X.International.

OIL & GAS MAINTENANCE

Corrosion issues on damp surfaces

Structures and equipment in Oil & Gas facilities are vulnerable to a variety of corrosion phenomena that can lead to sub-optimal performance, failures, shutdowns or even serious accidents.

These problems are compounded by the fact that coating application typically requires a "clean and dry" surface, which presents a major challenge in maintaining assets.

Leading causes of corrosion problems in an Oil & Gas facility

Moisture process generated Humidity environmental

US\$ 1.4 billion/year Estimated cost of corrosion to the US Oil & Gas industry (NACE) US\$ 1 million/day Potential cost of lost

⁻idal areas

production from a shutdown

coastal



Cooling towers

Cooling towers supply cold water used to expel heat generated in the facility's process. Areas in and around the cooling tower can experience heavy condensation and humid conditions, leading to corrosion issues.



Sweating pipes

Pipes carrying cold fluids experience continuous condensation on external surfaces as their temperature remains below dew point. This presents maintenance challenges as most coatings do not cure in the presence of moisture.





Secondary containment

Concrete areas designed for secondary containment can experience regular spills of cargo and chemicals used in the refining process, resulting in corrosion. Left untreated, this could lead to leaching of process chemicals underground.

LEACHING OF CONCRETE CHEMICALS CORROSION



Jetties and tidal areas

SHUTDOWNS

Shoreline infrastructures are exposed to rising and falling tides creating large "splash zones" which are intermittently wet and dry, accelerating the corrosion process. Additionally, these areas can become difficult to access and may require scaffolding.

S ° LARGE → "SPLASH ZONE"



CONTINUOUS

CONDENSATION

The Solution

AkzoNobel's International® brand has the perfect coating solutions to deal with damp surface issues, with Interzone 954 (abrasion and moisture resistant modified epoxy) and the Intercrete range of cementitious coatings.

HIGH HUMIDITY

CONDITIONS

international-pc.com/in-focus/maintenance-dss

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