AEV™ C-Ball Valves
Superior valve technology for cryogenic process isolation

Traditional cryogenic valve designs have long forced operators along the LNG value chain to take on excessive capital costs for installation and to endure high operating costs so that these poorly suited designs can maintain an acceptable level of efficiency and safety. There must be a better solution.

Liquified natural gas expands to 600x its size when returning to a gaseous state. If trapped in a valve cavity, the damage can be catastrophic and traditional safeguards still present risks.

The inability of traditional valve designs to prevent leakage due to temperature and pressure fluctuations along the LNG value chain has forced operators to concede the impact on profitability.

Traditional solutions for cryogenic process isolation come at an excessive installed cost as over-sized and over-complicated valve designs require inefficient pipeline routing and plant layouts.

Traditional cryogenic valves escalate operating costs with intensive maintenance schedules needed to avoid unplanned shutdowns, maintain tightness and comply with fugitive emissions standards.

What if you could solve these challenges with a single valve?

Now you can with the AEV²XC Cryogenic C-Ball Valve
AEV™ C-Ball Valves

Optimize the total installed cost of your valves

Deploy a modern design that has been optimized for size and weight while still meeting ASME B16.10 and ASME B16.34. The ²XC is 30% lighter than traditional ball valves with a top flange diameter reduced by 40% due to the C-shaped ball. The true bi-directional design also allows project teams to plan more compact pipe routing to further lower the total installed cost.

Improve the profitability of your operations

Run your processes for longer with a double offset C-ball valve design that enables non rubbing rotation to eliminate wear and extend maintenance intervals. And if maintenance is required, the ²XC features a true top entry design with minimal parts for rapid in line maintenance. The entire trim can be removed so repair work can be safely completed outside the pipeline.

Eliminate common valve safety risks

Ensure the safe handling of liquified gases with a single fixed seat valve design that completely eliminates the cavity found in traditional ball valves. With no cavity related risks or venting measures required, the ²XC is uniquely able to deliver true bi-directional, firesafe performance for a safer and simplified solution to your cryogenic process isolation challenges.

Reduce waste and improve your process efficiency

Discover sealing integrity like no other with a torque seated design that delivers leakage rates minimized to 1/10th of those required by BS 6364. Sealing energy is transmitted through the stem which is double offset to facilitate sealing by cam effect. This design eliminates springs and dynamic seals to enable superior performance independent of process pressure.