

# COATER Master Inspection Report

Author: QUALISURFAL

Document Code: F-MIR-Coat

QQM Section: 9.4.3.1.1

Date Approved: 16.11.2023

Aproved by: Executive Committee

Valid from: 01.01.2024

Version: 06

No. Pages: 34



	Report no											
COMPANY	0 0 0 0 0 0 0							• •				
Name												
Plant Address												
Phone					email							
Responsible person(s) (contact)												
Licence number			(leav GR1/	e blank for (GR2)		ber of ing lines	<b>3</b> <sup>2</sup>			SEASIDE endorsement holder	YES	NO
COATING LI	· · · NE I	 NS	SPECT	ION 1		0 0 0 0	0 0 0					
DATE OF INSPECTION (use dropdown calendar)	ON		DESIGNAT	TION <sup>2</sup> OF TI	HE COAT	ΓING LI	NE					
INSPECTION NO.												
			Granting						SEASIDE:	Granting		
TYPE OF INSPECTION	ON		Renewal						Select ONLY if FFC test is performed (ANNEX I or	Renewal (During RN1)		
DATE OF LAST INSF	PECTION		Repetition						ÀNNEX II)	Repetition		
(use dropdown calendar)			Has anythin in the plant the last insp	since	YES	NO	If YES	S ?				
Testing laboratory												
Name of inspector	1:							2:				
Is the inspection unannounced?	Υ	ES	NO If	f NO why?								
Is an inspection possible?	Υ	ES	NO I	f NO why?								
Remarks												

1 Annex I = SEASIDE, Annex II = Anodic pretreatment, Annex III = Supplement for off-site anodic pretreatment, Annex IV = Batch pretreatment inspection 2 A coating line is a production line used for coating aluminium for architectural applications that includes a single pretreatment cycle.

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			Re	port no	
IDENTIFICATION OF COATING SYSTEMS	USED BY THE	COATE	R (STOR	AGE)	
Verify that the powders (include the inspection are approved be	ling colours) that the co	pater uses for	external arch	tectural applications during	3
Coating systems (type and brand name)	Producer		Approval NO.*	Banned colours*	
* As shown on the current li	st of approved coatin	g systems p	ublished on t	he website (www.qualico	pat.net)
Does the coating plant YE have only approved powders in stock?	S NO If NO why?				
Do the coating materials comply wit prescribed by QUALICOAT? (see paragraph 4.1.1 and Appendix A1 of		YES NO			
Remarks					
Optional picture upload					

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			Report no	)=		
STORAGE CO AND LAYOUT	NDITIONS OF EQUIPMENT					
PARTS TO BE TREATE Are the parts to be treated Remarks	D I stored in accordance with section	າ 3.1.1 of the Specifications	5?		YES	NO
CHEMICAL PRODUCTS	S comply with the chemical manufa	cturer's requirements?			YES	NO
POWDER AND LIQUID  Do the storage conditions	COATING PRODUCTS comply with the powder manufact	turer's requirements?			YES	NO
Remarks  LAYOUT OF EQUIPME  Does the layout of equipm	NT nent comply with section 3.1.2 of th	ne Specifications?			YES	NO
Remarks						
	ION OF LABORATO	ORY				
1.1 LABORATO  APPEARANCE (  Remarks	YES NO					

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#### **APPARATUS FOR MEASURING THICKNESS AND GLOSS**

#### 1.2 Instruments for measuring coating thickness (ISO 2360)

Verify the calibration of the instrument using two suitable standards according to the thickness to be measured

	Instrum	Instrument A						Instrument B			
	MAKE						MAKE				
	MODEL						MODEL				
	No.						No.				
Deviation from the standard value	REQUIF	RED		MEASI	JRED	—	REQUIR	RED	MEASURED		
- Set-up I : 0 ± 0.5											
- Set-up II: < 60 ± 1											
- Set-up III: ≥ 60 ± 2											
Function											
	YES	NO									
Calibration standards/ foils available			Remai	rks							
Data sheet with identifi- cation no. and calibration records available	YES	NO	Remai	·ks							

#### 1.3 Specular glossmeter (ISO 2813)

Verify the calibration of the instrument

Make		Model		No		
Required		Measured				
Function	( ± 2 un		neet with identification no. an s available	d calibration	YES	NO
Remarks						

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#### **1.4** Analytical balance (sensitivity not less than 0.1 mg)

Make				Model		No	
Data sheet with no. and calibrat available		YES	NO	Last calib	orated on		
TEST WITH CA	ALIBRATED W	EIGHTS	(10-50g)				
	WEIGHTS US	SED		WEIGH	TS MEASURED		
Weight 1		g	=		g		
Weight 2		g	=		g		
Function							
Two calibrated weights for inhouse adjustme available		10					
Remarks							

#### **APPARATUS FOR MECHANICAL TESTS**

When verifying that the apparatus is functioning properly, it is necessary to check the visual appearance of the apparatus

#### 1.5 Cutting tool (for cross-cut adhesion test ISO 2409)

Make				Model		No	
Visual assessment							
If not good, indicate the reasons							
Function							
	YES	NO					
Adhesive tape available	IES	NO					
Available distances			mm				
between cuts							
Remarks							

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#### **1.6 Impact tester** (ISO 6272-1, ISO 6272-2 and ASTM D 2794)

Make	Model	No
Visual assessment		
If not good, indicate the reasons		
Function		
Remarks		

# 1.7 Apparatus for bend test (ISO 1519)

Make	Model	No
Visual assessment		
If not good, indicate the reasons		
Function		
Remarks		

#### **OTHER APPARATUS**

# 1.8 Recorder for stoving temperature

Make		Model				No	
Minimum number of sensors	3 on the parts	YES	NO	1 to measure the air	YES	NO	
Method used by the inspector for checking that the apparatus is functioning (for example, by comparing it with certified apparatus)							
Function				Last checked on			
Data sheet with identification no. and calibration records available				YES NO			
Remarks							

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1.9	Conductiv	ity mete	•										
	Make				Мо	del					No		
	Reference test solution			μS/d	cm		Temperatu	re			°C		
	Measured			μS/d	cm		Temperatu	re			°C		
	Function (≤ 2 µS/cm)				Ca ava	libratio ailable	on solution	≤ 100 µ	ıS/cm	YES	NO		
	Data sheet with and calibration	identificatio records avai	n no. lable	YES	NO								
	Remarks												
1.10	pH meter												
	Make				Mo	del					No		
	Test of the electrodes with two	Solution 1				рН	Meas	ured				рН	
	standard test solutions	Solution 2				рН	Meas	ured				рН	
	Function (± 0.1)												
	Remarks												
1.11	Apparatus	for boili	ng wate	er tes	t								
	Make				Mo	del					No		
	Function				Pre	ssure	cooker	YES	NO				
	Remarks												
1.12	Device for	the anal	ytical c	oatin	g wei	ght	determi	inatio	<b>n</b> (Chem	nical pr	etreat	tment only)	
	Make				Mo	del					No		
	Function						et with ider			YES	NO		
	Test method												
	Remarks												

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# 2. INSPECTION OF PLANT AND EQUIPMENT

#### **SURFACE PRETREATMENT**

#### Type of pretreatment

Chromate pretreatment

Chemical pretreatment (Chrome VI-free)

QUALICOAT approval NO. (Example: A-003 / A-074 / A-132)

Rinse pretreatment No-rinse pretreatment

In-house Anodic pretreatment (please complete ANNEX II)

Off-site Anodic pretreatment (please complete ANNEX III)

Remarks

#### 2.2 **Specific requirements**

Interruption in treatment? YES NO

If YES, how much time between the pretreatment and coating

Hours (max. 16 hours)

If YES, Are the pretreated parts handled with clean textile gloves?

NO

Remarks

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AA2

# 3. PROCESS **INSPECTION**

Installation System used **Process** Horizontal Spray Continuous Batch **Immersion** In the case of batch Vertical with basket pretreatment using Batch Cascade a basket, please complete ANNEX IV (jig)

#### **SEASIDE pretreatment** (For endorsement holders)

The SEASIDE inspection shall be conducted during the first annual licence renewal inspection using ANNEX I (or ANNEX II for in-house Anodic pretreatment and Annex III for Off-site Anodic pretreatment)

<b>SEASIDE</b> production
on the inspection
day

Α1

YES

NO

Remarks

#### 3.1 **PRETREATMENT**

#### **Etching type**

(Optional for Anodic pretreatment, see ANNEX II)

A2

(simple acid etching)	(acid etching + acid etching)	(alkaline etch and acid etch	ing ing)	(acid etching + alkaline etching + acid etching)
		STEP 1	STEP 2	STEP 3
INDICATE THE STE ETCHING OR DEOX	P (DEGREASING, XIDATION)			
рН				
Temperature (°C)	required			
Temperature ( C)	measured			
Concentration	required			
Concentration	measured			
Immersion/spray time (min)	required			
	measured			
Aluminium removed	(g/m²)			
Remarks				

AA1

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 $\geq$  1 g/m<sup>2</sup> / ( $\geq$  2g/m<sup>2</sup> for SEASIDE)

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**Total aluminium removed** 

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#### 3.1.1 Conversion treatment

Supplier	Pro	duct
	REQUIRED	MEASURED
Temperature	°C	°C
Concentration / extinction		
Conductivity	μS/cm	μS/cm
Immersion/spray time		
pH value		
Remarks		

# 3.1.2 Chromate conversion coating

	WEIGHT RANGE REQUIRED	WEIGHT MEASURED
YELLOW	g/m²	g/m²
GREEN	g/m²	g/m²
Remarks		

# 3.1.3 Chemical chrome VI-free conversion coating

	METHOD	WEIGHT RANGE REQUIRED	WEIGHT MEASURED	UNIT
COATER				
CHEMICAL MANUFACTURER				
(last available result)				
Remarks				

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#### **COOPERATION WITH THE CHEMICAL MANUFACTURER** 3.2

NUMBER OF SAME	PLES TESTI			ICDECTION	I	QUANTITY	Y	
AASS Test		ical (Ch		ee) <u>and</u> Chro	omate			
Coating weight measurement	for Chem	ical (Ch	nrome VI-fre	ee) treatmen	t			
Remarks								
Are the chemical manufacturers test results recorded?	YES	NO	If NO why?					
Are the sample detail (shipping dates, chemical manufactur		NO	If NO why?					
confirmation receipts recorded?								
recorded?	s)	TION						
recorded?  TECHNICAL IN  General technical	s)	0 s	Specific instructor the plant	ctions YE	ES NO			
recorded?  TECHNICAL IN  General technical	s) FORMAT	0 s	Specific instructor the plant	ctions YE	ES NO			
recorded?  TECHNICAL IN  General technical data sheet  Remarks	s) FORMAT	0 s	specific instruc or the plant	ctions YE	ES NO			
recorded?  TECHNICAL IN  General technical data sheet  Remarks  FINAL RINSE	FORMAT YES NO	0 s	pecific instruc or the plant	ctions YE	es no	D	MEASU	RED
recorded?  TECHNICAL IN  General technical data sheet  Remarks  FINAL RINSE  CONDUCTIVITY [µS	FORMAT YES NO	O S	specific instructor the plant	ctions YE		<u>D</u>	MEASU	RED
recorded?  TECHNICAL IN  General technical data sheet  Remarks  FINAL RINSE	FORMAT YES NO	O S fo	or the plant	Euolis		D	MEASU	RED
recorded?  TECHNICAL IN  General technical data sheet  Remarks  FINAL RINSE  CONDUCTIVITY [µS  Rinse before contreatment	FORMAT YES NO	O S fo	or the plant	Euolis		D	MEASU	RED
recorded?  TECHNICAL IN  General technical data sheet  Remarks  FINAL RINSE  CONDUCTIVITY [µS	FORMAT YES NO  S/cm] *  niversion  ersion	Rins Drip	sing Water			D	MEASU	RED

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Remarks/Reason for missing drip water measurement



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3.5	DRYING						
	Maximum temperature allowed		°C Max	imum temperature sured on the parts		°C	
	Production method		Sati	Y! isfactory	ES NO		
	Remarks						
3.6		ow, the inspector			mperature measu d by the powder i		st
	Powder manufacturer			Powde (P-No.	er approval )		
	Product name						
	STOVING CONDITI		MEASU	JRED	STO\ INSTALI		
	Time in minutes	Temp. of parts °C	Time in minutes	Temp. of parts °C	Duration in minutes	Set value °C	
	Alarm YES N system available	O A calculation of the CURING INDEX is used		If YES, does the v meet the manufac recommendations	turer's	Condition YE acceptable	S NO
	Remarks/ Reference to additional file uploads						
::: 4. I∣	NSPECTION	N OF FINISH	HED ::::				
	PRODUCTS						
1.1	INSPECTION	OF COATED I	PARTS (Which	have been rel	eased by the co	pater)	
	Appearance	V50 N0					
	Conforms to section 2.1 of the QUALICO Specifications		If NO why?				
	Type of produc	ction					
	Sections	Sheets	Small pa	rts	Others		
	Remarks						

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# COATING THICKNESS (Minimum thickness measured)

Powder (P-No)				Order No			Number of pieces tested
Colour				Lot size			Minimum thickness measured
No.	1	Measure 2	d coating th	ickness re	sults(µm) 5	Average in µm	Remark
1 2							
3							
4							
5							
6							
7							
9							
10							
Powder (P-No)				Order No			Number of pieces tested
Colour				Lot size			Minimum thickness measured
No.	1	Measure 2	ed coating th	nickness re 4	sults(µm) <b>5</b>	Average in µm	Remark
1							
2							
3							
4							
5							
6 7							
8							
9							
10							
Powder (P-No)				Order No			Number of pieces tested
Colour				Lot size			Minimum thickness measured
No.	1	Measure 2	d coating th	ickness re	sults(µm)	Average in µm	Remark
1							
2							
3 4							
5							
6							
7							
8							
9							
10							
Number of rejected pieces		Satisfac	tory YES	NO Rema	arks		

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4 0	•	4 4
N -2	~ ~ W/I	DO TOCT
4.3	Jawi	ng test
		9

The coating shall not crack or chip when sharp tools are used YES NO

Satisfactory

Remarks	R	e	m	a	rk	S
---------	---	---	---	---	----	---

#### Dry adhesion (ISO 2409) 4.4

Test on finished product. The result shall be 0.

SAMPLE No.	COATING THICKNESS	SPACING OF TH	HE CUTS BY COAT	ING THICKNESS	ASSESSMENT (0 REQUIRED)
		up to 60 µm	60 - 120 μm 2mm	Over 120 µm 3mm	
	μт				
Satisfactory	YES NO				
Remarks					

#### 4.5 **Wet Adhesion test**

3 samples of finished product taken during the inspection. On visual inspection, there shall be no sign of detachment or blistering. Colour change is acceptable.

SAMPLE No.		ATING KNESS	SPACING OF TH	E CUTS BY COAT	ING THICKNESS	VISU	
		RIVEOO	up to 60 µm 1mm	60 - 120 μm 2mm	Over 120 µm 3mm	SATISFA	
		μm				YES	NO
		μm				YES	NO
		μm				YES	NO
		ріп					
Satisfactory	YES	NO					
Remarks							

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#### 4.6 Machu test

No infiltration exceeding 0.5 mm on both sides of the scratch on 3 test pieces from different lots taken during the inspection. The results should be classified according to the rating scale below:

A. 3 samples satisfactory
B. 2 samples satisfactory
C. 1 samples satisfactory
D. 0 samples satisfactory
D samples unsatisfactory
2 samples unsatisfactory
3 samples unsatisfactory
3 samples unsatisfactory

SAMPLE LOT NO.	RESULTS	RESULTS		SATISFACTORY	
	Length of infiltration	mm	YES	NO	
	Length of infiltration	mm	YES	NO	
	Length of infiltration	mm	YES	NO	
Classification	Remarks				

#### **4.7 Acetic acid salt spray test** (ISO 9227)

The inspector must take 3 samples (sections) from different lots, during first inspection of the year. The results should be classified according to the rating scale below:

A. 3 samples satisfactory
B. 2 samples satisfactory
C. 1 samples satisfactory
D. 0 samples satisfactory
D samples unsatisfactory
2 samples unsatisfactory
3 samples unsatisfactory
3 samples unsatisfactory

SAMPLE LOT NO.		RESULTS			SATISFA	CTORY
	Length of infiltration			mm mm²/10 cm	YES	NO
	Blistering		S	/ TO O		
	Length of infiltration Surface corroded			mm mm²/10 cm	YES	NO
	Blistering		S			
	Length of infiltration Surface corroded			mm mm²/10 cm	YES	NO
	Blistering		S			

AASS Classification	Remarks	

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4.8	<b>Polymerisation</b>	test as	prescribed	(optional for	powder coatings)	)
-----	-----------------------	---------	------------	---------------	------------------	---

Ass	000	mai	nt i	cati	na	
MSS	C331		HL I	au	пу	١.

- Coating is very dull and quite soft
- Coating is very dull and can be scratched with a finger-nail
- Slight loss of gloss (less than 5 units)
- No perceptible change Cannot be scratched with a finger-nail

Req				
1 100	<b>W11</b>	0111	$\sim$	C

1	and	2 =	unsatisfactory
3	and	4 =	satisfactory

Solvent used

R	Δ	m	а	r	k	c
17	ㄷ		а	ш	n	Э.

#### 5. INSPECTION OF THE TEST PANELS

#### Tests performed on test panels processed concurrently with a production lot

Processed during the visit

YES NO

POWDER APPROVAL (P-No.)	TYPE AND BRAND NAME	PRODUCER	GLOSS CATEGORY 1/2/3	COLOUR SHADE
Remarks				

#### 5.1 **COATING THICKNESS (ISO 2360)**

SAMPLE REFERENCE	REQUIRED	MEASURED	SATISFACTORY
			YES NO
Remarks			

#### 5.2 **GLOSS MEASUREMENT** (ISO 2813)

SAMPLE REFERENCE	REQUIRED GLOSS RANGE	MEASURED	SATISFACTORY
			YES NO
Remarks			

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#### **5.3 DRY ADHESION** (ISO 2409)

SAMPLE REFERENCE	COATING THICKNESS			PACING OF THE CL Y COATING THICKN			
				up to 60 µm 1mm	60 μm - 120 μm 2mm	Over 120 µm 3mm	Assessment (0 required)
			μm				
Satisfactory	YES	NO					
Remarks							

#### **5.4 BEND TEST** (ISO 1519)

SAMPLE REFERENCE	COATING THICKNESS	COATING THICKNESS	CLASS 1:	NO cracking or detachment
	according to 2.7 of the Specifications	of the sample	CLASS 1.5; 2 AND 3:	NO detachment
			YE	S NO
	μm	μm	Satisfactory	
Remarks				

# 5.5 IMPACT TEST (ASTM D 2794 AND ISO 6272-1 OR-2) – for powder coatings only

SAMPLE REFERENCE	COATING THICKNESS	COATING THICKNESS	CLASS 1:	NO cracking or detachment
	according to 2.8 of the Specifications	of the sample	CLASS 1.5; 2 AND 3:	NO detachment
			YE	S NO
	μm	μm	Satisfactory	
Remarks				

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Re	po	ort	no	
10	P	JIL		

#### 6. IN-HOUSE CONTROL

CATEGORY OF TEST		CONFORMITY		
		Minimum frequency required	Recorded	
HED	APPEARANCE	According to the lot size of the order		
FINIS	COATING THICKNESS (ISO 2360)	According to the lot size of the order		
TESTING OF FINISHED PRODUCTS	GLOSS (ISO 2813)	Once in every working shift for each shade and manufacturer		
TEST	WET ADHESION	Once in every working shift All samples from one day may be tested together		
ပ	DRY ADHESION (ISO 2409)	Minimum of 1 x sample* for every two production hours		
TESTING	POLYMERISATION TEST (OPTIONAL FOR POWDER COATINGS)	Once in every working shift for each colour shade and gloss category and for each manufacturer		
PANEL 1	BEND TEST (ISO 1519)	Minimum of 1 x sample* for every two production hours		
PAI	IMPACT TEST (ASTM D 2794 and ISO 6272)	Minimum of 1 x sample* for every two production hours		
	CHEMICAL PRETREATMENT BATHS	Once per bath in every working shift, or according to the chemical supplier's advice, that shall be at least once per day (24 hours)		
	CONDUCTIVITY OF DEMINERALISED RINSING WATER	Once per bath in every working shift, or according to the chemical supplier's advice, that shall be at least once per day (24 hours)		
TESTING	TEMPERATURE OF PRETREATMENT BATHS AND HOT WATER RINSE	Once per bath in every working shift, or according to the chemical supplier's advice, that shall be at least once per day (24 hours)		
SS TE	DRYING CONDITIONS	Drying temperature recording: once in every working shift Measurement on parts: once a week		
PROCESS	WEIGHT OF CONVERSION COATING (CHROMATE/CHEMICAL PRETREATMENT)	Once in every working shift, or according to the chemical supplier's advice, that shall be at least once per day (24 hours)		
_ ₫	WEIGHT OF ALUMINIUM REMOVED (etching degree)	Once in every working shift, or according to the chemical supplier's advice, that shall be at least once per day (24 hours)		
	STOVING CONDITIONS	Displayed temperature recording: once in every working shift Stoving curve: twice a week on profiles		

<sup>\*</sup> The same panel to be chosen for DRY ADHESION, BEND TEST and IMPACT TEST

RECORDS AND
REGISTERS

REGISTER
NO YES NO

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PRODUCTION CONTROL

are available for all tests

YES NO up to date

up to date

# STANDARDS OR OPERATING INSTRUCTIONS BASED ON THE STANDARDS

YES NO

Remarks

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7. OTHERS		
Specifications Is the latest edition of the QUALICOAT Specifications (including current Update Sheets)	YES	NO
available to the person(s) responsible?  Complaint book	YES	NO
Is a register for customer's complaints available?		
Use of the label (see Appendix A1 of the QUALICOAT Specifications)  Does the use of the logo comply with the regulations for use of the QUALICOAT quality label?	YES	NO
<b>Training attendance</b> Do employees participate in the trainings provided by the General Licensee?	YES	NO
If Not, why?		

INSPECTION BODY	
DATE	
INSPECTOR'S SIGNATURE	
DATE	
LABORATORY'S SIGNATURE	

# **GENERAL LICENSEE**

DATE

**RESULT RECOMMENDATION TO QUALICOAT\*** 

**SATISFACTORY** 

**NOT SATISFACTORY** 

**REMARKS GL** 

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<sup>\*</sup> The final assessment is made by **QUALICOAT** 



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SUMMARIZING	SHEET				
Form to be complet	ed at the end of an inspection	1			
COATER			LICENCE NUMBER		
DATE OF INSPECTION	COATING LINE DESIGNATION	NAME OF INSPECTOR			
INSPECTION NO.	Overtices				
	Granting				
	Renewal				
	Repetition				
RESOLUTION OF PREVIO	OUS ISSUES AND NONCONFORMITIES:	:			
1					

# RESULTS

3

SUMMARY OF TESTS AND INSPECTION	ISSUES AND/OR NONCONFORMITIES	COATER'S REMARKS
		1
INSPECTION OF MATERIALS		
(5.1.1.)		
INSPECTION		
OF LABORATORY EQUIPMENT		
(5.1.2)		

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SUMMARY OF TESTS AND INSPECTION	ISSUES AND/OR NONCONFORMITIES	COATER'S REMARKS
INSPECTION OF PRODUCTION PROCESS AND EQUIPMENT (5.1.3) + INSPECTION OF PRETREATMENT (5.1.4)		
INSPECTION OF FINISHED PRODUCTS EXCLUDING LABORATORY TEST RESULTS (5.1.5) + PANELS (5.1.6)		
REVIEW OF IN-HOUSE CONTROL AND REGISTERS (5.1.7)		
OTHERS (CLAIMS REGISTER, USE OF THE LABEL, ETC.)		

INSPECTOR'S SIGNATURE	PLANT MANAGER'S SIGNATURE

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	Report	n
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ANNEX I

# ANNEX I SUPPLEMENT FOR MONITORING SEASIDE

#### 1. SEASIDE PRETREATMENT TYPE

A1 (simple acid etching)	A2 (acid etching + acid etching)	AA1 (alkaline etching and acid etching)	AA2 (acid etching + alkaline etching + acid etching)
			MEASURED
CAMPLE	Initial weight	P1 [g]	g
SAMPLE	Surface area	S [m²]	m <sup>2</sup>
ACID ETCHING	Weight after Weight after acid	P2 [g]	g
ACID ETCHING	Weight loss	D1 = (P1-P2)/S [g/m <sup>2</sup> ]	g/m²
ALKALINE ETCHING	Weight after alkaline etching	P3 [g]	g
ALKALINE LICIINO	Weight loss	D2 [g/m²]	g/m²
ACID ETCHING	Weight after acid etching	P4 [g]	g
ACID ETCHING	Weight loss	D3 [g/m²]	g/m²
Total Weight loss		D = D1 + D2 + D3 [g/m <sup>2</sup> ]	g/m²
Remarks			

#### 2. FILIFORM CORROSION TEST

The inspector takes three samples (sections) from different lots. The results should be classified according to the rating scale below:

A. 3 samples satisfactory 0 samples unsatisfactory C. 1 samples satisfactory 2 samples unsatisfactory B. 2 samples satisfactory 1 samples unsatisfactory D. 0 samples satisfactory 3 samples unsatisfactory

SAMPLE No.	RESULTS			SATISFACTORY
	Longest filament	≤ 4 mm	L:	YES NO
	Average length of filaments	≤ 2 mm	M:	
	Longest filament	≤ 4 mm	L:	YES NO
	Average length of filaments	≤ 2 mm	M:	
	Longest filament	≤ 4 mm	L:	YES NO
	Average length of filaments	≤ 2 mm	M:	

FFC Classification Remarks

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: ANNEX II	•					•	 •		•			
SUPPLEMENT FOR ANODIC PRETREATMEN								•				

#### 1. DEGREASING - ETCHING - DESMUTTING

		DEGREASING	ETCHING	DESMUTTING*
	SUPPLIER			
	PRODUCT			
Tamanagatuma (%C)	required			
Temperature (°C)	measured			
Concentration	required			
Concentration	measured			
Immersion/spray time (min)	required			
	measured			
Total etching rate g/m <sup>2</sup>	( ≥ 2g/m2 requested )	Remarks		* mandatory for Alkaline etching

#### 2. ANODISING

	RECOMMENDED	MEASURED	INHOUSE CONTROL FREQUENCY	RECORDED
Temperature of anodising bath	20 - 30 °C		Every 8 hours	
Acid concentration	180 – 220 g/l		Once per day	
Aluminium content	5 – 15 g/l		Once per day	

Remarks

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#### 3. CONVERSION TREATMENT

	REQUIRED	MEASURED
Temperature	°C	°C
Concentration/ extinction		
Conductivity	μS/cm	μS/cm
Immersion/spray time		
pH value		
Remarks		

#### 4. RINSING

	REQUIRED	MEASURED	INHOUSE CONTROL FREQUENCY	RECORDED
Conductivity of the final rinse	30 μS/cm at 20 °C		Minimum once per day	
Conductivity of dripping water	30 μS/cm at 20 °C		Minimum once per day	
			•	•

Remarks

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YES

NO



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#### 5. PROCESS REQUIREMENTS Passivation after pre-anodising with QUALICOAT AP-No. YES NO Is there a written confirmation from the powder manufacturer on the compatibility with this type of pretreatment? Remarks YES NO Is each coating material (i.e., each colour shade, gloss category, and manufacturer) tested for boiling water resistance prior to coating, followed by an adhesion test (see § 2.4)? Remarks YES NO Is a wet adhesion test carried out every 4 hours during the application? Remarks YES NO Is the etching rate checked once per day? Remarks YES NO Is the thickness of the anodic coating checked with every load? Remarks YES NO Are the pre-anodised parts stored for longer than 16 hours? YES NO Is an additional rinsing done?

Is the total time between pre-anodising and coating less than 72 hours?

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Remarks



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#### **6. THICKNESS OF ANODIC FILM** (Anodic coating without powdering and surface flaws)

ORDER NO.			LOT	SIZE					
Section 1 Thickness in [µm]	2	3	4	5	6	7	8	9	10
ORDER NO.			LOT	SIZE					
Section 1 Thickness in [µm]	_ 2	3	4	5	6	7	8	9	10
ORDER NO.			LOT	SIZE					
Section 1 Thickness in [µm]	2	3	4	5	6	7	8	9	10
Remarks									

#### 7. FILIFORM CORROSION TEST

The inspector takes three pre-anodised sections from different lots. The results should be classified according to the rating scale below:

A.	3	samples satisfactory	0	samples unsatisfactory	C.	1	samples satisfactory	2	samples unsatisfactory
B.	2	samples satisfactory	1	samples unsatisfactory	/ D.	0	samples satisfactory	3	samples unsatisfactory

SAMPLE No.	RESULTS			SATISFACTORY
	Longest filament	≤ 4 mm	L:	YES NO
	Average length of filaments	≤ 2 mm	M:	
	Longest filament	≤ 4 mm	L:	YES NO
	Average length of filaments	≤ 2 mm	M:	
	Longest filament	≤ 4 mm	L:	YES NO
	Average length of filaments	≤ 2 mm	M:	

FFC Classification Remarks
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							Kep	ort no.		ANNE
ANNEX I SUPPLE		OR O	FF-SITE	EANC	DIC	PRET	REAT	MENT		
QUALANO licence no. of anodiser						licen	LICOAT ce no. odiser			
Checklist o	utsourced	work (off	-site anodise	r)						
Date order is given			Unique reference	(e.g. order	no. / jo	b card no. / pi	ocess no. fo	r reference)	Type of product	Profiles Sheets Others
Bill of materia includes	Numbers I YES NO	Lengths YES NO		YES N		Orawings (ES NO	If NO specify			
Alloy										
Requested treatment	PreOx		Declared lay	<b>yer thickne</b> 4-10µm			Remark			
Delivery of treated parts	From Extru Trader		m Powder Coater	Co d	omple eliver	te Partial y delivery	,			
Exit control by anodiser	YES N	0		Visual check	OK	NOT OK				
Remark										
Extra samples provided	YES NO	declared	extra samples to be made me material elivery?	YES	NO	If not specify				
Date of Anodi	sing production		(use dropdown	calendar)		Time	e of Anodisi	ng production	n (A)	
			(use dropdown	calendar)				J	. ,	
Date of Samp	le production					Time	of Sample	production		

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4.

5.

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-		ANNEX III

# **3.** Delivery appointments between sender and recipient (storage period in accordance with 3.4 of the QUALICOAT Specifications)

	(use dropdov	vn calendars)				
Date of material receipt			(effective goods receipt date)			
Delivery material latest			(date of the final delivery com	npletion)		
Desired pick up date			(originally requested pick up	date)		
Remarks						
Preliminary in (incoming goods i			re-Ox by the coater			
Checks packaging at receipt	OK	Are the extra s made of the sa material as the	ame			
Film C thickness check	OK	Measurements	s	Average measure		μm
Visual check Y of products satisfactory	ES NO	Remarks				
Rinsed Y upon arrival (<30µS)	ES NO	Specify				
Additional wet ad for powders used time on pre-Ox	for the first	YES NO	Feedback In-House Control Anodiser of process / parameters	YES NO	Receipt of suitability of powder coating from coating supplier	YES NO
		duction sample)				
Coating prod (incoming goods i		fore production	n)			
Date of coating production (B)			Time of coating production (B)			
Elapsing time bet Anodising (A) and less than 72h?		YES NO	Are the pre-treated parts handled with clean textile gloves?	YES NO	Is the resistance to boiling water, followed by an adhesion test carried out every 4 hours during application?	YES NO
Remarks						

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				l	Report	no	ΔN	INEX IV
	NNEX IV	REATMEN	Γ INSPECTIO	N			AN	
PRO	CESS INSPEC	TION (see sec	ction 3)					
1.	Material and se	eparators						
	Aluminium	Stainless steel						
	Others	Specify						
2.	Shape and nun	nber of separa	itors					
	Shape			Number				
	Contact width: (maximum 2 mm)			(The maximun	n contact widtl	ns must be effecti	ve and not nomina	al)
	Remarks							
3.	Flow of liquid							
	Distance between the section			Correct (minimum 1 cr	YES m)	NO		
	Remarks							
4.	Hooping							
	MATERIAL USED							
	Aluminium	Stainless steel						
	Others	Specify						
	MAXIMUM CONTA	ACT WIDTHS YES NO	2					
	Correct (maximum 2		,					
	Remarks							
5.	Boiling water to	<b>est</b> (only for gra	inting a licence)					
		YES NO	<b>3</b> 2					
	Satisfactory							
	Remarks							

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**UPLOAD 2/4** 

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