General Regulations

VIII- Guideline for Remote Inspection



1. Introduction

This procedure sets out the criteria for remote inspections to be conducted.

In general, QUALANOD inspections shall be performed physically and unannounced. This remains as standard procedure and shall be the first option.

Remote inspections shall only be used in exceptional situations and shall be authorized. Restrictions and approval process are described under point 3 in this procedure. In addition, also Remote inspections shall be performed unannounced.

2. Referencing Standards for the Accreditation Body

Regarding the ISO 17065 accreditation of QUALANOD and the ISO 17025 accreditation of the testing institute, the International Accreditation Forum (IAF) passed a Mandatory Document (MD) No. 4 issued 04.07.2018 regarding the use of Information and Communication Technology (ICT) for auditing / assessment purposes. The document allows for both, inspection body and assessment body the use of ICT for auditing and assessment, provided the conformances of the IAF are met. In a nutshell, the requirements are:

- Data protection
- Mutually agreement between anodizer and inspector to participate an online audit (remote inspection)
- · Identify the risks of an online audit
- Audit plan needs to be set up according to cover these risks
- Technical infrastructure must be checked
- Auditors shall have the competence to carry out online audits
- Additional time as planning the audit may be necessary, please check

The guidelines cover all above requirements.



3. Restrictions and approval process

The following restrictions and approval process apply to perform remote inspections:

- 1. Remote inspection is only allowed for renewal. All **granting's** must be performed **physically**.
- 2. Risk assessment according to the below criteria by the testing institute and General Licence holder (for individual licence holder QUALANOD).
- The testing laboratory needs to provide evidence to QUALANOD that remote inspection is allowed or not.
- 4. The involved parties need to provide a "good reason" why physical inspection can't be performed. Good reasons are
 - a. Danger to the life of the inspector
 - Region of the Licensee needs to be within a crisis area or a crisis warning area or a similar restriction from the local government.
 - For example: War, natural disasters, epidemics, pandemics, terrorism
 - c. Travel and visiting restriction by the local government.
 - d. Visiting restriction by the company itself with understandable reasons. (for example, a confirmed case of infection within the company)
 - e. Epidemic / Pandemic: remote audits can also be carried out in countries with very limited travel options such as: Evidence of a current negative test (eg PCR test), quarantine on entry, lack of travel connection/infrastructure
- 5. The company is written to and confirms the possibility of a remote inspection. The guideline is made available to the company.
 - If necessary, the video stream is checked in advance (see guideline). Since many other audits (9001, Qualicoat etc.) have now been made online, this point may not be applicable.
 - The QUALANOD licenced anodizer needs to agree on remote inspection.
- Approval of the remote inspection by General Licence holder and QUALANOD.Each inspection needs an own approval by all parties.
- 7. In case of a positive decision the following must be noted on the inspection report
 - that it is a remote assessment and why a remote assessment was carried out (see reasons above)
 - that the anodizer is in agreement with a remote inspection
 - the date of approval of QUALANOD.

4. Requirements and Procedure

The requirements for carrying out remote inspections are defined below.

4.1 Hardware Requirements

Technical requirements for the anodizers are:

- A portable device like a smartphone or tablet with conferencing apps and Camera
- Microphone and Speaker, ideal would be a headset (see picture in the appendix)
- Fast, stable internet
- Device for charging the portable device

During the audit, the inspector can use two screens; one with the inspection report to be filled in and one with the videoconference. In order to carry out "remote-inspections", it may needs a special training for the inspectors.

4.2 Pre-Check of Feasibility

Before the audit, the internet connection needs to be checked by the inspection body. The inspector will call the licence holder in advance, checking the connection, the internet speed and the quality of the video stream. Within this pre-check a suitable video-conferencing platform will be agreed by testing body and anodizer (e.g. Teams, Skype, GoToMeeting, Zoom, Webex, etc.). If necessary, the technical contact of the company will get a training for the video conferencing by the inspector.

In order to make the working environment for the audit better, the company receives a "check list" with the objects an inspector will ask for during the audit and a flow chart for the inspection. This way the inspection is kept focussed and does not run out of time. **The inspection by itself will be unannounced.** The anodizer is made aware of this.

4.3 Procedure for the Online Inspections

In the morning (in case of time difference morning of the anodizer), the inspector calls the licence holder to carry out an inspection. As the video-conferencing platform app should be pre-installed, the inspection should be able to start without delay (unannounced inspection).

The audit will be split into different modules, which are worked through step by step (see flow chart chapter 4). Breaks for charging the (mobile) devices or have a rest will be necessary as well. Probably there will also be some deviations from the procedure in the flow chart depending on the course of the audit. The timespan for the inspection is the usual 4-6 hours as the whole process will be checked in the usual way.

At the end of the inspection, the inspector discusses the issues and non-conformities and sends the checklist to the company for their signature. The inspector finalises the inspection report and sends it to the respective party.

4.4 Data Protection

The video material of the inspection will not be shown to third parties and kept confidential between anodizer and inspector. There are no records of the video-stream stored, photos will be stored separately at the inspection body. The data of the inspection will be recorded as usual in the current valid version of the master inspection report.

5. Checklist for the Anodizing Plant

5.1 Documentation / Inhouse Control

The anodizer should be prepared to show the inspector the following documentation which may be either paper-based or in computer files. If necessary, they can be shown using the share-screen facility of the video conferencing software.

- 1. The plant's Qualanod licence showing the anodizing types for which the plant is licensed.
- 2. A selection of documents showing agreements with customers.
- 3. The plant's register of complaints.
- 4. The production control records.
- 5. Suppliers' written instructions for the use of processes they have supplied.
- 6. The plant's standard operating practices.
- 7. The approval numbers for any processes used by the plant that require Qualanod approval.
- 8. Copies of the ISO standards specifying the tests that the plant applies or written working instructions based on those standards.
- 9. Data sheets for each testing apparatus showing the apparatus identification number, calibration checks and maintenance service records.
- 10. Evidence that the glass-coated abrasive paper has been validated (only if the ISO 18771 test method is used).
- 11. Where subcontracted product tests are carried out.
- 12. A selection of documents showing the plant's use of the quality label.
- 13. Reference foils for the thickness gauge.
- 14. pH buffers-especially the expiry date.
- 15. Process for anodizing: Short process description of chemical pre-treatment, anodizing and sealing with:
 - products and process parameters recommended by chemical supplier:
 - · bath analyses,
 - temperature,
 - sealing time
 - pH value (sealing bath)

5.2 Visual observation

The anodizer should be prepared to show the inspector the following by walking around the plant and using a camera ideally linked to the video conferencing.

- 1. The anodizing lines and any mechanical pretreatment facilities. The inspector should be told what solutions are in the baths.
- 2. The monitoring of solution temperatures.
- 3. The storage of aluminium products both before and after anodizing.
- 4. The laboratory and testing apparatus.
- 5. The stock of chemicals needed for product testing and solution analyses. The inspector will want to verify that all are available.

The inspector will want to witness the following. A camera should be used ideally linked to the video conferencing.

- 1. The use of the testing apparatus to determine any deviations from standards.
- 2. The application of the product tests to actual products
- 3. The analysis of bath solutions (although he might not watch the analyses completely from beginning to end).

5.3 Inspection of products

The anodizer should be able to identify finished products for inspection, which it has inspected and passed as satisfactory or parts which have been packed and/or are ready for dispatch. The inspector will want the anodizer to carry out thickness measurements on at least 30 parts for each type of anodizing. This could consist of many lots with different numbers of parts in each. For each lot, the anodizer should be able to show the inspector documentation tracing back to the customer's order. It is important that the lots selected include ones from all the anodizing lines in the plant and include all the sealing processes operated by the plant.

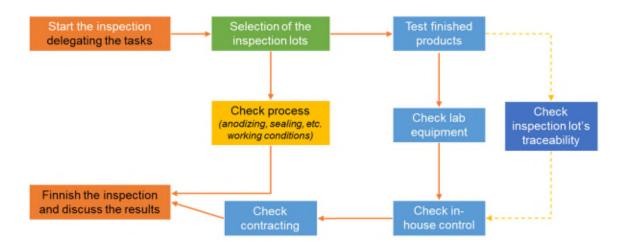
If test specimens cannot be taken from a production lot, then the inspector will expect special test specimens made of the same alloy as the production lot and treated simultaneously with it to be available. If it had not been possible to produce those, then the inspector will expect special test specimens made of an alloy containing at least 97% aluminium and treated simultaneously with the production lot to be available. Circumstances which might lead the licensee to produce special test specimens include those where: i) it is not possible to take specimens from the production lot because of the shape, size or form of the product; ii) multiple lots of different alloys are treated together; iii) the lot comprises only one piece.

If there are insufficient parts of one anodizing type, special rules apply. The inspector might want thickness measurements carried out on the parts that are available.

Depending on the further product testing that is required, the inspector will identify samples for those tests from the lots subjected to thickness measurement. Those tests could include the dye spot, admittance, mass loss, surface abrasion resistance and/or wear tests. He will want the anodizer to carry out those tests although he may request that samples be sent to testing institutes for the mass loss, surface abrasion resistance and/or wear tests. The dye spot and admittance tests should always be performed in the plant. If samples are to be to send to a testing institute, the inspector will want to observe each one being uniquely marked so that it can be identified on arrival at the testing institute.

6. Flow Chart

In this section, the modules/blocks of the online inspections are visualized in a flow chart.



7. Appendix

7.1 Helpful Technical Equipment

The following technical equipment are examples, you may use different equipment adapted to the situation (e.g. security helmet, etc).

