Extreme weather can wreak havoc on valuable outdoor equipment. Rust and corrosion will inevitably damage metal exposed to harsh conditions. Steel enclosures like those found at the Tanajib compound, ARAMCO, Saudi Arabia, had pronounced rusting due to the presence of high humidity, salt and heat in the coastal area.

This environment caused the existing paint to crack and peel with corrosion present in several spots. If left untreated, underlying rust or corrosion could result in immature failure of the equipment or enclosure.

Notably, the rooftops of these enclosures showed a higher corrosion rate than the rest of the structure. Moisture accumulating on the roof, combined with direct UV rays and presence of salt, accelerated the corrosion.

The aim of this application is to control corrosion and prolong the equipment lifespan under harsh weather conditions present in the region.

For this application, LINE-X utilized a highly specialized coating, XS-350, to protect the surface of the enclosures by sealing out moisture, salts and chemicals. The LINE-X coating also provides outstanding physical properties that can withstand high levels of abrasion, impact and temperature changes while eliminating cracking and chipping problems that can result from many other conventional protection systems.

LINE-X XS-350 can be applied at a wide range of temperatures and under high humidity conditions with no adverse effects.

Only the external surface of the enclosure was protected by LINE-X XS-350. While this will extend equipment life, protecting the internal surface will greatly enhance the performance and life expectancy of the entire structure.

The LINE-X application will provide durable, long-lasting protection against abrasion and corrosion.

While the existing application will increase sustainability and improve the performance of the equipment, it has the potential to dramatically reduce maintenance and repair costs if applied to new enclosures prior to installation onsite.