Section 4

Quality System Requirements

4.10 Inspection & Testing

(General Manager Approved by :

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4.10.1 Policy

It is Advatek Systems Inc.'s policy that for all inspection and testing activities, the specified requirements for the product are met as per *Measurement Canada's Quality Assurance standard, S-A-01.*

4.10.2 Purpose

The purpose of this procedure is to establish and maintain documented procedures that enable the verification of all inspection and testing activities conducted within the Quality Assurance Program.

4.10.3 Scope

This procedure applies to all inspection and testing activities within the Quality Assurance Program.

4.10.4 References

- 4.10.4.1 Measurement Canada's Quality Assurance standard, S-A-01
- 4.10.4.2 Weights & Measures Act, Regulations and Specifications
- 4.10.4.3 Measurement Canada Bulletins
- 4.10.4.4 Measurement Canada's Notices of approval

4.10.5 Procedure

The QAS will ensure that for all devices inspected within the Quality Assurance Program, Advatek Systems Inc. will have inspection and test procedures in place.

The Recognized Technicians shall have access to all inspection and test procedures when inspecting devices within the Quality Assurance Program.

For all inspection and testing of devices required under this Quality Assurance Program, these procedures are located in *Measurement Canada*'s FIM (Field Inspection Manual) which is located on their website. All inspection and test points required by *Measurement Canada* will be those issued by *Measurement Canada* and titled Field Inspection Manual for Non-Automatic Weighing Devices. The Field Inspection Manual is laid out in two parts: the Inspection Procedures Outlined (IPO) which lists all the required test points for devices, and the Standard Test Procedures (STP) which describe how each test is conducted. The tolerances for these test points can also be found on *Measurement Canada*'s website.

4.10.6 Receiving Purchased Weighing Devices

When purchased weighing devices arrive at receiving, the contents of the order are verified by the receiver/shipper or recognized technicians against the packing slip and then checked against the Purchase Order. This is done to ensure no material or documentation is missing or that the product is not damaged. If there is something missing or that the device has been damaged, a Non-conformance Report shall be initiated and forwarded to QAS.

If everything is in order, the shipper/receiver or a Recognized Technician shall code it as received in Advatek Systems computer program entitled "Work Load" which will generate a notification of shipment arrival to all staff.

For scales that are purchased for customers, once the receiving has been verified and everything is in order, the purchase order documentation is placed on the shipment package and placed in the assigned receiving area until the Recognized Technician commences the Inspection and Testing (Refer to 4:10:7; and 4:10:8 and 4:10.8.1).

For scales that are to be kept in Advatek Systems' inventory, the shipper/receiver or a Recognized Technician will apply an Inventory Tag (see document ADV-FOR-12) to the box referencing Advatek Systems as the customer and shall be coded as received in Work Order which will generate notification of shipment arrival to all staff.

Where the device does not come in a box, an "Inventory Tag" (see document ADV-FOR-12) shall be affixed to the device itself referencing Advatek Systems as the customer and shall be coded as Received in Advatek System's program Work Load.

4.10.6.1 Procedure

When purchased products arrive at receiving that are not weighing devices, the contents of the order are verified against the packing slip description and then checked against the Purchase Order by the Recognized Technician. This is done to ensure no material or documentation is missing or that the product is not damaged. If there is something missing in the order or if the product has been damaged, a Non-conformance Report shall be initiated and forwarded to the QAS.

If everything is in order, the receiver shall code it as received in Advatek Systems computer program entitled "Work Load" which generates notification of shipment arrival to all staff and the purchase order documentation is placed on the shipment box which will be processed for either shipping to customers or for being utilized for service. When receiving equipment/weighing devices from customers for repair or service, a Work Order shall be generated by the Recognized Technician and a service tag (see document ADV-FOR-009 in Appendix B) affixed to the device. Through this work order, we positively identify the scale and its owner and shall be accessible for obtaining work progress by all staff in Advatek System's Program "Work Load". The scale is then processed (4.9).

Should a scale from customers arrive and there are no technicians to receive the scale fully, a temporary service tag will be completed and affixed to the scale (see document ADV-FOR-011). This will allow Advatek System to track a customer scale internally. Subsequently, a permanent service tag (see document ADV-FOR-009 in Appendix B) will be issued once a technician starts the service process and creates a work order.

Should all other purchased products arrive and there are no technicians to receive the product in full capacity, a visual inspection shall be performed to ensure there is no damage to the product and the courier's way bill will be left on the shipment box. Subsequently, the Recognized Technicians will complete the receiving process.

4.10.7 In-Process Inspection and Testing

The in-process inspection and testing activities shall be performed by the Recognized Technicians according to procedures laid out in the *Measurement Canada's Field Test Procedures*. These can be found on *Measurement Canada's* website. This in-process inspection and testing is done in order to assess the condition of a device before or after repairs and calibration have been performed. Any in-process inspection or test becomes part of the final inspection process if no subsequent activities (such as repair or calibration) are performed and the validity of the test performed cannot be questioned. The results of in-process inspection and testing shall be recorded the Product Test Sheet or the POS Product Test Sheet (documents ADV-DOC-007 and ADV-DOC-020).

4.10.8 Final Inspection and Testing

Recognized Technicians are responsible to ensure that all required inspection and test points are addressed when inspecting devices under the Quality Assurance Program.

These inspections shall be conducted according to *Measurement Canada*'s FIM for each device in question.

The test results will be recorded on the Product Test Sheet or the POS Product Test Sheet (documents ADV-DOC-007 and ADV-DOC-020) and this document shall be signed and dated by the Recognized Technician.

When all final inspection and testing activities have been completed by a Recognized Technician, the device is either certified or rejected, and marked according to Advatek Systems Inc.'s QAM (4.12).

4.10.8.1 Gravity Acceleration Procedure

The purpose of this procedure is to take into consideration the effect gravity may have on a device at its final destination. Advatek Systems Inc., in compliance with *Measurement Canada Bulletin M23*, is responsible for ensuring that scales inspected at our location and that are effected by gravity are accurate at their intended point of use. This procedure is to be followed by all Advatek Systems Inc.'s Recognized Technicians. This procedure applies to inspections done in our service shop and not those done at customer locations.

Class I and II Devices

The Recognized Technician will use a gravity calculator to determine if the difference in acceleration due to gravity between our location and the intended point of use will cause the scale to exceed the limits of errors.

If the scale will be within tolerance at its intended point of use, the inspection can proceed as usual.

If it is determined that the device will be out of tolerance at its final destination, the inspection procedure is the same as usual but there will be an additional step required before we can send the scale to the customer. After the inspection is complete, the Recognized Technician will break the seal and adjust (bias) the device to ensure its accuracy at the intended point of use. After the adjustment is complete, the technician will apply an Advatek service seal to the device. The designated technician will make note of this adjustment on the Product Test Sheet or the POS Product Test Sheet (ADV-DOC-007 and ADV-DOC-020).

Class III and IIIHD Devices

With the use of a gravity calculator, we have determined that the difference in acceleration due to gravity between our location and all points within the Maritime Provinces (NB, NS & PEI) as well as Ile-De-La-Madelaine, PQ, was within the accepted tolerance. There will be a map (ADV-FOR-008) placed in the service department as well as in the attachments and Appendix B of this manual, outlining this region.

If a case occurs that we must ship a device outside this region, the Recognized Technician will use a gravity calculator to determine if the device will or won't be within tolerance at its final destination.

If the scale would be within tolerance at its intended point of use, the inspection can proceed as usual.

If it is determined that the device would be out of tolerance at its final destination, the inspection procedure is the same as usual but there will be an additional step required before we can send the scale to the customer. After the inspection is complete, the Recognized Technician will break the seal and adjust (bias) the device to ensure its accuracy at the intended point of use. After the adjustment is complete, the technician will apply an Advatek service seal to the device. The Recognized Technician will make note of this adjustment on the Product Test Sheet or the POS Product Test Sheet (ADV-DOC-007 and ADV-DOC-020).

The gravity calculator uses the location's postal code to determine the gravity acceleration factor. However, for cases where the inspection can't proceed, we will use the latitude and longitude coordinates for both locations to ensure a more accurate gravity calculation. We use the difference between the two locations as a multiplication factor to the weights when calibrating a device. The Inspection Certificate (ADV-FOR-005) as well as the Product Test Sheet or the POS Product Test Sheet (ADV-DOC-007 and ADV-DOC-020) will be kept in Quality Records (4.16). For cases where an adjustment was made immediately after inspection, both documents will be sent to *Measurement Canada*.

4.10.9 Inspection and Test Records

For every device inspected under the Quality Assurance Program, all pertinent details shall be recorded at the time of inspection and an Device Examination Certificate (see attachments and document ADV-FOR-005 in Appendix B) shall be issued. For devices which fall under the mandatory examination frequencies, the next certification date will be added to the Device Examination Certificate.

Copies of all ASP Device Examination Certificates (document ADV-FOR-005), along with the respective Product Test Sheet or POS Product Test Sheet (ADV-DOC-007 and ADV-DOC-020), for all devices inspected under this Quality Assurance Program, shall be filed and kept as Quality Records with customer files (4.16).

For instances where there exists non-compliances and the device owner does not want the device repaired (or Advatek Systems Inc. is unable to repair), Advatek Systems Inc. shall adhere to the *Measurement Canada's Enforcement Policy For Accredited Organizations*, as found on their website.

4.10.10 Attachments (see Appendix A & B)

- 4.10.10.1 Product Test Sheet (ADV-DOC-007)
- 4.10.10.2 Device Examination Certificate (ADV-FOR-005)
- 4.10.10.4 Regional Map (ADV-FOR0008)
- 4.10.10.5 Permanent Service Tag (ADV-FOR-009)
- 4.10.10.6 POS Product Test Sheet (ADV-DOC-020)
- 4.10.10.7 Temporary Receiving Tag (ADV-DOC-011)