Materials	
Valve Casing	Stainless Steel AISI 303
Plunger	Hard Metal Coated Stainless Steel
Valves	High Grade Stainless Steel
HP Seals	Teflon or Aramid Packing
Crankshaft	Drop forged and case hardened



Performance Under Pressure

CO₂ Liquid and Gaseous Pump Compressor

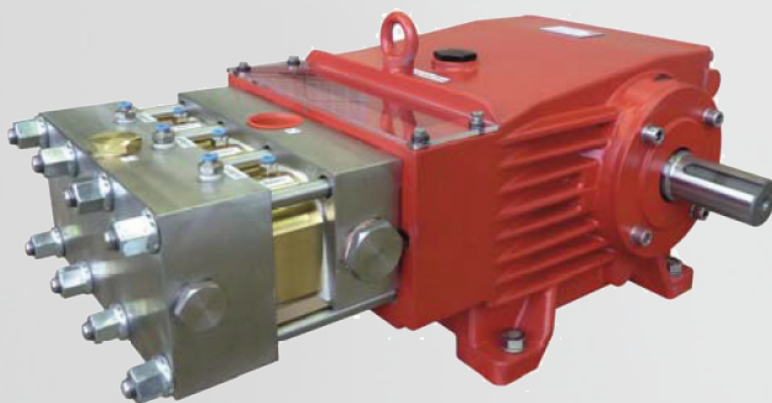
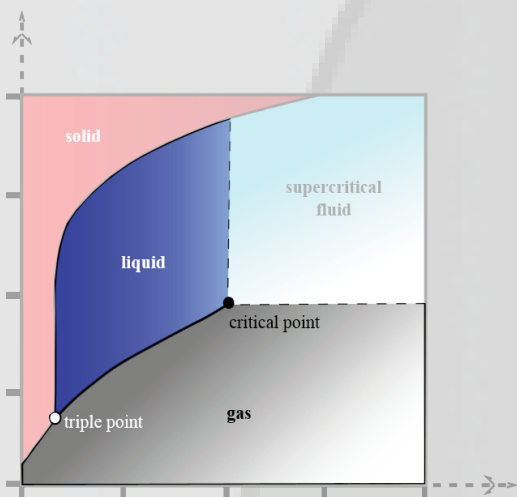


The compressor can pump gaseous CO₂ from vessels back to the storage vessel. The pressure in the vessel is reduced to approximately ambient pressure. Any remaining CO₂ in the vessel is not lost to the surroundings.

Piston seal life is long due to the cooled cylinder. The cooled discharge casing has a positive effect on the seals and reduces the outlet temperature.

The pump compressor has been designed which can pump gaseous and liquid CO₂ <72.5 PSI (<5 bar) in the liquid phase against the tank pressure at a maximum system pressure of 1160 PSI (80 bar) with an efficiency equal to conventional oil-lubricated compressors and significantly superior to centrifugal pumps.

CO ₂ Pump Compressor					
Pump Model	Maximum Volume		Maximum Pressure		Speed
	GPM	LPM	PSI	bar	RPM
CGP7163	59.3	224.4	1160	80	480



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Performance Under Pressure

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