

Atollvic Monitoring Report



Refit Monitoring Report 12.04.2018

Report reviewed and approved by:

IICIN International Independent
Coating Inspectors Network
Managed by BUBUS BVBA

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1. Object

The purpose of this report is to show the results of the monitoring activities performed during Topside & Superstructure refit done on 12th April 2018 in Atollvic Shipyard.

2. Scope

This document is extended to **IICIN** and to all the personnel considered appropriate by them.

3. Inspection

3.1. *Inspection staff.*

The monitoring activities was conducted by the technical consultant mentioned below:

Adrián Rouco López.

- NACE Coating Inspector Level I No. 62953.

This inspection report was reviewed and approved by the Technical Director:

Alejandro Expósito Fernandez.

- NACE Coating Inspector Level III No. 28997.
- FROSIO Coating Inspector Level III No. 2247.
- NACE Corrosion Technician.
- NACE Off-shore Corrosion Assessment Technician.
- NACE Shipboard Corrosion Assessment Technician.
- NACE Marine Coating Technologist.
- SSPC Protective Coating Specialist.

3.2. *Monitoring Inspection Results.*

3.2.1. *General Information.*

This report will describe the results of the inspection and monitoring jobs cited above.

- ✿ Date of the inspection: 12.04.2018
- ✿ Attendants during the inspection:
 - NAME (Application Company).
 - NAME

The surface preparation and coating application are going to be conducted for the contractor NAME, with the material resources and human of its own.

3.2.2. *Inspection.*

During the inspection, the following jobs were carried out:

- ✿ Topsides visual and gloss inspection
- ✿ Superstructure: Topcoat visual and gloss inspection.

3.2.3. *Reference documents:*

The reference documents used for the inspections are:

- ✿ Specification AwlGrip.
- ✿ Technical data sheets of the products.

3.2.4. *Inspection Result.*

- ✿ Top side hull areas:
 - Some defects like dust inclusions, pinholes or fisheyes, were detected in isolated areas and in both port and starboard sides. Some runs were identified on aft-port side.

- In both port and starboard sides, the hull was divided in 10 zones (from 1 to 5 in starboard side from fore to aft, and from 6 to 10 on port side from aft to fore) in which two gloss measurements had been carry out on each zone. Results on table below.

Inspected area		Angle (°)	LogHz1.6C	DOI	Rspec	Gloss value
Zone 1	Measuremt 1	60	1.6	98.1	73.4	94.4
	Measuremt 2	60	0.0	94.7	66.0	96.6
Zone 2	Measuremt 1	60	0.1	98.7	92.7	94.7
	Measuremt 2	60	0	99.2	103.6	96.7
Zone 3	Measuremt 1	60	0.0	99.2	80.4	95.4
	Measuremt 2	60	0.0	95.3	65.6	96.7
Zone 4	Measuremt 1	60	0.0	99.3	91.0	95.8
	Measuremt 2	60	0.0	87.4	56.9	96.4
Zone 5	Measuremt 1	60	1.3	99.2	90.2	95.3
	Measuremt 2	60	0.4	98.5	77.8	96.5
Zone 6	Measuremt 1	60	0.0	99.4	83.1	95.3
	Measuremt 2	60	0.0	99.1	77.3	96.4
Zone 7	Measuremt 1	60	0.0	99.2	75.2	96.2
	Measuremt 2	60	0.0	98.2	83.9	96.5
Zone 8	Measuremt 1	60	0.0	99.1	80.1	96.0
	Measuremt 2	60	0.0	98.9	98.5	96.3
Zone 9	Measuremt 1	60	0.0	98.9	72.9	95.7
	Measuremt 2	60	0.0	99.1	85.1	96.4
Zone 10	Measuremt 1	60	0.0	98.5	49.0	95.7
	Measuremt 2	60	0.0	98.7	87.4	96.2
Average				97.9	79.5	95.9

Table No.2. Gloss measurements.

✚ Superstructure areas:

- Some defects like dust inclusions, pinholes or fisheyes, were detected in isolated areas and in rare cases, even less than on hull areas.
- The superstructure were divided also in 10 zones (from 1 to 4 inside and from 5 to 10 outside) in which one gloss measurements had been carry out on each zone. Results on table below.

Inspected area		Angle	LogHzC	DOI	Rspec	Gloss value
Zone 1	Inside	60	5.4	97.6	72.4	94.4
Zone 2	Inside	60	2.1	95.3	39.2	94.4
Zone 3	Inside	60	0.0	98.9	86.9	93.9
Zone 4	Inside	60	234	96.7	43.9	81.3
Zone 5	Outside	60	26.9	98.2	76.8	91.9
Zone 6	Outside	60	7.3	99.3	96.9	92.7
Zone 7	Outside	60	61.2	96.6	69.0	89.9
Zone 8	Outside	60	148.2	90.2	39.3	82.5
Zone 9	Outside	60	91.5	93.9	49.1	88.2
Zone 10	Outside	60	86.4	85.3	33.5	90.1
Average			66.3	95.2	60.7	89.9

Table No.2. Gloss measurements.

The importance of the surface cleaning before any coating application was highlighted to the application company in previous inspections, in order to reduce the risk of defects appearance due to contamination, and the lack of cleaning of the application equipment before any coating application.

Coating system:

The coating system specified for applying is:

- ✚ 1st coat: Hullgard Extra Epoxy Primer(100 µm)
- ✚ 2nd coat: Awlfair LW (2000 µm)
- ✚ 3rd coat: High Build Epoxy Primer (125µm)

- ⊕ 4th coat: 545 Epoxy Primer(35 μm)
- ⊕ 5th coat: 545 Epoxy Primer(35 μm)
- ⊕ 6th coat: 545 Epoxy Primer(35 μm)
- ⊕ 7th coat: Awlgrip Topcoat(25 μm)
- ⊕ 8th coat: Awlgrip Topcoat(25 μm)
- ⊕ 9th coat: Awlgrip Topcoat (25 μm)

NDFT: 6480 μm

Batch numbers.

The batch numbers of the products used for the application:

Coat	Component	Batch number
High Build Epoxy Primer	Component A	TF5169UF/TF5324UF
High Build Epoxy Primer	Component B	TF5167UF
Epoxy Primer 545	Component A	TE4436UF
Epoxy Primer 545	Component B	TD3795UF
Awlgrip Topcoat	Component A	0227236144
Awlgrip Topcoat	Component B	0227165047

Table No.3. Batch number information.

Material used for surface preparation.

The material used for the surface preparation was summarized below:

Material	Description	Process
Abrasive Disc	Abrasive Disc P36	For damages repairing up to the substrate.
Abrasive Disc	Abrasive Disc P80	For filler and hullgard coat sanding.
Abrasive Disc	Abrasive Disc P180	For hullgard coat and for epoxy existing primer sanding.
Abrasive Disc	Abrasive Disc P320 & 400	For epoxy Primer 545 sanding before topcoat application

Table No.4. Material used for surface preparatio

