Cameron’s ORBIT® rising stem ball valve’s unique tilt-and-turn design, which reduces seal rubbing and delivers reliable performance, is the proven technology for arduous process conditions. From high-temperature, critical isolation to molecular sieve switching services, Cameron’s ORBIT rising stem ball valve continues to be a valve of choice. This legacy of innovation is present throughout the brand’s history, beginning in the industry a century ago.

Only five years after Oklahoma became a state, The Oilwell Improvements Co. of Tulsa was established by Alfred G. Heggem as an iron foundry and machine shop with the purpose of manufacturing and selling oil well supplies and machinery. At its creation in 1912, the early line included such products as the wireline oil saver, a tool that was fitted around cable tool drilling lines to save excess oil. Heggem also developed the control casing head—a modified version of a plug valve that allowed closure on the drilling line, rather than a tapered plug. This could be called the forerunner of the modern BOP.

These products were born out of ideas Heggem conceived while working for the US Bureau of Mines on trips to the early oil fields of Oklahoma, West Virginia and Texas. His inventions and concern for oil and natural gas conservation caused the US Department of the Interior (DOI) to give him the first known occurrence of the title Petroleum Engineer in 1912. The honor is fitting for the man who the DOI credits as being co-inventor of drilling mud—fluid that makes drilling a well safer and more efficient.

His groundbreaking ball valve seating principle, patented in 1935, was considered by many at the time to be the first major advancement for valves in half a century, which led directly, on April 28, 1936, to Heggem being granted the world’s first true ball valve patent. This patent is the forerunner to all ball valves today. The now recognizable ORBIT brand name was brought to being in 1934 when it was trademarked and copyrighted in relation to the valve technology. Nearly 80 years later, the same engineering technology still is used to safeguard against seat rubbing—a leading factor for why ORBIT valves are world-renowned for high integrity and long service life.

The legacy of ORBIT service sprang out of the difficulty the company encountered initially in selling the innovative technology. Being such a departure from the well-known plug valve and wedge gate valves that had been in use for years, the salesmen were encouraged to sell ORBIT based on its reliable field repair service and quick delivery. In fact, many of the salesmen stocked the valves in their garages at home, so that they might deliver the valve faster upon order. This commitment to service has stayed with the brand.

Cameron acquired ORBIT in 1998. Today, ORBIT valves are used in major LNG and natural gas plants in the world for molecular sieve services and are in service in the offshore and onshore production, enhanced oil recovery, transmission and storage, refining oil, petrochemical and chemical, gas processing, LNG, and industrial markets.