

Intertek C&E Management System		Page 1 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS025
EMEA CERTIFICATION SCHEMES - PRODUCT CONTROL SPECIFICATIONS		
Issue Date:	Revision Date: 11 th Feb 2015	Approved by: Anders Delsborn
	Effective Date: 19 th Feb 2015	

1.0 Purpose

Product Control Specifications (PCS) specify the requirements for routine inspections, tests, Product Verification Tests and sample selection for products certified under an Intertek EU Type 5 certification scheme (including GS, S, BEAB, ASTA, ENEC, BAUART and TICK MARK). They are for use by manufacturers and by factory inspectors.

2.0 Scope

Products: Passive filter units for electromagnetic interference suppression
Standards: EN 60939-2
Marks: S, BG, ENEC and TICK-mark

3.0 Routine inspections and tests

3.1 General

The following requirements apply to most products.

Variations may be permitted by prior, written agreement from the certification body.

The factory should have a quality plan defining all inspections and tests on materials, components and completed products as appropriate.

Completed products shall be marked to confirm satisfactory completion of all required testing.

Any products which fail inspection or testing shall be segregated and not allowed to continue through the process until rectified and re-inspected or retested.

Products shall not be released until the testing equipment has been checked again following a production batch.

Records of inspections and test should be maintained and held for at least two years.

Records shall include:

- Type of product
- Date of test
- Place of manufacture
- Quantity tested
- Number of failures and actions taken

~ Note: After printing or download, this document is no longer under control and shall be used for reference only. ~

Intertek C&E Management System		Page 2 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS025
EMEA CERTIFICATION SCHEMES - PRODUCT CONTROL SPECIFICATIONS		
Issue Date:	Revision Date: 11 th Feb 2015	Approved by: Anders Delsborn
	Effective Date: 19 th Feb 2015	

3.2 Required inspections and tests (for Intertek Certification Marks)

Inspection/test		Test parameters	Sampling plan	
Satisfactory appearance, markings and any user instructions correct and clear		Visual inspection	100%	
Continuity check and measuring of values		Rated values considering the tolerances	100%	
Dimension check of outlet, if not separately certified		Frequency, first and last bit of each production lot, and for larger production lots at specified intervals	100%	
Dielectric strength test min 2s			100%	
Type of insulation	Rating	Test voltage	To case (if metal)	
			C ≤ 1μF	C > 1μF
Basic	< 150V	4,3 x U _R d.c.	900V a.c or 1260V d.c.	4,3x U _R d.c.
Basic	≥ 150V - ≤ 300V		1500V a.c or 2250V d.c	
Basic	> 300V - ≤ 520V		2000V a.c. or 3000V d.c.	
Basic	> 520V - ≤ 760V		3000V a.c. or 4000V d.c	
Double or reinforced	≥ 150V - ≤300V		4000V a.c or 4500V d.c.	
Double or reinforced	> 300V - ≤ 520V		4000V a.c. or 6000V d.c.	
Double or reinforced	> 520V - ≤ 760V		5000V a.c. or 7500V d.c.	

3.3 Required inspections and tests (for ENEC Marked products)

In addition to the inspections and tests detailed in section 3.2, the requirements of document ENEC 303 Annex U shall be fulfilled.

~ Note: After printing or download, this document is no longer under control and shall be used for reference only. ~

Intertek C&E Management System		Page 3 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS025
EMEA CERTIFICATION SCHEMES - PRODUCT CONTROL SPECIFICATIONS		
Issue Date:	Revision Date: 11 th Feb 2015	Approved by: Anders Delsborn
	Effective Date: 19 th Feb 2015	

4.0 Product Verification Tests/Periodic testing (refer to CIG 021 clause 4.8)

Product verification tests are in addition to the production line inspection and routine tests and are performed on samples taken randomly from the production line.

The manufacturer is responsible for conducting or arranging for the following periodic testing to be completed. Records shall be available for review during factory inspection visits.

Certification Mark	Frequency	PVT/periodic testing required
ENEC SEMKO, BG and TICK mark	Annual Recommended	<p>PVT is required for ENEC mark For S-, BG- and TICK mark PVT is not mandatory but it is recommended to demonstrate ongoing compliance with EU Directives. For each basic type certified, the following tests according to the product standard is required/recommended:</p> <ul style="list-style-type: none"> • Marking cl. 1.5 • Test Group I: <ul style="list-style-type: none"> Group 3A – cl. 4.17 Temperature rise or cl. 4.19.1 Endurance current Group 3B – cl. 4.18 Impulse voltage <ul style="list-style-type: none"> – cl. 4.19.2 Endurance-voltage line termination/case Group 3C – cl. 4.18 Impulse voltage <ul style="list-style-type: none"> – cl. 4.19.2 Endurance-voltage between line Terminations • Test Group II: <ul style="list-style-type: none"> Group 2 – clause 4.16 Damp heat, steady state Group 7 – clause 4.21 Passive flammability <p>Note: The tests of Groups 3B or 3C may be omitted if the capacitors in the filter are separately encapsulated and have been qualified under EN 60384-14.</p> <p>Tests have to be performed on types which have results close to the limits in the type tests.</p>

Intertek certification offices can advise on any aspect of PVT and can provide the testing service if required.

~ Note: After printing or download, this document is no longer under control and shall be used for reference only. ~

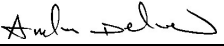
Intertek C&E Management System		Page 4 of 4
Work Instruction (Inspection)		Document No.: WI-R-EMEA-CERT-INSP-PCS025
EMEA CERTIFICATION SCHEMES - PRODUCT CONTROL SPECIFICATIONS		
Issue Date:	Revision Date: 11 th Feb 2015	Approved by: Anders Delsborn
	Effective Date: 19 th Feb 2015	

5.0 Surveillance testing by the Certification Body

If required, samples are selected during the factory inspection and the manufacturer should send these to the address provided. If samples are required but not available at the time of the inspection, the manufacturer should send these as soon as they become available. If there is no stock or production, the manufacturer should advise the certification body that samples will not be provided due to no production.

The certification body will arrange for the required testing to be completed. This will be charged to the manufacturer or Licence holder. A report of the testing will be provided.

Certification Mark	Surveillance testing requirements
SEMKO, BG and TICK-mark	Regular selection of samples is not required. Samples may be required if any deviations to the type tested or non-compliance with the product standard are suspected.
ENEC	Samples for product surveillance are selected by the inspector at the time of factory inspection, to be sent to Intertek.

Document History				
Revision No.	Date	Changes	Name & Title	
			Author	Approving Official
1	11/02/2015	Original issue	Torbjörn Andersson/ R W Hayward	

End of Document

~ Note: After printing or download, this document is no longer under control and shall be used for reference only. ~