

QUALANOD

Sample report form for the laboratory testing of a new process



General information

Report Number	XXXXX
Date of report	XX th MONTH 20XX
Number of pages	XX
Type of inspection →Granting →Renewal →if yes:	yes / no yes / no please indicate the QND-Nr.: QND-..... please indicate any changes made since the initial application:
Name of the system	XXXXX
Type of product	XXXXX

Inspection

Date of specimen preparation	XX th MONTH 20XX
Location and facilities used for specimen preparation (see General Regulations VI-7)	XXXXX XXXXX
Representative of the testing institute at the specimen preparation	NAME / JOB TITLE
Date of laboratory testing by the testing institute	XX th to XX th MONTH 20XX

Involved parties

Instructed by (the applicant)	COMPANY ADDRESS COUNTRY
Testing institute	COMPANY ADDRESS COUNTRY
QUALANOD general licensee (or QUALANOD secretariat)	COMPANY ADDRESS COUNTRY

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Introduction

The procedure for the approval of new processes, for which a new or renewed approval is sought from QUALANOD, is given in General Regulations VI. Its provisions shall be followed. This document is a sample report form for the results of the laboratory testing.

The testing institute named above has been authorized by QUALANOD to carry out the assessment of new processes for architectural anodizing according to General Regulations VI and Specifications Chapter 10.

Specimen Preparation

The alloy used was EN AW XXXX or AA XXXX.

The following process cycle was used:

Table 1 - Description of the process cycle

Step	Process Name	Time t in min. / Temperature T in °C, current density or voltage for anodizing, pH for sealing	Concentration or Conductivity
1 Degreasing	XXXX	XX / XX	XXX g / l
2 Rinsing	Tap water	XX / XX	XXX µS / cm
3 Etching	XXXX	XX / XX	XXX g / l
4 Rinsing	Tap water	XX / XX	XXX µS / cm
5 Deoxidizing	XXXX	XX / XX	XXX g / l
6 Rinsing	Tap water	XX / XX	XXX µS / cm
7 Rinsing	Deionized water	XX / XX	XXX µS / cm
8 Anodizing	XXXX	XX min / µm XX XX A/dm ² XX volts	XXX g / l
9 Rinsing	Tap water	XX / XX	XXX µS / cm
10 Rinsing	DI- water	XX / XX	XXX µS / cm
11 Colouring	XXXX	XX / XX	XXX ml / l
12 Sealing	XXXX	XX min / µm XX pH XXX	XXX ml / l
13 New process	XXXX	<i>Give process parameters that vary from those of the reference process</i>	

Sample Details

Standard Process (S)

Label / No.:	Nominal thickness:	Colour	Test:
S15U1	15 µm	Natural (C0)	Thickness / Mass Loss Test
S15U2			
S15U3			
S15C1	15 µm	Dark Bronze (C34)	Thickness / Mass Loss Test
S15C2			
S15C3			
S20U1	20 µm	Natural (C0)	Thickness / Mass Loss Test
S20U2			
S20U3			
S20C1	20 µm	Dark Bronze (C34)	Thickness / Mass Loss Test
S20C2			
S20C3			
S15U4	15 µm	Natural (C0)	Thickness / Admittance / Dye Spot / Surface Abrasion Resistance Test
S15U5			
S15U6			
S15C4	15 µm	Dark Bronze (C34)	Thickness / Admittance / Surface Abrasion Resistance Test
S15C5			
S15C6			

Label / No.:	Nominal thickness:	Colour	Test:
S20U4	20 µm	Natural (C0)	Thickness / Admittance / Dye Spot / Surface Abrasion Resistance Test
S20U5			
S20U6			
S20C4	20 µm	Dark Bronze (C34)	Thickness / Admittance / Surface Abrasion Resistance Test
S20C5			
S20C6			
S15U7	15 µm	Natural (C0)	Thickness / Acetic Acid Salt Spray Test (AASS)
S15U8			
S15U9			
S15C7	15 µm	Dark Bronze (C34)	Thickness / Acetic Acid Salt Spray Test (AASS)
S15C8			
S15C9			
S20U7	20 µm	Natural (C0)	Thickness / Acetic Acid Salt Spray Test (AASS)
S20U8			
S20U9			
S20C7	20 µm	Dark Bronze (C34)	Thickness / Acetic Acid Salt Spray Test (AASS)
S20C8			
S20C9			

New Process (N)

Label / No.:	Nominal thickness:	Colour:	Test:
N15U1	15 µm	Natural (C0)	Thickness / Mass Loss Test
N15U2			
N15U3			
N15C1	15 µm	Dark Bronze (C34)	Thickness / Mass Loss Test
N15C2			
N15C3			
N20U1	20 µm	Natural (C0)	Thickness / Mass Loss Test
N20U2			
N20U3			
N20C1	20 µm	Dark Bronze (C34)	Thickness / Mass Loss Test
N20C2			
N20C3			
N15U4	15 µm	Natural (C0)	Thickness / Admittance / Dye Spot / Surface Abrasion Resistance Test
N15U5			
N15U6			
N15C4	15 µm	Dark Bronze (C34)	Thickness / Admittance / Surface Abrasion Resistance Test
N15C5			
N15C6			

Label / No.:	Thickness:	Colour:	Test:
N20U4	20 µm	Natural (C0)	Thickness / Admittance / Dye Spot / Surface Abrasion Resistance Test
N20U5			
N20U6			
N20C4	20 µm	Dark Bronze (C34)	Thickness / Admittance / Surface Abrasion Resistance Test
N20C5			
N20C6			
N15U7	15 µm	Natural (C0)	Thickness / Acetic Acid Salt Spray Test (AASS)
N15U8			
N15U9			
N15C7	15 µm	Dark Bronze (C34)	Thickness / Acetic Acid Salt Spray Test (AASS)
N15C8			
N15C9			
N20U7	20 µm	Natural (C0)	Thickness / Acetic Acid Salt Spray Test (AASS)
N20U8			
N20U9			
N20C7	20 µm	Dark Bronze (C34)	Thickness / Acetic Acid Salt Spray Test (AASS)
N20C8			
N20C9			

Results

Mass Loss Test

Class 15 μm

Sealing System	Color	Coating thickness $[\mu\text{m}]$	Result 1 $[\text{mg}/\text{dm}^2]$	Result 2 $[\text{mg}/\text{dm}^2]$	Result 3 $[\text{mg}/\text{dm}^2]$	Average $[\text{mg}/\text{dm}^2]$	Rating
S STANDARD PROCESS	C0						
	C34						
N NEW PROCESS	C0						
	C34						

Class 20 μm

Sealing System	Color	Coating thickness $[\mu\text{m}]$	Result 1 $[\text{mg}/\text{dm}^2]$	Result 2 $[\text{mg}/\text{dm}^2]$	Result 3 $[\text{mg}/\text{dm}^2]$	Average $[\text{mg}/\text{dm}^2]$	Rating
S STANDARD PROCESS	C0						
	C34						
N NEW PROCESS	C0						
	C34						



Dye Spot Test

Class 15 µm

Sealing System	Color	Coating thickness [µm]	Sample 1	Sample 2	Sample 3	Rating
S STANDARD PROCESS	C0					
N NEW PROCESS	C0					

Class 20 µm

Sealing System	Color	Coating thickness [µm]	Sample 1	Sample 2	Sample 3	Rating
S STANDARD PROCESS	C0					
N NEW PROCESS	C0					

Admittance Test

Class 15 μm

Sealing System	Color	Coating thickness $[\mu\text{m}]$	Sample 1 $[\mu\text{S}]$	Sample 2 $[\mu\text{S}]$	Sample 3 $[\mu\text{S}]$	Average $[\mu\text{S}]$	Limit $[\mu\text{S}]$	Rating
S STANDARD PROCESS	C0						20	
	C34							
N NEW PROCESS	C0						20	
	C34							

Class 20 μm

Sealing System	Color	Coating thickness $[\mu\text{m}]$	Sample 1 $[\mu\text{S}]$	Sample 2 $[\mu\text{S}]$	Sample 3 $[\mu\text{S}]$	Average $[\mu\text{S}]$	Limit $[\mu\text{S}]$	Rating
S STANDARD PROCESS	C0						20	
	C34							
N NEW PROCESS	C0						20	
	C34							

Acetic Acid Salt Spray test

Date of last corrosivity check: XX/XX/XXXX

R_p values determined from the percentage of the inspection areas showing pitting corrosion (if carried out).

Class 15 µm

Sealing System	Color	Coating thickness [µm]	Sample 1	Sample 2	Sample 3
S STANDARD PROCESS	C0				
	C34				
N NEW PROCESS	C0				
	C34				

Class 20 µm

Sealing System	Color	Coating thickness [µm]	Sample 1	Sample 2	Sample 3
S STANDARD PROCESS	C0				
	C34				
N NEW PROCESS	C0				
	C34				

Results of visual examination (if carried out):

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Surface Abrasion Resistance test

Class 15 µm

Sealing System	Color	Coating thickness [µm]	Sample 1	Sample 2	Sample 3	Rating
S STANDARD PROCESS	C0					
	C34					
N NEW PROCESS	C0					
	C34					

Class 20 µm

Sealing System	Color	Coating thickness [µm]	Sample 1	Sample 2	Sample 3	Rating
S STANDARD PROCESS	C0					
	C34					
N NEW PROCESS	C0					
	C34					



Conclusion

The process or product of the current application has been tested as prescribed in the QUALANOD Specifications clause 10 and General Regulations VI.

11/30/2020

Signature
Testing Institute

Signature
Testing Institute



Image documentation

- Image 1 – Reference system (S) 15 μ m C0 after the AASS test
- Image 2 – Reference system (S) 15 μ m C34 after the AASS test
- Image 3 – Reference system (S) 20 μ m C0 after the AASS test
- Image 4 – Reference system (S) 20 μ m C34 after the AASS test
- Image 5 – New product (N) 15 μ m C0 after the AASS test
- Image 6 – New product (N) 15 μ m C34 after the AASS test
- Image 7 – New product (N) 20 μ m C0 after the AASS test
- Image 8 – New product (N) 20 μ m C34 after the AASS test