Shot feeders are used to feed treatment chemicals to water systems. This can include corrosion inhibitors, biocides, wet-layup chemicals, scale inhibitors, cleaners, glycols, etc. In order to get these chemicals into the system, you must have flow through the shot feeder. The inlet water pressure must be higher than the outlet water pressure. The figures below illustrate three strategies for shot feeder installation.

Figure 1 uses the pump discharge and suction as the driving force across the shot feeder. Figure 2 uses a valve or orifice to create a pressure differential between the inlet and outlet of the shot feeder. Simply installing the shot feeder’s inlet and outlet on the same length of pipe without anything to create a pressure differential will result in your chemicals remaining in the shot feeder with no flow. Figure 3 uses makeup water supply to provide a boiler with wet layup chemicals.