

Technical Service Data Sheet

Project Management - Marine



Description

Hempel’s Project Management Service (Marine) is designed for customers that seek management of the complete coating application process during the project execution. This service delivers the industry leading application support for silicone applications to avoid rework and enable the customer to achieve the anticipated fuel savings from this product. This service requires the coating advisor to be given the authority to stop work in case of deviations from specification. This service is supported by detailed inspection documentation. The services included in the this service package are described below.



Coating advisor

The coating advisors are experts within the field. The coating advisor will manage, inspect, guide and report on the project phases as described below to help maximise the effectiveness and quality of the coating processes. The coating advisor will be able to provide additional services if time allows. Progress reports will be issued daily to be able to track the progress of the project. A final report will also be distributed at the end of the project.

Step 1 - Pre-project inspection

Pre-project briefing to explain the paint specification in detail

Pre-meeting to explain procedures and processes to be followed including roles and responsibilities

Provision of expert advice to ensure good painting practice by applicators/workforce

Organisation and planning of the entire project related to coatings

Visual inspection prior to the start of any work on the actual condition of existing coating system, broken down per main area, in percentage and type of break down

Verification of suitability of the specification based on the inspection of the actual condition of the existing coating system. Advise on recommended adjustments to the specification, if necessary

Verification of the paint order, thinners, cleaning agents etc, including recommended adjustments, that have been approved by the customer

Distribution of specification, relevant PDS and R&D Guidelines to stakeholders in charge of the projects, including verbal and/or written explanation on key specification notes and product requirements

Step 2 - Surface preparation inspection

The coating advisor monitors, guides and inspects throughout the surface preparation process. The areas where coating advisor’s presence is needed should be provided in advance. If additional areas are agreed on site, such will be noted in the progress reports.

Follow all surface preparation methods/procedures as per specification

- Low/high pressure fresh water cleaning and degreasing
- High pressure water jetting/Ultra high pressure water jetting
- Mechanical surface preparation
- Abrasive sweeping/blasting

Check quality of each surface preparation method against agreed preparation grade and report accordingly

Prior to application take conductivity measurements, surface profile/roughness to check final quality of surface preparation and report accordingly

Document the final results. In case of any deviation found, the recommended corrective actions, consequences and follow-up on implementation and final result to be reported

Detailed photo documentation

Step 3 - Application inspection

The coating advisor monitors, guides and inspects throughout the application of every coat. The areas where coating advisor's presence is needed should be provided in advance. Depending on vessel LOA and coating type, additional coating advisors could be provided. If additional areas are agreed on site, such will be noted in the progress reports.

Managing paint stock: Storage condition and shelf life checks. Paint rotation if necessary

Managing paint consumption

- Creating and reporting on the paint/drum distribution plan per coat
- Creating the consumption list

Microclimate checks and reporting. If found to be out of acceptable range, advise of corrective actions

Application

- A toolbox talk is provided to applicators covering correct film formation, WFT checks, and best application practices, emphasising that achieving the specified WFT/DFT is the applicator's responsibility
- Check and advise on proper mixing and film formation
- Wet film thickness (WFT) – As taking WFT measurement is dependent on access and time it is important that the applicator is controlling this regularly, however each coating advisor at least aims at conducting minimum 10 WFT per coating advisor on flat bottom where access is possible and random WFT measurements on other areas if possible
- Dry film thickness (DFT) – to be measured according to ISO 19840 per coat and reported
- Overcoating intervals to be monitored and reported per coat

Document the final results. In case of any deviation found, the recommended corrective actions, consequences and follow-up on implementation and final result will be reported

Detailed photo documentation

Additional services that can be offered upon agreement with customer

Condition Reports (i.e tanks): Possibility of carrying out a condition report of chosen areas or general condition reports. Flexibility of documentation and adapting to changes

Sea stock optimisation: Checking and organising paint locker. Provision of basic training to ensure following coating processes properly

Step 4 - Final inspection

Check and report the overall final appearance of the coating work

DFT check and advise on corrective action if not according to specification

Average hull roughness measurements upon completion of the final coat will be taken and reported (for full application systems only)

Advise on time before undocking

Step 5 - Reporting

Progress reports will be written and distributed daily by email

A final comprehensive report including the progress reports will be distributed by email when the coating advisor's inspections are completed

*While we strive to manage the coating process and guide applicators to meet specification, we cannot ensure full observation and monitoring of every square meter due to limitation in access, timing and safety constraints beyond a coatings advisor's control.

Conditions

Hempel's Technical Service is provided subject to this Technical Service Data sheet and the current version of Hempel's General Conditions of Sale, Delivery and Service.

Technical Service consists of surveying on site, advising, and reporting to the customer, as described in this Technical Service Data sheet, on the project progress and the conformity of the application of Hempel products with the product documentation consisting of project specification (where applicable), Product Specification, Product Data Sheets, Material Safety Data Sheets and any other product information provided by Hempel in writing, to aid the customer's acceptance of work. Any additions or changes to the scope of services defined herein shall be agreed upon in writing, by all parties involved, before the start of a project.

Hempel's Technical Service is provided by Hempel's coating advisors. Hempel's coating advisor will be ensured by the customer:

- Appropriate access to the work site according to local HSE regulation(s) and project schedule
- Safe working environment and site-specific safety training
- The use of access equipment, inside the coating advisor's competences
- Access to an approved customer representative for site decisions and corrective actions

If the customer fails to ensure the above access, security and health conditions to the satisfaction of the coating advisor, the coating advisor is entitled to suspend performance of its services with immediate effect until the conditions have been met, following a written notice hereof to the customer, without being in breach or otherwise liable for any failure or delay in the performance of its services obligations.

Limitation of liability

Hempel's liability for the provision of Technical Services shall at any time be limited to the value of the Technical Services provided by Hempel for which the customer has paid.

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