Protective paints and coatings are used to prevent corrosion, wear and environmental damage of assets across multiple industries which typically include: road and rail infrastructure (bridges), oil and gas infrastructure (offshore rigs, pipelines) and the shipping industry (ship building).

With extensive research and development, SOCOTEC’s laboratory testing of materials and paint inspection produces an approach to the assessment of protective paints and coating that combines an in-depth understanding of the key elements in both the cause and prevention of corrosion.

SOCOTEC’s NACE & ICorr Level 2 qualified paint inspectors provide extensive services for the analysis and assessment of protective paints and coatings systems, including:

› Paint inspection
› Condition surveys
› Failure analysis
› UKAS accredited* on-site testing
› UKAS accredited* laboratory analysis, physical testing and accelerated weathering
› Approval of protective paints and coatings systems to leading standards
› Technical support relating to Highways England
› Natural Weathering Trials
› Consultancy
PROTECTIVE PAINTS AND COATINGS ANALYSIS

Laboratory analysis, physical testing and accelerated weathering
SOCOTEC’s third party UKAS accredited testing* provides an evaluation of the performance and properties of protective paints and coatings that is of great value to the manufacturer. SOCOTEC provides critical information for predicting the performance and lifespan of the protective paints and coatings by testing to many industry standards including: NORSOK M501, ISO 20340 (cyclic ageing), EN ISO 2812 - 2 (sea water immersion) and ISO 15711 (cathodic disbondment).

Physical testing includes:
 › impact testing, scratch resistance, bend testing and pull off adhesion

Physical properties determined include:
 › density, viscosity, volatile content, volume solids and drying times

Accelerated weathing conducted include:
 › salt spray, humidity, UV, SO₂ and colour and gloss monitoring

On-site testing
SOCOTEC can provide UKAS accredited* on-site testing, including cross-cut tests, film thickness, determination of gloss value, surface profile of blast cleaned steel and pull-off strength of coatings*.

Determination of dry film thickness, pull off adhesion testing and measurement of salt concentration form the basis of evaluation of a coating system in situ, and the determination of how well it is adhering to the substrate.

Failure analysis
Coating systems may fail for various reasons including the use of incorrect products or poorly applied coatings. SOCOTEC provides inspection of coatings systems in situ to understand the reason for failure and to recommend to clients how best to rectify the issue.

Approvals of coatings systems
Using approved coatings systems will help to ensure the durability of structures and surfaces. SOCOTEC submits coating systems to rigorous testing regimes in line with leading specifications. SOCOTEC’s pre-qualification of coating systems meets HAPAS, Network Rail, NORSOK M501, ISO 20340 and ISO 12944 standards.

Technical support relating to Highways England
SOCOTEC’s experienced coatings team are directly contracted to supply technical support to Highways England for all coatings-related matters, including A & B sample tests. SOCOTEC’s laboratory analysis ensures that the products applied to bridge painting on the network meet the same level of quality that was demonstrated when SOCOTEC first approved the products for use.

* A listing of SOCOTEC’s UKAS accredited activities can be found at socotec.co.uk – Testing Laboratory 0001

FOR MORE INFORMATION
For more information about our services, please email salesuk@socotec.com or call 0845 603 2112.