



Shell Global Solutions

Attn: Mr. Kees Zaal,
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Our ref: Contract No: 122482

5th July, 2022

To whom it may concern,

With reference to above-referred contract, Shell Global Solutions International B.V. hereby confirm that we have carried out a one-time technical assessment for Transocean Coatings in the form of performance testing of "Protective Coatings for onshore and offshore facilities" according to Shell DEP 30.48.00.30-Gen. "Protective coatings for onshore and offshore facilities", February 2021.

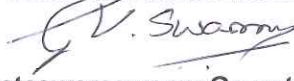
The Transocean Coatings applied the coating systems that were subjected to the required test program according to the aforementioned DEP. The technical assessment program is described in detail in Shell Global Solutions report SRN-03212 for all the newly assessed products.

The results of the technical assessment shall be included in the approved coating systems into our global Technically Accepted Manufacturers and Products (TAMAP) database for Coatings. Such listing shall, subject to the conditions set out in Article 3.2 of the above-referred contract, be maintained till 31st July 2027 from the date of this letter.

The approved coating system for Transocean Coatings are listed in the Table 1 given below. The list of coating systems given in Table 2 is for informative only.

Please note that in assessing that the listed Transocean Coatings are compliant with the aforementioned DEP, we do not warrant the quality of the goods manufactured or delivered by Transocean Coatings for the fitness for purpose of such goods.

Yours sincerely
Shell Global Solutions International BV

 5th July, 2022

Venkateswaraswamy Gomatham,
Senior Materials & Corrosion Engineer SME-Coatings P&T
Project & Technology, Project & Engineering Services
Shell Technology Centre Bangalore (STCB)

Table 1: Approved coating systems for offshore and onshore facilities

Sl. No	Environment	System code	Coating system	NDFT (μm)
1	Wetted and intermittently - wetted zone, design temperature < 50 °C with Cathodic protection system	FC1N & LC5N	Transozinc Silicate 152 + Transpoxy Masterbond BT + Transpoxy Masterbond BT	75 + 175+ 250 =500
2		FC1N & LC5N	Transozinc Silicate 152+ Transpoxy Barrier FF + Transpoxy Glascoate 440DTM	75+125+300 = 500
3	Wetted and intermittently - wetted zone, design temperature < 50 °C without cathodic protection	FC1N/M & LC5N/M	Transpoxy HB-AL+ Transpoxy HB	250+250 = 500
4	Atmospheric zone -35 °C up to + 120 °C	FC2N & LC1N	Transozinc Silicate 152 + Transpoxy MasterMIO + Transpoxyl PX 370	75+150+75=300
5	Atmospheric zone -35 °C up to + 120 °C	FC2N & LC1N	Transozinc Silicate 152 + Transpoxy Masterbond BT + Transpoxyl PX 370	75+150+75=300
6	Atmospheric zone -35 °C up to + 120 °C	FC2N & LC1N	Transozinc Epoxy Primer 155 + Transpoxy Masterbond BT + Transurethane Shield	50+175+75=300
7	Atmospheric zone -35 °C up to + 120 °C	FC2N/M & LC1N/M	Transpoxy Barrier FF-AL + Transpoxy MasterMIO + Transocean NISO 360 finish	100+150+50 = 300
8	Atmospheric zone -35 °C up to + 120 °C	FC2M & LC1M	Transpoxy Barrier FF + Transpoxy Masterbond + Transurethane Shield	100+125+75 = 300
9	Atmospheric zone -35 °C up to + 120 °C insulated	FC2 N/M	Transpoxy Tankguard 118+ Transpoxy Novacure 488	100+200 =300
10	Atmospheric zone -35 °C up to + 120 °C insulated	FC2N/M	Transpoxy Novacure 488+Transpoxy Novacure 488	150+150=300
11	Atmospheric zone >120 °C up to 200 °C insulated	FC2N/M	Transpoxy Tankguard 458 +Transpoxy Tankguard 458	2x150 =300

12	Atmospheric zone >120 °C up to 200 °C un-insulated	FC3N & LC2N/M	Transozinc Silicate 152 + Transosil finish	75+2x25=125
13	Atmospheric zone >200 °C up to 450 °C	FC4N/M	Transozinc Silicate 152 + Transosil AL-HR	75+35=110
14	Atmospheric zone >200 °C up to 450 °C	FC4N/M & LC3M	Transozinc Silicate 152 + Transotherm 581	50+75=125
15	Decks and floors/ light and normal duty	FC6M & LC7M	Transpoxy Barrier FF + Transpoxy Barrier 218 + Transurethane Shield	125+150+75 = 350
16	Decks and floors/ light and normal duty	FC6N/M & LC7N	Transozinc Epoxy Primer 155 + Transpoxy Masterbond BT + Transurethane Shield	50+200+75=325
17	Decks and floors/ light and normal duty	FC6M & LC7N/M	Transpoxy Barrier FF + Transpoxy Masterbond + Transurethane Shield	125+150+75 = 350
18	Steel floors/ heavy duty and helidecks	FC7N	Transozinc Epoxy Primer 155 + Transpoxy Barrier 218 + Transpoxy Barrier 218 NS + Transurethane Shield	50+150+175+75 = 450
19	Steel floors/ heavy duty and helidecks	FC7M	Transpoxy Barrier FF + Transpoxy Barrier 218 + Transpoxy Barrier 218 NS + Transurethane Shield	125+150+175+50 = 450
20	Submerged carbon steel items: -10°C to 50°C without cathodic protection	FW1N	2 x Transpoxy Glascote 440DTM	2x300=600
21	Submerged carbon steel items: 50 °C to 120°C	FW2N	2 x Transpoxy Novacure 488	2 x 150 = 300
22	Wetted and intermittently - wetted zone, design temperature < 50 °C with CP for onshore	FS1N/M & LS4N/M	Transpoxy HB-AL+ Transpoxy HB	2x250=500
23	Wetted and intermittently - wetted zone, design temperature < 50 °C with CP for onshore	FS1N/M & LS4N/M	Transpoxy Uniprimer + 2x Transpoxy Glascote 440	75+200+225 =500
24	Atmospheric zone -35 °C up to + 120 °C insulated	LS1 N/M	Transpoxy Barrier FF + Transurethane Shield	125 + 75=200
25	Atmospheric exposure 120°C to 200°C	FS2N/M & LS2N/M	2xTranspoxy Tankguard 458	2x 125=250

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26	Buried and Immersed plant piping and vessels 50°C to 120°C	LS5N/M	Transpoxy Tankguard 118+ 2xTranspoxy Novacure 488	100+2x200=500
27	Atmospheric zone -35 °C up to + 120 °C galvanised surfaces	LO1 N/M	Transpoxy Barrier FF + Transurethane Shield	125 + 75=200
28	Topside aluminium helidecks - Anti-skid	FO1 N/M	Transpoxy Uniprimer Transpoxy Barrier 218 NS Transurethane Shield	75+200+75=350
29	Atmospheric zone -100° up to -35 °C	LL1-N	Transpoxy Novacure HR Transpoxy Novacure HR	100+100=200
30	Internal tank coating for fuels up to 60°C	FT5 N/M & LT2 N/M	2x Transpoxy Novacure 488	2x250=500
31	Internal tank coating for fuels up to 60°C	FT5 N/M & LT2 N/M	2x Transpoxy Glascote 440DTM	2x250=500
32	Internal tank coating for crude oil (wet, sweet and sour) up to 60°C	FT6N/M & LT1N/M	2x Transpoxy Novacure 488	2x250=500

E. P. Swamy

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The following coating systems have been tested voluntarily on rusted carbon steel panels with surface preparation of water blast cleaning (Wa2) by Transocean to provide information on performance of specific coating systems for maintenance painting. However, the long-term performance beyond 7 years would not be same as dry abrasive blast cleaned surface. These are not listed in TAMAP as not covered in Shell DEP 30.48.00.31-Gen.

Table 2: Performance coating systems for maintenance painting on rusted steel with water blast cleaning

Sl. No.	Environment	System code	Coating system	NDFT (μm)	Remarks
1	Wetted and intermittently - wetted zone, design temperature < 50 °C	FC1M	Transpoxy HB-AL+ Transpoxy HB	250+250 =500	4200 hrs. test: Passed corrosion creep test and sea water immersion test. Adhesion test: 4.6 MPa
2	Wetted and intermittently - wetted zone, design temperature < 50 °C	FC1M	Transpoxy Master Bond BT-AL +Transpoxy Master Bond BT	250+250 = 500	4200 hrs. test: Passed corrosion creep test and sea water immersion test and Adhesion test :15.3MPa
3	Atmospheric zone -35 °C up to + 120 °C	FC2M & LC1M	Transpoxy Masterbond BT-AL + Transpoxy PX 370	200+100 =300	4200 hrs. test: Passed corrosion creep test and Adhesion test: 18.8MPa
4	Atmospheric zone -35 °C up to + 120 °C	FC2M & LC1M	Transpoxy HB-AL+ Transocean NISO finish 360	250+50 =300	4200 hrs. test: Passed corrosion creep test and Adhesion test: 6.6MPa
5	Atmospheric zone -35 °C up to + 120 °C	FC2M & LC1M	Transpoxy Barrier FF-AL + Transpoxy MasterMIO+ Transocean NISO finish 360	125+125+ 50=300	4200 hrs. test: Passed corrosion creep test and Adhesion test: 16.2MPa

S. Swamy
5th July, 2022