Functional Description

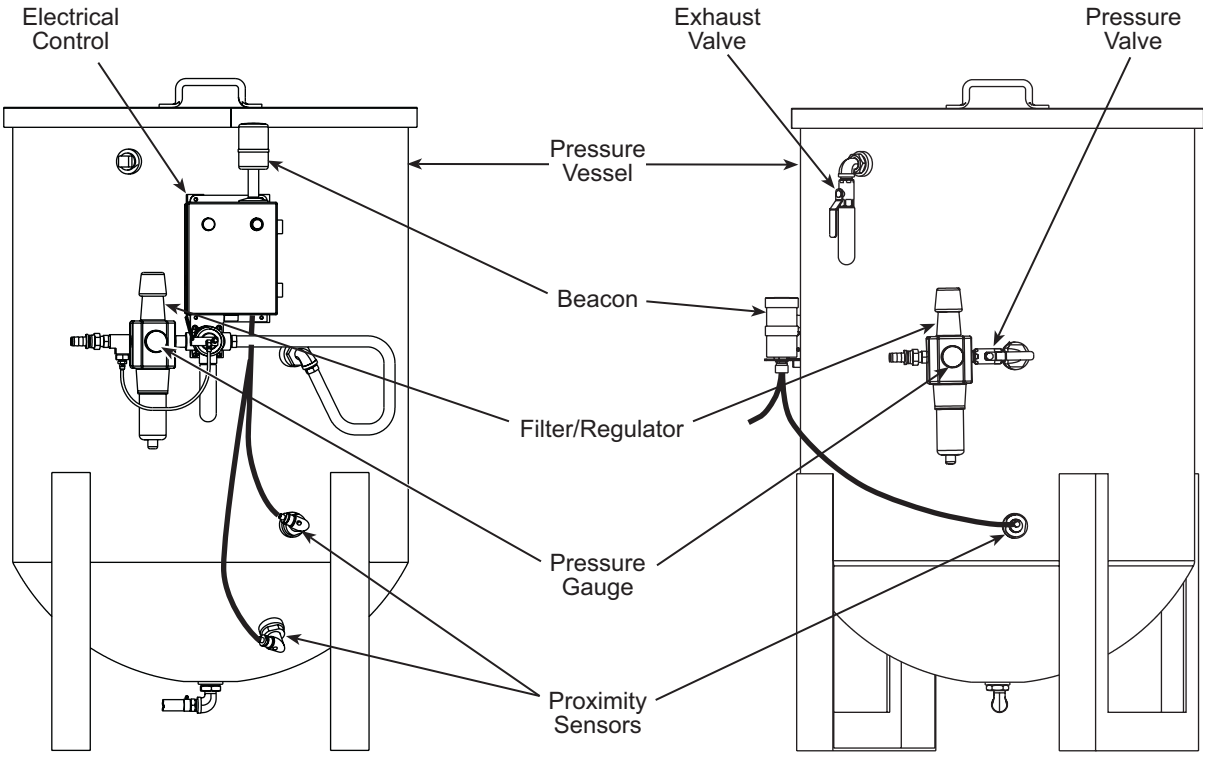
The dense phase hopper system delivers abrasive to abrasivejets. The system consists of two major components: a pressure vessel (also called the main hopper) which holds the abrasive, and a separate mini-hopper which controls flow of the abrasive to the abrasivejet (such as the Permalign cutting head).

Low pressure positive air in the pressure vessel transfers the abrasive through flexible tubing to the mini hopper. The mini hopper is equipped with an adjustable gate to control the flow of grit delivered to the abrasivejet. The vacuum is produced in the abrasivejet mixing chamber helps pull the abrasive trough the tubing from the mini hopper. The abrasivejet mixes the abrasive with ultra high pressurize water to be directed against the material to be cut.

Pressure Vessel

The pressure vessel (also called main hopper) is a cylindrical container that holds the abrasive. The pressure vessel is available in two configurations, advanced and basic.

- The **advanced configuration** has a solenoid valve and electronics to control the air pressure in the pressure vessel. Two proximity switches detect when abrasive level is low and near empty.
- The **basic configuration** has two ball valves to control the air pressure in the pressure vessel. A proximity sensor detects when the abrasive level is low.



Pressure Vessel Component Identification