

## Valve Assembly

**Company Name:** Dow Chemical

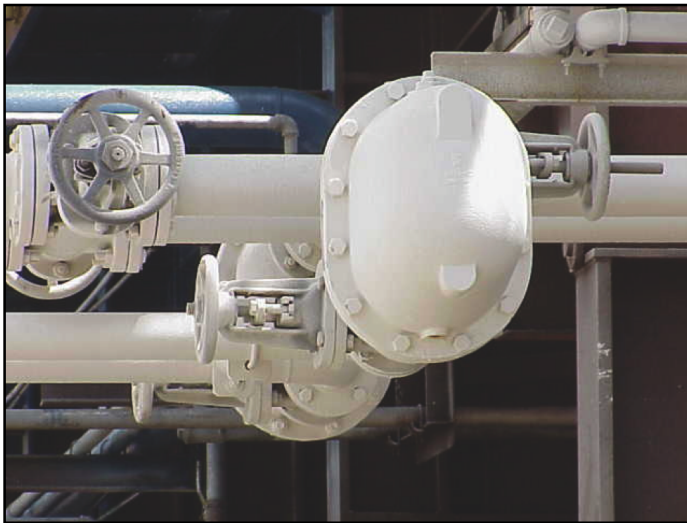
**Location:** Freeport, TX USA

**Coating:** Mascoat Industrial-DTI

**Thickness:** 60 mils (1.5 mm)

**Reason for application:** CUI & Personnel Protection

Dow Chemical engineered a new and unique valve assembly. After it was installed and began working, engineers determined that it needed to be insulated because the valve was giving off temperatures of over 200°F (93°C). Also, to protect their investment, they wanted to keep Corrosion Under Insulation to a minimum. The complex geometry of the newly designed valve made it very difficult and expensive to install conventional pin-and-blanket insulation. This type of insulation must be



custom-tailored for each job. Since the valve assembly was very intricate, conventional insulation would need to be designed before being fabricated, increasing costs and time. Conventional insulation would also do little to protect the expensive valve from CUI.

Mascoat Industrial-DTI was chosen because it could efficiently insulate the intricate valve with no extra design time and provide personnel protection, all the while negating the chance for CUI to occur. With only 60 mils (1.5 mm) of Mascoat Industrial-DTI applied, the valve's substrate temperature was measured at 125°F (51°C). The valve is fully inspectable at all times and cost was kept to a minimum because the insulation was sprayed on, not specially tailored for a single application.

A Mascoat representative visited the plant in 2015 for another project, and asked about the status of the valve. Dow personnel reported that the valve is still in service with the original coating in place. Furthermore, they stated that there have been no CUI or personnel protection issues with the valve.