

Structure and material list:

Body and bonnet: ASTM A216 GR.WCB

Wedge: CA15+STL6

Seat:F6A+STL6

Stem: ASTM A182 GR F6a

Gasket: SPW SS316+Graphite

Packing : Graphite

Pressure:PN160

Temperature:≤250°C

The painting is an important considered factor for offshore application valves

Selecting a suitable painting (coating) for an offshore gate valve is critical to protect it from the harsh marine environment, where factors like saltwater, humidity, and corrosion are prevalent. Here's a guide to help in the selection:

1. Corrosion Resistance

Coating Type: Use coatings with high corrosion resistance, such as epoxy-based paints, polyurethane, or zinc-rich primers.

Multilayer System: Offshore valves often require a combination of primer, intermediate, and topcoat layers to provide long-term protection.

2. Saltwater and Marine Protection

Anti-corrosive Coating: Ensure the coating can withstand constant exposure to saltwater. Marine-grade coatings, like those with anti-corrosive properties, are ideal.

Cathodic Protection: Consider pairing the valve with cathodic protection systems (e.g., sacrificial anodes or impressed current systems) for added durability.

3. Abrasion Resistance

Offshore environments can be abrasive due to debris and sand in seawater. Choose coatings with high abrasion resistance to prevent wear and tear.

4. Temperature and Pressure Conditions

The coating must also withstand extreme temperatures and high-pressure conditions typically found in offshore operations. Select coatings rated for high-temperature applications, such as silicone-based or thermal-barrier coatings.

5. Chemical Resistance

Offshore environments often involve exposure to various chemicals. Ensure the coating is chemically

resistant to any substances the valve might encounter, such as oil, gases, or cleaning agents.

6. UV Protection

Use coatings with UV-resistant properties, especially for valves exposed to direct sunlight for extended periods, to prevent degradation.

7. Application Process

Surface Preparation: Proper surface cleaning (e.g., shot blasting) is essential before applying any coating to ensure adhesion.

Compliance Standards: Ensure the coating complies with relevant industry standards (e.g., ISO 12944 for offshore corrosion protection).

By selecting coatings based on these factors, the gate valve will have a longer lifespan and perform optimally in challenging offshore environments.