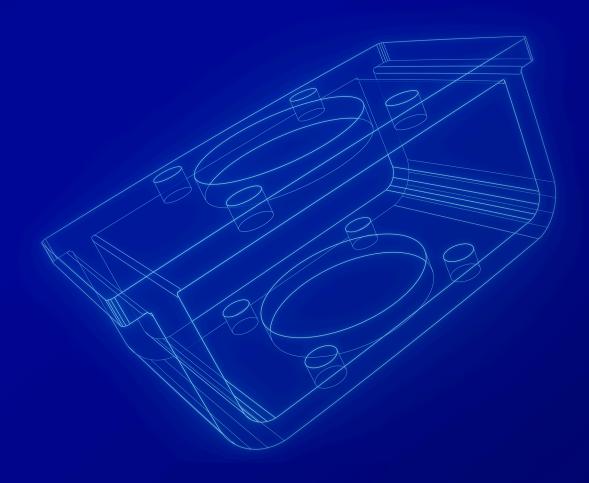
# IMPERATIVE DESIGN FEATURES OF A MOUNTING BRACKET

Valve automation brackets are mechanically loaded parts with many features and facets to their design.

Critical features of the bracket that must be considered when designing, manufacturing, and installing the mounting bracket include:



# **THICKNESS**

The bracket needs to be thick enough to prevent excessive levels of stress and deflection when transmitting the actuator torque and other loads.

# **PARALLELISM AND FLATNESS**

If the mounting surfaces are not parallel or flat, it can cause sideloading on the valve stem causing the valve or actuator to prematurely fail.

## CONCENTRICITY

Orientation between the valve and actuator mounting must be concentric. VanAire's manufacturing practices includes fixtures, jigs, and programs that ensure these mounting patterns are aligned.

### WELDING

ISO 12490 & API 6DX states, "Welding, including repair welding, of structural welds, including mounting kit, shall be performed in accordance with procedures qualified to ANSI/AWS D1.1/D1.1M or an equivalent standard." Therefore, VanAire standards help ensure that our structural welds comply with AWS standards.

### **SURFACE**

Surface protection is a great way to ensure the bracket withstands the demands of the application. VanAire offers stainless material for certain applications and powder-coated brackets as our standard finish for carbon steel brackets. Powder coating brackets has proven to create a higher-performing surface finish than spray painting; it's more predictable, consistent, durable, and corrosion resistant.

