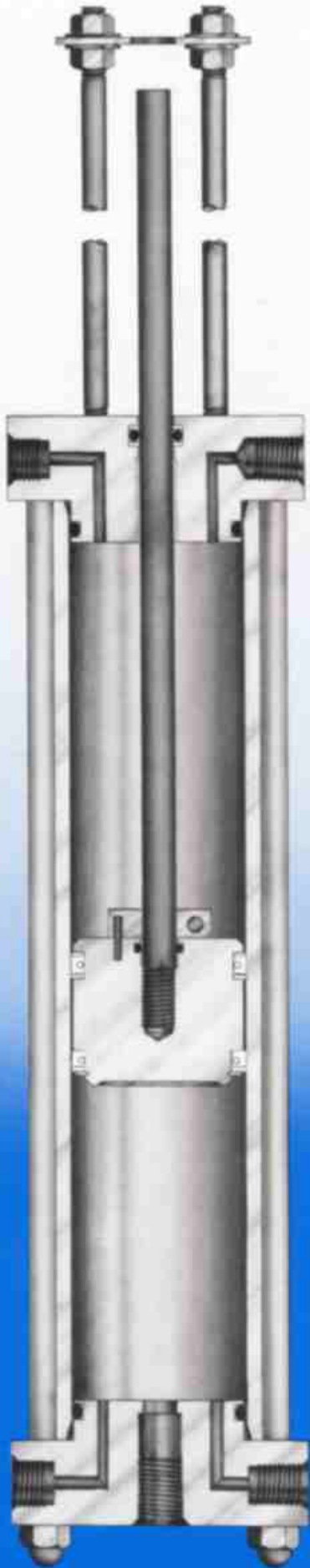


Purge End Cap

# *Constant Pressure Sample Cylinders*

*CP2-SI*

*CP2-G*



*CP2-M*

*CP2-GM*



Welker Engineering Company manufactures the most versatile and respected line of constant pressure sample cylinders in the Oil and Natural Gas Industry.

At Welker Engineering Company, quality and craftsmanship in both construction and design are most important. This is reflected in our current line of constant pressure sample cylinders. Listed here are five of our more popular models:

**CP2-SI** Convenient size and ease of use typify this constant pressure sample cylinder. An indicating rod and an 80% of capacity indicating tower provide positive reference to the location of the piston. This cylinder is ideal for the transport of natural gas liquids, natural gas, and specialty gas products. Capacities of 100cc through 1000cc are available. D.O.T. approved. Exemption number DOT-E 7657.

**CP2-M** Convenient size, ease of use, and excellent mixing action make this the most popular and respected mixing cylinder available today. It features an indicating rod with an 80% of capacity indicating tower for quick and positive reference to the collected volume, and a mixer which utilizes vortex action for unsurpassed mixing of stratified product. Capacities of 100cc through 1000cc are available. D.O.T. approved. Exemption number DOT-E 7657.

**CP2-G** This cylinder utilizes a pin tracker to provide positive reference to the location of the piston. The tracking system is highly resistant to heat and chemical attack, and may even be used in a moderate oven. This cylinder is designed for the transport of natural gas liquids, natural gas, and specialty gas products. Capacities of 100cc through 1000cc are available. D.O.T. approved. Exemption number DOT-E 7657.

**CP2-GM** This cylinder is designed to have both a short overall length and a gravity action mixer. The mixer is a stainless steel device which works in conjunction with the cylinder saver rod. Mixing is accomplished by inverting the cylinder several times. The mixer slides along the cylinder saver rod, thereby eliminating any contact with the cylinder wall. The piston is tracked by a pin tracker, a rugged system which provides a highly visible indication of piston

Welker Engineering Company makes a full line of oil, liquid hydrocarbon, and gas sampling equipment, each item manufactured to the highest standards of quality and craftsmanship. Contact us with your sample collection needs. We are ready to serve you.

location. Capacities of 100cc through 1000cc are available. D.O.T. approved. Exemption number DOT-E 7657.

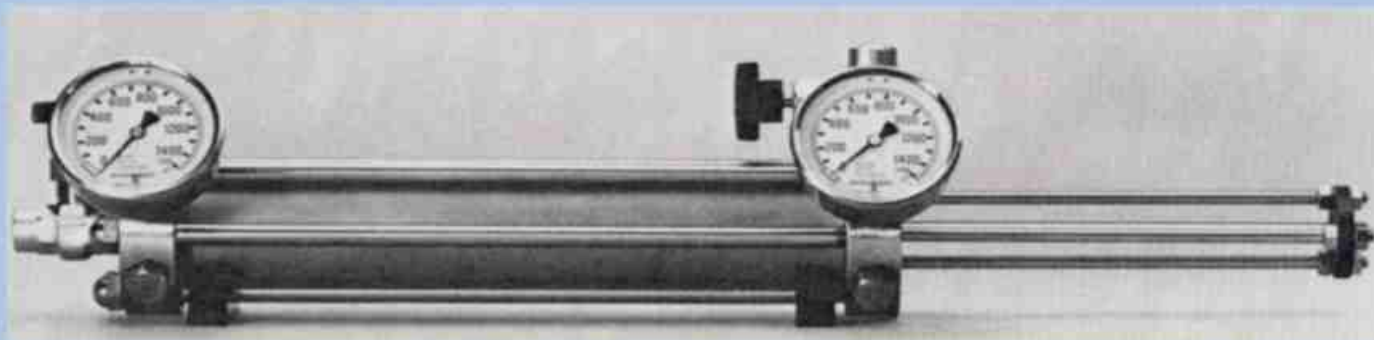
**CP2-FWM** The "Water Watcher" is unique in that it allows the user to actually see how much water a collected sample contains. The sight glass through which the water is visible is calibrated. This allows the user to calculate what percentage of the sample is water. The "Water Watcher" also features an indicating rod with an 80% of capacity indicating tower and the vortex mixer. Capacities of 100cc through 1000cc are available. D.O.T. approved. Exemption number DOT-E 7657.

The pistons, end caps, indicating rods, mixers, tie rods, and nuts are all fashioned from 316 stainless steel. The cylinder is also constructed of 316 stainless steel. The stainless steel construction of our constant pressure sample cylinders give them excellent resistance to corrosion and exceptional longevity. Each cylinder is hydrostatically tested to 3600 psi and inspected. Constant pressure sample cylinders are available in any size and other materials. Contact Welker Engineering Company for information.

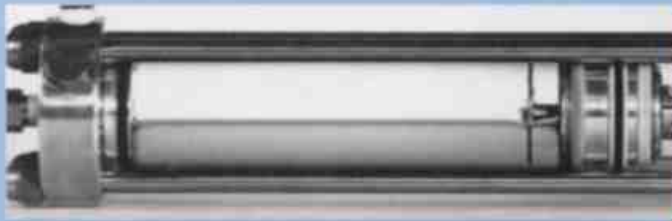
Carrying cases designed for our cylinders are available. Lined with thick polyurethane foam, they provide exceptional protection for the cylinder, valves, reliefs and gauges as specified by the D.O.T. They are formed of fiberglass reinforced plastic and feature stainless steel full length hinges, latches with padlock provisions, and padded handles.

The MC-3 and the MC-5 offer the same protection of 300cc and 500cc standard sample cylinders with valves and reliefs attached. They are also formed of fiberglass reinforced plastic and lined with thick polyurethane foam. One to five cylinders fit into each case, which features a comfortable built-in handle. The full length hinges and the latches (with padlock provisions) are made of stainless steel. All of our cases meet shipping requirements.

These cylinders listed here represent but a portion of our line. D.O.T. approved cylinders are available in sizes through 6000cc. We also have the capabilities to design and build custom cylinders to fill almost any need. Call us with your questions or ideas.



Cylinder Shown: CP2-SI



## VORTEX MIXER

Stratification of a sample can occur when the sample consists of multiple components. This stratification must be broken up in order to achieve accurate test results. The vortex mixer accomplishes this most effectively.

The vortex mixer consists of a disc fastened to the end of a rod. The rod passes through a series of seals and bearings so as to be accessible from outside the cylinder. With just a few quick strokes the entire collected sample is made perfectly homogeneous, regardless of product composition. If the sample was collected properly, this will assure accurate test results.

	SI and M				G and GM		End Cap Dia.
	A	B	C	D	E	F	
CP2-100	13.3	10.7	7.9	13.3	12.6	7.4	3.00
CP2-150	15.7	12.2	9.3	16.0	14.0	8.8	3.00
CP2-300	22.8	16.2	13.3	24.0	18.0	12.8	3.00
CP2-500	30.8	20.5	17.7	32.8	22.4	17.2	3.00
CP2-800	46.0	29.5	26.7	50.8	31.4	26.3	3.00
CP2-1000	54.7	34.0	31.2	61.3	35.9	30.7	3.00

ALL DIMENSIONS GIVEN IN INCHES.

- A. Over all length of cylinder, including valves, reliefs, gauges, and 80% indicating tower.
- B. Over all length with indicating tower removed, but including valves, reliefs and gauges.
- C. Over all length with indicating tower, valves, reliefs, and gauges all removed.
- D. Over all length with indicating tower, valves, reliefs, and gauges all in place and indicating rod extended fully (past 80%).
- E. Over all length of cylinder including valves, reliefs, and gauges.
- F. Over all length with valves, reliefs, and gauges removed.



## PURGE END CAP

Welker Engineering Company offers the purge end cap as an option for all of our constant pressure sample cylinders. A valve, built into the side of the flange, is ported to the internal face of the end cap. This valve allows the operator to purge the inlet piping through the inlet valve and to the face of the piston. This eliminates any possibility of contaminants being trapped in the inlet piping.



## CP2-FWM



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