

# Project management

## Marine



### Description

Hempel's project management service is designed for customers that want complete coating application management during a project. This service can reduce long term maintenance cost, supports reduction in overall docking cost and helps maximize fuel performance.

This service is a combination of full time project management with authority to stop work, expert coating advisors and training of staff to ensure quality expectations are met. The services included in this service package are described below.



### Coating advisor

The coating advisors are experts within the field. The coating advisor will be available full time for the entire duration of the project; from the start to the finish. The coating advisor will be on-site to inspect and advise on every step of the project.

The coating advisor will be able to provide additionally 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

### The main check points to be conducted prior to the start of the project.

- Pre-project briefing to explain the paint specification
- Pre-meeting to explain procedures and processes to be followed including roles and responsibilities
- Education and training of workmen to ensure good painting practice
- Organization 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 and relevant PDS 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 is present full time throughout the surface preparation process. The areas where the 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.

Equipment inspection	Check of quality, capacity and quantity of equipment. If found to be out of acceptable range, advise on corrective action.
	Document the results, the recommended corrective actions and whether or not they were implemented in the progress/final report.
Low/high pressure fresh water cleaning and degreasing	Photo documentation of agreed surface preparation grade in progress/final report for each surface preparation method.
High pressure water jetting/ Ultra high pressure water jetting	Check the result of surface preparation against agreed preparation grade for each surface preparation method. If necessary, recommend corrective action.
Mechanical surface preparation	Document the results, the recommended corrective actions and whether or not they were implemented in the progress/final report.
	Photo documentation of agreed surface preparation grade in progress/final report.
Abrasive sweeping/blasting	Check the result of surface preparation against agreed preparation grade and if necessary, recommend corrective action.
	Check the achieved surface profile/roughness, if specified, and if necessary, recommend corrective action.
	Document the results, the recommended corrective actions and whether or not they were implemented in the progress/final report.

## Step 3 - Application inspection

The coating advisor is present full time throughout the application process. The areas where the 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.

Paint consumption control	Prepare paint distribution plan with consumption per main area for each full coat.
	Check and report, if paint consumption is according to the paint distribution plan.
	Report total consumption in final report.
Managing paint stock	Checking storage condition and shelf life.
	Rotating paint stock if necessary.
Microclimate	Check and report microclimate. If found to be out of acceptable range, advise on corrective action.
	Document the results, the recommended corrective actions and whether or not they were implemented in the progress/final report.
Application	Check and report correct mixing ratio, induction time and stirring. If necessary, advise on corrective action.
	Check and report film formation. If necessary, advise on corrective action.
	Check and report batch numbers. If necessary, advise on corrective action.
	Check and report application equipment and technique i.e. airless, brush, roller, nozzle orifice, etc. Advise as needed.
	Document the results, the recommended corrective actions and whether or not they were implemented in the progress/final report.
Overcoating intervals	Check and report that overcoating intervals are kept within specification. Advise on corrective action if necessary.
	Document the results, the recommended corrective actions and whether or not they were implemented in the progress/final report.
Dry film thickness (DFT)	Check and report DFT periodically or according specification. If found to be out of acceptable range, advise on corrective action.
	Document the results, the recommended corrective actions and whether or not they were implemented in the progress/final report.

## Step 4 - Additional services

These services can be offered upon agreement with the customer.	
Average hull roughness measurements	Measure and report the average hull roughness measurements.
Condition Reports	The coating advisor can carry out a condition survey of Ballast Tanks.
	The coating advisor can carry out a survey of general condition of all areas.
Maintenance Manual	Preparation and introduction to the customer.
Sea stock optimization	Check and organize paint locker i.e. expired paints, validation of paint qualities available etc.
	Check mechanical equipment and provide basic training.

## Step 5 - Final inspection

The main check points conducted when the project has been completed are listed below
Check and report the overall final appearance of coating work.
Check and report total DFT. Advise on corrective action if not according to specification.
Check time before undocking.

## Step 6 - Reporting

Report types and frequency are listed below
Progress reports will be written and distributed daily by e-mail.
A final report including the progress reports will be distributed by e-mail when the coating advisor's inspections are completed.

## 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.