Belden Universal offers customized universal joints and complete drive shaft assemblies for the Nuclear Power Industry. Nuclear Power has a variety of applications that require a manufacturer to comply with complex regulatory standards.

The Belden universal joint drive shaft assemblies in the reactor are the rotary actuation linkage which connects to valves that control the Recirculation System (RS) and the Circulating System (CS). The RS & CS Systems start when there is a buildup of steam in the containment area. The steam is cooled and the RS & CS System forces the steam to condense and turn back into liquid to reduce the pressure in the containment area. Once in liquid form, it is moved away from the containment area and put back in the system.

Glove boxes are a main component in protective work stations that allow operators to handle radioactive materials safely. Two types of glove boxes exist allowing a person to work with hazardous substances, such as radioactive materials and the other allows manipulation of substances that must be contained within a very high purity inert atmosphere. Remote glove boxes can control rotary actuation for use in plant maintenance functions.

Belden Universal has been successful in supplying custom universal joints and drive shafts for such applications as nuclear reactor safety valves and glove boxes to repurpose material for reactor fuel assemblies. Both projects have led to repeat orders and gaining new customers within the diverse segments of nuclear power.