

What is it?

Calibration Columns, with or without ball valve, provided by Lutz-JESCO America Corporation are robust construction tubes. They come with a sealed top and overflow connection. Eight sizes are available: 100 ml, 200 ml, 500 ml, 1000 ml, 2000 ml, 4000 ml, 10,000 ml, and 20,000 ml. The proper size can be selected to fit any flow requirement from less than a gallon per hour to 640 gallons per hour. Flanges are supplied with NPT fittings as standard.

What does it do?

JESCO's Calibration Columns are an important addition to any chemical feed system. They help ensure that the pump is pumping the specified amount of fluid by providing verification of the flow rate of the metering pump, thus they are instrumental in accurately metering the process fluid. They have the following key features:

- High reliability, low cost
- High contrast graduation markings
- Clear easy view tube
- Robust construction
- Direct GPH readout
- Sealed top with overflow connection

What happens without it?

Without a Calibration Columns, you won't be able to determine your system's required flow rate, neither at the initial start-up or following routine maintenance.

Where does it go?

The Calibration Column is located in the metering pump's suction line. Flooded suction is recommended, otherwise the Calibration Column has to be filled by hand.

How does it work?

For the calibration of a chemical feed system, the Calibration Column is to be filled with water or any other neutral fluid to the top mark; close the valve from the chemical feed tank; start the metering pumps and draw down the chemical in the column for 30 seconds; stop the metering pump. The reading on the left side of the column is a direct readout in US gph.

Alternatively, observe the volume drawn on the ml scale. To convert to lph or gph use the appropriate formula below:

$$\text{lph} = (\text{volume}/\text{draw time}) \times 3.6$$

$$\text{gph} = (\text{volume}/\text{draw time}) \times 0.952$$



What is it made of?

Calibration Columns are made of corrosion resistant materials; standard units are constructed of clear PVC tubing and grey PVC flanges. The tubes are provided with precise graduations (ml and gph) around the total circumference to give an unobstructed view of the contained liquid. Borosilicate glass calibration columns are also available for use with acids and other corrosive liquids. Please consult factory for technical information on the glass cylinders.

Selection Procedures

1. Determine pump size in gallons per hour.
2. Calibration Columns should be sized to allow draw down in approximately 30 seconds. The recommendations in the table will provide an approximate 30 second draw down.
3. Select a Calibration Column material that will be compatible with fluid being pumped.
4. Note that Calibration Columns are not designed for operation above atmospheric pressure.

Note: Maximum cylinder pressure is 15 psi.

Selection Table

Size (mL)	Maximum Pump Flow Rate Recommended (gph)
100	3.2
200	6.4
500	16
1,000	32
2,000	63
4,000	127
10,000	320
20,000	640

