CLIENT:	CONSULTANT:
MAPNA TOUS POWER GENERATION Co.	MESSINAN ENGINEERING CO. Eng.& consultancy of Power Plant & Ind.

PROJECT: TOUS (FERDOWSI) Combined Cycle Power Plant (Steam Portion) – 3 Blocks

Painting Procedure for Tous Auxiliary Cooling Systems

IN-HOUSE REVISIONS							DOCUMENT REVISIONS						
A2							B						
A1	Revised Issue	M.F	M.F	M.A	P.K	14.03.22	A	Revised Issue	M.F	M.F	M.A	P.K	14.03.22
A0	First Issue	M.F	M.F	M.A	P.K	19.02.22	0	First Issue	M.F	M.F	M.A	P.K	19.02.22
REV.	DESCRIPTION	DESG	DRAWN.	CHK	APP.	DATE	REV.	DESCRIPTION	DESG	DRAWN	CHKD	APP.	Date

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	SUB Contractor'S DOC. No:	File No. :	Design Stage
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CONTENT

1. SCOPE

The following procedures covers the minimum requirements for surface preparation and paint application for auxillary, peak and delta cooling system., which will be exposed to salty and corrosive environment for "**TOUS (FERDOWSI) Combined Cycle Power Plant (Steam Portion)**" projects.

2. PAINT MANUFACTURERS OBLIGATIONS

2.1) The manufacturer shall requested paint supplier to send technical data sheet and test and analysis certificates and submitted to contractor inspector for verification.

2.2) The paint manufacturer shall state shelf life of all paints and protective coating and shall provide recommendations for storage.

All product containers shall be marked with their batch number and initial manufacture date. Manufacturer shall provide a guarantee that no such materials have been reconstituted for any reason what so ever.

2.3) The latest available issue of paint data sheets for the particular batch shall be supplied by paint manufacturer.

3. REFERENCE

- PAINTING TECHNICAL SPECIFICATION FOR COOLING SYSTEM: CCP/Y2-99/MC-G-31-DGA-003
- ASTM D4752
- ISO 8501-1
- GS COR 350

3.1) CODES, REGULATIONS AND STANDARDS

3.1.1) Work shall be performed according to the following Codes and Standards, the coating manufacturers' recommendations and this specification.

3.1.2) EN ISO or ISO standards

3.1.3) ISO 8501-1.

3.1.4) ASTM standards

3.1.5) RAL 840 HR Deutsches Institut für Gütesicherung und Kennzeichung e.V.

4. DESIGN REQUIRMENT

4.1) Coating for the protection of the main equipment and steel structure shall be designed and applied ; for the application over the specified minimum surface preparation standards detailed in this procedure.

4.2) All coating shall be suitable for application and serviced in salty and corrosive environment conditions.

4.3) The paint system shall generally be based on the design temperature of the equipment and reference specification .

5. GENERAL

5.1) The manufacturer shall provide and maintain in good condition all plant, equipment and tools necessary to carry out the work in and tools necessary to carry out the work in an efficient manner.

5.2) The manufacturer shall provide, unless other wise instructed, all paints and thinners necessary to carry out the work . The contractor shall purchase such paint from approved manufacturers.

5.3) The manufacturer shall provide skilled and experienced personnel to carry out the work together with competent andqualified supervision.

5.4) The manufacturer shall comply fully with this specification unless otherwise approved by the contractor. Additionally, the work will be subject to continuous inspection by the inspector who will

be at liberty to check at every stage that the work is being carried out in accordance with all aspects of this specification.

5.5) Prior to the commencement of work, the manufacturer shall submit for the approval of company, fully detailed procedure as to how he intends to carry out the work within the frame work of this specification & Document.

5.6) The items listed below shall be shielded & protected to protected to prevent damage during surface preparation & paint material applications. Unless otherwise specified, the following surfaces shall not be painted:

• Concrete structures

• Plastic materials or materials coated with ultra violet ray resistant plastic.

• Non-ferrous materials (90-10 and 70-30 Copper-Nickel, Monel, Aluminium bronze), high grade stainless steels.

5.7) The equipment listd below shall be shielded to prevent : damage during surface preparation and painting operations.All opening, including those which are flanged or threaded. Shall be sealed to prevent entry of sand, dust, or coating materials

- Name plates and notices
- Packing glands
- Packing seal
- Pressure gauges
- Gauges glasses
- Instrument dials

5.8) All equipment which should be heat treated , shall be painted after heat treatment. Machined

and threaded surfaces shall be protected with temporary rust preventative paint .

6. SURFACE PREPARATION

6.1) Paint life depends primarily on surface preparation.surface preparation should remove foreign bodies to allow the type of priming paint used to wet the surface thoroughly and develop adequate adhesion.

6.2) All rough edged cuts & welds,weld sptters,indentations,all surfaces & protrusionmust be ground to smooth out the contour before thesurface is prepared for painting .Any grinding performed after blast cleaning ,must be re-blast to required roughness.

6.3) All bolt holes shall be drilled and blunted before blasting.

6.4) Prior to surface preparation, the surface shall be inspected for spotting oil and grease deposits or pollution on the surface. If any, the deposits of oil or grease shall be removed from the surface by solvent cleaning prior to further surface preparation.

6.5) Required Cleanliness

All surfaces prepared for coatings shall satisfy :

- SA 2.5 of the Swedish standard SIS 05 5900 or,

- Near White Metal Blast Cleaning of the surface preparation specification SP-10-63 T of the Steel Structures Painting Council or,

- NACE No. 2 Near White Blast Cleaned Surface Finish in accordance with the NACE STANDARD TM-01-70.

6.6) Required Roughness

6.6.1) - All surfaces shall be blast cleaned to obtain a total angular roughness Rt included :

- between 30 and 50 microns when total thickness of the coats of paint applied is less than 400 microns,

- between 50 and 80 microns when total thickness of the coats of the paint applied is greater than 400 microns.

6.6.2) - Only dry blasting techniques are allowed. Compressed air for abrasive blasting shall not contain any trace of oil or water. Blasting nozzle pressure shall not be less than 6.2 bar g (90 psi g). The use of SPONGEJET process with the proper equipment is approved.

6.7) Surface preparation shall not take place in the following conditions:

a- At temperature below 10 ° C

b- When the relative humidity is greater than 80%

If the air's relative humidity exceeds 80 %, the Applicator must obtain permission from the Company to proceed with or continue with surface preparation. The applicator must provide a hygrometer to measure the air's relative humidity.

c- When the metal surface temperature is less than 3 ° C above the ambient dew point or in excess of 38 ° C.

Measurement with appropriate equipment controlled by inspector. Frequency shall be twice a day at beginning of each shift & when adversalty condition may occure.

d- Outside daylight hours on exterior locations.

e- Paint material shall not be applied in rain , snow , fog or mist , nor to wet damp surfaces or to frosted or ice coated surfaces.

f- Paint material shall not be applied to steel when ambient temperature are excepted to fall to 5 ° C before the paint has dried.

6.8) Surface preparation on new steel surface shall remove all surface irregularities and mill-scale, together with all rust and surface contamination such as grease, dirt and solid pollution.

6.9) All abrasives shall be free of dust, dirt and other foreign matter. They shall be of a reusable type & to be kept dry all time.

6.10) The abrasive used in installations as wheel abrators or manual blast cubicles in which the abrasive is recovered and re-used shall be mixture of chilled iron or steel grit and steel shot able to produce the required surface profile.

The abrasive mixture shall be replenished using new and worn abrasive, so as to produce a consistent profile height and standard of surface cleanliness. The abrasive mixture shall be kept free of dust (including metallic particles) and debris. Abrasive cleaning employing sand shall not be permitted.

Abrasive material for blast cleaning, consisting solely of steel shot shall not be used. A mixture consisting of steel shot and at least 25% by weight steel grit is acceptable.

NOTE: for stainless steel, Befor painting stainless steel surfaces shall be cleaned ,degreased A non-metallic blast abrasive i.e. aluminum oxide, shall be used when abrading stainless steel surfaces. Sand shall not be used. Iron abrasive, iron oxide abrasive or non free chloride/chlorine/halide abrasive shall not be allowed for stainless steel blast cleaning. (The use of copper slag is not allowed).Total roughness shall be in the 25 micron range.

6.11) Surface preparation for steelwork (C.S) shall result clean surface compatible to SA-2 ½ as per Swedish standard 055900 and sspc . vis-1 degree SP 10 , but main reference is ISO 8501-1

6.12) Chipping, scraping and steel wire brushing using manual or power driven tools shall only be used where blast cleaning is impractical, with the approval of owner authorized inspector.

6.13) During surface preparation, care shall be taken not be damaged or alter identification plates, machined surface and parts coated in the factory, these parts shall be properly protected.

Any oil, grease, dust or foreign body shall be removed prior to blasting.if oil or grease needs to be removed again,the surface shall be reblasted.

6.14) The frequency of profile measurement shall be in accordance with ISO 8503-2.

7. STORAGE, MIXING AND THINNING OF PRODUCTS

7.1) STORAGE CONDITION

7.1.1)-All paints and thinner containers shall be kept closed before use and stored under shelter.

7.1.2)-The settlement of heavy paints shall be lessened by rolling the drums in which they are stored every six weeks.Turning the drums on their ends is not allowed.The normal finishing paints & drum paints do not require rolling during the storage period.

7.1.3)-Any paint for which the shelf life is expired shall not be used.The maximum storage time for paints shall be in accordance with manufacturer 's recommendations.paints shall not be stored in open containers, even for a short time.

7.1.4)-Paint shall be stored in a well ventilated room , free from excessive heat or direct rays of the sun & maintained at a temperature of between 4 oC and 27 oC .open air srorage shall be avoided particularly of heavy paints such as primers and undercoats.

7.2) MIXING

7.2.1)- Painting material shall be thoroughly mixed immediately prior to application .Mixing shall be by means of mechanical stirrers, paddle mixers , can vibrators or can shakers.

7.2.2)- All the ingredients in each container shall be thoroughly mixed and homogenized. Mechanical mixing shall be such that all pigments or other agents are held in solution during application.

Manual mixers are not authorized.

7.2.3)-Paint mixed in the original container shall not be transferred until all settled particles have been remixed with the medium to facilitate mixing.

7.2.4)-Paint shall not mixed or held in solution with air bobbles.

7.2.5)-If a skin has formed in the container and skin is thicker than1mm, the paint shall not be used.

7.2.6)- All the pigmented products shall be strained after mixing unless applicator equipment is provide with adequate strainers.

Strainers must allow all pigments to pass through, but not any skin.

7.2.7)- paint component shall be mixed in the proper ratio as supply by paint manufacturer in containers.Mixing of "guessed" quantities is not permitted .where required , the paint manufacturer indication time shall be observed .Mixed paint exceeding the pot life shall nor be used.

7.3) THINNING

7.3.1)- No thinners are to be added unless necessary for proper application, thinning must never exceed manufacture recommendations. If thickening of paint prevents proper application by brush , not more than 51% by volume of the correct thinner may be added.

7.3.2)- Thinners used must be those suggested by the manufacturer.

7.3.3)- When use of thinner is authorized by the manufacture, it shall be added during mixing. Applicators shall not be add consistency. Thinners must be added under the guidance of the specialist who is thoroughly familiar with the quantity and type of added thinner.

7.4) FILM THICKNESS

7.4.1)- The applied DFT shall not be less than the specified minimum.The DFT shall be measured in accordance with SSPC-PA2.DFT measurement shall be made of each coat & of the total system.

7.4.2)- The total dry film thickness for a multicoat system shall not be less than the added total

specified dry film thicknesses.

7.4.3)- Inadequate film thickness shall require the further application of an additional complete coat over the hole area until the dry film thickness is sufficient to meet the specified minimum.excessive thick coat shall be removed completely by blast cleaning , & shall be re-coated according to this project specification.

7.4.4)- The dry film thickness of each coating applied coating applied shall be checked by means of an elcometer or micro tester dry film gauge.

8. PRIMING

8.1) Prepared surface should be primed generally within three hours or before visible re-rusting occurs. Cleaned surface shall never be left over night prior to coating, in such case re-blasting or re-cleaning is necessary.

8.2) In order to minimize contamination between successive coat of paint, over coating of the preceding coat shall be done as soon as it is permitted by the particular specification, and not delayed beyond the period specified.

8.4) The primer to finishing coat paint shall be from the same manufacturer for each system to ensure compatibility.

9. PAINTING APPLICATION

9.1) Procurement and storage

The quantities of paint and thinners required to perform the entire job shall be procured before the work commences, except in cases where the shelf life of the product is less than the anticipated duration of the work.

Thinners, solvents, etc. shall be stored in a suitably ventilated fireproofed building, separate from other painting consumables.

The products shall be delivered in their original sealed packaging and stored in such conditions as to avoid their degradation (controlled temperature, etc.). The packaging shall be clearly marked with the product description, the batch number, the fabrication date and the expiry date.

The expiry dates from the fabrication dates are:

• For zinc ethyl silicate: 6 months

• For other products: 1 year

• Specific cases: according to manufacturer's recommendation with COMPANY approval.

9.2) APPLICATION

9.2.1) General

Paint shall always be applied to surfaces that are dry, clean and degreased, for both coating on substrate and previous coat.

Painting works shall not proceed if:

• Temperature of the substrate is less than 3°C above the dew point,

• The relative humidity is more than 85% RH (90% RH for inorganic zinc silicates),

• The weather is rainy or foggy, except under shelter, and subject to verification of the atmospheric conditions,

• The minimum or maximum temperature of the ambient atmosphere and the substrate are outwith the limits given in the product data sheets (usually 10 °C for epoxy based paint and 5 °C for acryl-polyurethane topcoat.

CONTRACTOR shall keep a daily record of the dew point, relative humidity, ambient atmosphere and substrate temperatures (all measured before the work commences and twice per shift and when ambient conditions are obviously changing) to ensure that conditions are acceptable. These records shall be kept and made available to COMPANY.

Application shall be by airless spray.

Stripe coats shall be applied by brush to all angles, corners, sharp edges, bolt or rivet heads, etc. with the same product than this to be applied on the surface to be painted. The only exception is inorganic zinc silicates where stripe coats shall be applied using the repair system primer i.e. zinc rich epoxy.

Different colours shall be used for all successive coats of the paint system. The finishing coat of the required colour shall be sufficiently opaque to cover the shade of the undercoat.

The thickness of each coat, including frequency and tolerance shall be checked by the

CONTRACTOR according to ISO 19840. The values shall be recorded and made available to COMPANY.

10. GALVANIZING

10.1) Hot -dip galvanizing shall be in accordance with ASTM A123 on products fabricated from rolled , pressed & forged steel snaps , plates , bars & strips except that pipes for hand railing shall meet ASTM A-153 .

11. INSPECTION

11.1) Contractor shall advise the owner inspector before commencing specific paint applications.

11.2) Inspector shall have the right to inspect the paint work at all stages and to reject any and all tools, instruments, material, staging or equipment of work which do not conform to the specification.

11.3) Each coat paint shall be free from defects and damage.Finished paint shall have the correct

shade, degree of gloss and evens and be tree from tackiness after drying/curing and from cracks, holidays, runs, sags, wrinkles, patchiness brush or roller marks or any defects that may be deleterious to the quality of the coating.

11.4) Prior final acceptance of completed work, a joint inspection shall be made by contractor and owner inspector and an agreed inspection report to be signed by both parties.

11.5) Inspection by the paint manufacture or an independent inspection service shall not relieve the contractor of responsibility for ensuring that the work is carried out in accordance with the specification.

11.6) Before commencement of shop preparation and painting, a meeting between the coating manufacturer, contractor and company's representative shall be convended, to establish and agree, when necessary, visible blast standard, blast profile, satisfactory application the coating and agreement and calibration of inspection equipment.

11.7) Each coat shall be inspected prior to application of the next coat, Areas found to contain runs, over spray, roughness, cracks or other signs of improper application shall be repaired or recoated in accordance with the authorized inspector recommendation.

12. QUALITY CONTROL AND TESTING

12.1) Contractor shall submit to company for approval, his proposed quality control and testing procedures covering all phases of surface preparation and paint application.

12.2) Manufacturers of all materials shall supply test certificates of all tests performed and certificate of compliance stating that the material meets the requirements of the applicable specification.

12.3) Before paint application the prepared surface shall be inspected visually by Quality control inspector and if the result is satisfactory the parts can be released for painting.

12.4) After paint application following test shall be performed by Quality control departments:

- Visual check
- Thickness check
- Adhesion test
- MEK test

12.5) VISUAL CHECK

Coating film sould be inspected visually after each application & before application & before application of the next coat in order toverify that the whole surface is free of defect as:

-mud cracking

-Inclusion & cleanliness

-Holidays

-Bubble

-Mechanical damage

-Runs/sags

-Over spray

12.6) THICKNESS CHECK

- Dry paint thickness shall be measured with a magnetic probe,such as micro test of elcomter or equivalent. It is imperative that the magnetic probe be calibrated for each thickness of coating steel support with a non-magnetic block whose thickness is as close as possible to the coating being checked.

-On each spot, make 5 measurements by moving the probe a short distance for each new gage

reading. Take the average of the five (5) gage reading as the spot measurement.Each coat's thickness & total thickness shall be checked. Make five separate spot measurements spaced evenly over each section of the structure 10 square meters in area.

NOT: Average of spot measurments >= specified DFT

All individual measurments >= 90% of specified DFT.

- Should be the thickness less , or more if a maximum thk.is specified , two additional measurements are also in defect ,the item subjected to investigation shall be rejected.

The surfaces represented by the item rejected shall also rejected.

(Zinc ethyle silicate):

- Before over coating it shall be checked, with the solvent recommended by the paint manufacturer, that the hydrolysis is completed by soaking the surface with a rag impregnated with the recommended solvent.

- For each successive coat, the minimal allowable thickness shall be at least 53% of the specified thickness, the maximum thickness shall not exceed 100% of the specified thickness.If the paint remains soft or shows mud crack or orange skin or wrinkling, the paint shall be rejected and request for new application.

In order to achieve the specified dry film thickness, frequent checks of wet film thickness shall be carried out during the paint application with film thickness gauges such as the elcometer wheel or comb type.

12.7) ADHERENCE CHECK;

a) for final coating Paint adherence shall be checked as per ASTM method D3359, methode A or B , or ISO 462.4 .Exhibiting an adhision of less than 15 Kg.cm2 shall be rejected & repaired.

Method A (x cut) shall be-used for paint film thicker than 125 microns, Methode B (Lattice pattern) shall be used for paint film up to 125microns.

Test Method A: An X-cut is made in the film to the substrate.

Pressure-sensitive tape is applied over the cut and then removed. Acceptable rating are 5A (No peeling or removal) or 4A (Trace peeling or removal along incisions or at their intersections.)

Test Method B : A lattice pattern with either six or eleven cuts in eachdirection (cross cut) is made in the film to the substrate, pressure-sensitive tape is applied over the lattice and then descriptions and illustrations. Spacing between the cut lines shall be 1 mm for film thickness up to 50 microns and 2 mm for film thickness from 50 to 125 microns. Acceptable results are rate 5B (the edges of the cuts are completely smooth, none of the squares of the lattice is detached) or 4B (small flakes of the coating are detached at intersections; less than 5% of the area is affected).

If the test is unsatisfactory, the entire surface shall be blast

12.8) MEK TEST

b) Test method for resistance of ethyl silicate (primer coating): in this method we use a solvent rub technique for assessing the MEK resistance of ethyl silicate zinc-rich primers the MEK resistance of some two component ethyl silicate zinc-rich primers has been shown to correlate well with the cure of the primer as determined by diffuse reflectance infrared spectroscopy .the technique can be used in the fabricating shop .

-TERMINOLOGY

Double rub the act of rubbing a solvent saturated cloth in one complete forward and backward motion over a coated surface.

-SIGNIFICANCE AND USE

Ethyl silicate zinch-rich primers cure by the reaction of the vehicle with moisture thereby providing a binder.

As relative humidity and temperature vary during the day , so does the rate of cure.

A certain min. degree of cure is recessary prior to topcoating .this can be agreed upon befor the test method.

-PROCEDURE OF TEST

select areas on the primer surface at least 150 mm long on which to run the tests.

Clean the surface with tap water or dry cloth to remove loose material.

Measure the dry film thickness of the primer .

Mark a 150-by 25mm rectangular test area on the undamaged cleaned suface using a pencil or other suitable solvent resistant marker.

Fold the cheesecloth (100%cotton mesh size grade 28 by 24 approximately 300 by 300 mm) into a pad of double thickness and saturate it to a dipping wet condition with the methyl ethyl ketone (MEK) (for steelwork) .

Do not allow more than 10 s to elaspe before proceeding to the next steps.

Place the properly protected index finger into the center of the pad while holding excess cloth with the thumb and remaining fingers of the same hand.

With the index finger at a 45 angle to the test surface , rub the rectangular test area with moderate pressure first away from the operator and then back towards the operator .one forward and back motion is one double rub and complete at the rate of approximately 1/5 .

Continue rubbing the surface with the MEK saturated pad , wetting the pad as necessary without lifting it from the surface , until either the metal substrate is exposed or 50 double rubs have been completed if the former , record the number of rubs when the substrate is exposed .

Select an adjacent area to be used as a control .

Inspect the test areas and the cheesecloths.

Rate the results in accordance the followings :

- Burnished appearance in rubbed area , slight amount of zinc or cloth after 50 double rubs .
- Or some marring and apparent depression of the film after 50 double rubs.

12.9) INSPECTION RESULTS

All quality control results shall be written up into reports.

All reports shall be submitted to the authorized inspector for approval.

13. REPAIR OF DEFECTS OR DAMAGE

13.1) Any defect of damage that may occur shall be repaired before the application of further coats and where necessary the particular surfaces made paint free. remedial work shall be carried out prior to packing for shipment.

13.2) Areas where due to inadequately prepared surface solvent entrapment, excessive application of prime and/or finish coats, etc.

The tested paint system consistently fails to meet the required test standards for adhesion, the contract shall remove the affected area by blast cleaning and shall reapply the full paint system to meet the required standard.

13.3) area which are to be over coated shall be thoroughly cleaned free from grease, oil and other foreign matter and shall be dry. The surface shall then be prepared to the standard as originally specified (for large damaged areas), or prepared to the highest possible standard using mechanically operated tools (for small local damaged spots to 1 m2).

13.4) Damaged areas of galvanized surface : Remove oil, greas & any other forein material from the surface by washing with a suitable chloride –free solvent , in accordance with SSPC-SP1 standard , on all galvanized areas near surfaces damaged by welding & then bristle brush washed with clean water.

13.5) When thorouly , a minimum of two coats of two pack zinc rich epoxy paint shall be applied by brush to provide a zinc coating thickness that is a minimum of 30 µ more than the galvanized layer.

14. PAINT SYSTEM

14.1) Inorganic zinc rich primer, two component , high build type moisture curing ethyle silicate type zinc primer.The metalic zinc content is a minimum 80% by weight of total solids & provides sacrificial protection & high anti-corrosive stability to steel surfaces.Continuos heat resistance is achieved in the temperature range up to 400 °C.

Organic zinc rich primer two component epoxy based zinc rich primer.The metaliczinc content is a minimum 80% by weight of total solids & provides sacrificial protection & high anti-corrosive stability to steel surfaces.contininuous heat resistance is achived in the temperature range up to 150 °C.

Epoxy: Two component polyamide cured epoxy paint.Generally it has good resistance to chemicals & exhibits good durability .Continuos heat resistance is achieved in the temperature range up to plus 120 °C.

Polyurethane: Two component isocyanate-free , aliphatic type polyurethane top coat. Generally this paint product extremely hard & good chemical , weather resistance & excellent durability & gloss retention.

Silicon Acrylic One component ,aluminum (or color) pigmented acrylic-modified silicon resin.Heat resistant up to 200°C.Full cure can be achived at ambient temerature.

14.2) Paint system applicable shall be in accordance with I , II, III .

15. PAINTING REPORTS

See Attachment 1.

I. Painting system for Steel Structures and V-units except aluminum and Stainless Steel

HOT DIP GALVANIZED (Acording to ASTM A-123, DFT 80 µ

II. Painting system for: Intermediate Pieces and Fan Casing (fan ring and pipe holder)

1- Minimum surface preparation: SSPC-10 or equivalent (SA 2 1/2)

2- Primer: Zinc Phosphate Epoxy Polyamide

Dry film thickness= 75 µ

3- Intermediate: High build epoxy polyamide-MIO pigmented

Dry film thickness= 75 µ

A

4- Finishing: Aliphatic polyurethane
Dry film thickness= 50 µ

(Total Dry film thickness=200 microns)

Finish color: RAL 7035

Painting & Surface Preparation Report

Item painted :

Date : **Time:**

Humidity :

Temperature:

Surface profile:

Roughness check:

Adhesion Test (X-Cut Test):

Visual test:

Visual test:

MEK Test:

Paint type :

Primer:

1st coat:

2nd coat:

manufacture of paint :

Ral No.:

Thickness of each coat:

DESCRIPTION	THK	RESULT	DATE	REMARK
1	SAND BLASTING			
2	PRIMER COATING			
3	INTER COAT			
4	FINISH COAT			

INSPECTOR	AAC	CLIENT	TPA
SIGNATURE			
DATE			