

Paint systems requirements

The following painting systems have been tailored to meet the QP refinery painting and coating demands. During the technical evaluation stage, the submitted painting systems shall be subject to QP Approval. All the paint supplier shall submit the equivalent of their brand names to every paint system individually and the most technically competitive product amongst the submittals shall be selected.

Approved vendor list

The following paint vendors are approved by QP Refinery:

Jotun paints-.Hempel paints.-Belzona.-International Paint-Ameron. -Carboline.-Chestertone Sigma Paints.

ANNEXURE - 1 ENERGY TECHNICAL SERIVCES, POST BOX-4718, DOHA, QATAR TEL:- 44428492 AND FAX:- 4442 7455 83 STORAGE TANKS SUPPLIES FROM CHESTERTON/CONTRACT NO GTC 11101800 Point price (QR) REMARKS Unit Rate In ORLATE SYSTEM Area is M' Paint Qly (LTR) 100 CI 45,000 20,666.67 100 (3 31,000 200.00 100 3 100 74 1.000 1,000.00 QUOTAICH REFERENCE MC1/QTN O4/REV/03 AND SUBSTQUENT

CAULKING MATERIAL FOR BUILDUP

ARC 858 100 ALL 500 L.000,000

THADE DISCOUNT

TURN AND CONCTIONS.- SUMMARY OF TOTAL PRICE FOR THE PROJECT

1) ALL THE MATERIALS ARE SUBJECT TO MANUFACTURER QUARNITES FOR SYTARS PERIOD

3) ALL THE MATERIALS DELIVERED TO CARRY BATCH CENTIFICATES FROM THE MANUFACTURES.

IN PEC WILL PLAINT AND MENUAUM STOCK CALANUTY OF ADDG-5000 LITERS IN THEIR DOMA WARE HOUSE FOR SHORT DELIVERY

HANY MATERIALS IN UNIFICE MORE THAN THE AMOVE SHALL BE GIVEN 60 BAYS NOTICE PEADO FOR EXTRA QUANTITIES REQUIRED

SI PLURIL COMPONENT MACHINE SHALL BE SUPPLIED TO ETS FREE OF COST FOR 6 MOTHUS PERIOD AS WHEN REQUIRED WITH MOTICE PERIOD OF 2 DAYS.

ST THE PECES CLUDITED AND VALID FOR WHOLE CONTRACT DUNATION AND IN THIS CONSECTION CHESTERIOR NEED TO EXERCISE THEIR SUPPLIERS FOR EAST MATERIALS SOURCING

7) ETS WILL COLLECT THE MATERIALS FROM DUNA WAREHOUSE OF FEC

B) GATE PASS ASSISTANCE (WITHOUT NIC CHARGES) SHALL BE ARRANGED FROM ETS FOR YOUR PERSONNEL

9) AIR HRINGHT CHANGES AND NOT INCLUDED AND BUT UPON ETS REQUEST PEC WILL ARRANGE MATERIALS WITH ADVANCE COST INFORMATION TO ETS

TO PEC WILL EXTEND THOSE TECHNICAL SUPPORT INCLUDING APPROVED INSPECTOR DURING PROGRESS OF WORKS AT FREE OF COST

LLI NECESSAY TRAINING AND CERTIFICATION WILL BE EXTENDED TO ETS PERSONNEL FOR CHESTERION PRODUCTS APPLICATION

12) PAINSRT - LUCAL ASLEVANA

Chesterine ARC 983

heate ton ARC 54+

Chesterton ARC - HT - 5

Chesterton ARC - HT - S

13) INCAME PAG FAIL TO MITET DITIVEN SCHEDULE THEM ETS RESERVES MIGHT TO SOURCE THE MATERIALS FROM OTHERS AND DIFFERNCE IN COST SHALL BE BACK CHARGED TO MC

14) PEC WILL PUT BEST BEST REFORTS FOR INITIAL DESIVERES OF 2500 LITTERS WITH IN 21 DAYS FROM DATE THIS LPD.

IS/LE WILL BE INFAVOR OF FOWER ENGINEERING COFFORATION, BANK HAME-CAPAR INTERNATIONAL ISLANDE BANK ACCOUNT NUMBER 1111 073-074 001

16) DELIVERY . MAXIMUM 60 GAYS BY SEA FREIGHT AND ARE FARECHT 21 DAYS FROM THE DATE OF DEMAND LETTER ISSUED FOR REQUIRED QUANTES. FROM ETS.

17) DURATION OF LPO - E4/OS/2012 TO BO/DE/2018 (REMARK VALID FOR THE PLRIDDS



CTUSTONS HELD WITH YOU AT ETS







REFINING DIRECTORATE

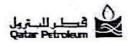
PAINT SYSTEM NO. C1

Internal coating of vessels, cooling water system heat exchangers and LGO tanks for service at temperature up to 70 C that are subject to marked pressure/temperature changes and /or acidic or other aggressive chemicals.

		1	PAINT MATRIX				
Surface Preparation	Shop or field application	DFT Per coat	Intermediate coat	DFT Per coat	Top Coat.	DFT Per Coat	Total DFT
Degreasing/ high pressure water washing/Blast clean to Sa 3.	Two component high build solvent free modified epoxy with ceramic filler.	250 µm	Two component high build solvent free modified epoxy with ceramic filler.	250 μm	None		500 µm

Notes:

- The dry film thickness could range from 500 1000 μm depending upon product used subject to manufacturer recommendations and QP Engineer approval.
- 2. The coating can be applied by brush or trowel for small areas like the floating heads of the heat exchangers while for large areas like tanks, a sprayable version of the coating material is a must.
- 3. The QP Engineer shall request for the list of chemicals that the coating material can withstand.
- The adhesion of such coating shall be at least 5 Mpa. ALLAP
- 8. A two-pack Epoxy ceramic based component compatible with the system, to be supplied to repair/caulk the pitting and coving as required.
- 6. For storage tanks coating, hand application is not accepted and the contractor must make the plural component spray machine available if the airless spray machine is incapable to apply the material within its potlife.





Paint system No. C2

Internal coating of vessels and tanks for service at temperature above 70 C to 90 C that are subject to marked pressure/temperature changes and /or acidic or other aggressive chemicals.

		ı	PAINT MATRIX				
Surface Preparation	Shop or field application	DFT Per coat	Intermediate coat	DFT Per coat	Top Coat.	DFT Per Coat	Total DFT
Degreasing/ high pressure water washing /Blast clean to Sa 3.	Two component high build solvent free modified epaxy with ceramic filler.	250 µm	Two component high build solvent free modified epoxy with ceramic filler.	250 µm	None		500 µm

Notes:

- The dry film thickness could range from 500 1000 μm depending upon product used subject to manufacturer recommendations and QP Engineer approval.
- 2. The coating can be applied by brush or trowel for small areas while for large areas like tanks, a sprayable version of the coating material is a must.
- 3. The QP Engineer shall request for the list of chemicals that the coating material can withstand.
- The adhesion of such coating shall be at least 5 Mpa.
- 5. A two-pack Epoxy ceramic based component compatible with the system, to be supplied to repair/caulk the pitting and coving as required.
- 6. For storage tanks coating, hand application is not accepted and the contractor must make the plural component spray machine available if the airless spray machine is incapable to apply the material within its potlife.



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REFINING DIBECTORATE

PAINT SYSTEM NO. C3

Internal coating of vessels and tanks for service at temperature above 90 C to 120 C that are subject to marked pressure/temperature changes and /or acidic or other aggressive chemicals.

		1	PAINT MATRIX				
Surface Preparation	Shop or field application	DFT Per coat	Intermediate coat	DFT Per coat	Top Coat.	DFT Per Coat	Total DFT
Degreasing/ high pressure water washing/Blast clean to Sa 3.	Two component high build solvent free modified epoxy with ceramic filler.	250 µm	Two component high build solvent free modified epoxy with ceramic filler.	250 μm	None		500 µm

Notes:

 The dry film thickness could range from 500 – 1000 μm depending upon product used subject to manufacturer recommendations and QP Engineer approval.

A two-pack Epoxy ceramic based component compatible with the system, to be supplied to

repair/caulk the pitting and coving as required.

3. For storage tanks coating, hand application is not accepted and the contractor must make the plural component spray machine available if the airless spray machine is incapable to apply the material within its potlife.





REFINING DIRECTORATE

Paint system No. C4

Internal Coating of vessels (De-salters) for service at temperature up to 180C that are subject to marked pressure/temperature changes and other aggressive chemicals.

		1	PAINT MATRIX				
Surface Preparation	Shop or field application	DFT Per coat	Intermediate coat	DFT Per coat	Top Coat.	DFT Per Coat	Total DFT
Degreasing/ high pressure water washing/Blast clean to Sa 3.	Two component high build solvent free modified epoxy with ceramic filler.	500 µm	Two component high build solvent free modified epoxy with ceramic filler.	500 µm	None		1000 µm

- Notes: The dry film thickness could range from 500 1000 µm depending upon product used subject to manufacturer recommendations and QP Engineer approval.
- A two-pack Epoxy ceramic based component compatible with the system, to be supplied to repair/caulk the pitting and coving as required.