Eesti Arsenal



EESTI ARSENAL OÜ (EA) QUALITY ASSURANCE PROGRAM AND STANDARDS (QAPS)

Application:	PK-14 manufacturing
Revision:	2.0 14/02/2016

1. GENERAL

Aim

QAPS demonstrates and documents the commitment of EA to the high quality of its products and life-cycle management.

Quality Manual

EA has established, documented and implements an effective QAPS, based on Quality Manual (QM).

2. MANUFACTURING

According to QM the manufacturing and assembly is performed by subcontractors holding valid ISO 9001 AQAP 2110.

3. MATERIAL SUPPLIERS AND PROCUREMENT

The quality control over purchased components, raw material and consumables used in the manufacturing process is based on EA QM procedures.

All the materials used in PK-14 manufacturing process are purchased in UN and/or NATO member states.

4. EXPLOSIVE MATERIALS

Explosive materials used in PK-14 are manufactured and classified according to ISO 9001 and AQAP 2110 quality standards as well as ISO 14001 environmental standard.

Explosive material environmental testing iaw STANAG 4370:

C2 Cold test (-46°C) 24hours	AECTP 200, Category 230
B3 Hot and humid test (+71°C) 24 hours	AECTP 200, Category 230
Secured cargo vibration	STANAG 4370, AECTP 400 ed. 3, 401, procedure III, pic A-2
Classical waveform shock	STANAG 4370, AECTP 400 ed. 3, 403, procedure I
B3 diurnal storage cycling	AECTP 300 Ed. 3, 306, climate cat. B3/C

C2 diurnal cycling AECTP 300 Ed. 3, 303, procedure I, climate cat. C2

Explosive material Compatibility testing:

Vacuum stability	(40h/100C)	STANAG	4147
Microcalorimetry		STANAG	4147
FTIR spectrum		STANAG	4147

Explosive material qualification testing STANAG 4170 (fresh, three (3) months, six (6) months accelerated ageing)

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5. UN PACKAGE CLASSIFICATION, TRANSPORTABILITY CLASSIFICATION

Stacking test	No. 277/2002, App. A, parag. 6.1, MoTC, Finland
Dropping test	No. 277/2002, App. A, parag. 6.1, MoTC, Finland
Packaging for dangerous goods	Cert Nr. 11 91 21, SP Technical Research Institute of Sweden
12 meter drop test	UN Orange book test series 4a
Thermostability (+75°C)	UN Orange book test series 4b

6. ACCEPTANCE AND PRODUCTION TESTING

Acceptance testing sampling and testing is performed iaw ISO 2859-1:1999.

Product testing performed at 50 m distance with the 50 mm thick target plate (material grade S355, EN10025).

- 5. MARKING AND LABELING
 - Marking and labeling is performed iaw EA QM: NATO standard barcode handbook AAP-44(A) STANAG 4329 AST - NATO standard barcode symbologies AAP-44(A) EU Commission directive 2008/43/EC (Track and Trace Directive)
- 6. DATA AND DOCUMENT SECURITY Manufacturing data, customer data and documentation is safely stored and handled iaw EA QM. The access to this section is restricted.
- 7. ENVIRONMENTAL ASPECTS Manufacturing of PK-14 by EA is performed iaw ISO 14001:2015