



## Product Approval vs Type Testing

### Not all cable testing is equal

Throughout the cable industry- amongst manufacturers, distributors, specifiers and end users alike – there is misunderstanding over the difference between product approvals and type testing. In this article we cut through the confusion, explaining the difference between the two and the benefits of each.

The confusion often starts with the fact that both product approvals and type testing each go by several different names which are often interchanged.

Product approvals is also known as *product certification* and *product conformity*. Type testing is also known as *one-off testing*, *conformance testing*, *conformity assessment*, *accredited*

*product testing* and *compliance testing*. So, what is the difference?

#### **Type testing**

Type testing is one-off testing that checks that the sample of cable supplied meets the requirements of the standard. The manufacturer supplies samples to an independent third party, such as BASEC, for testing. Type testing provides the specifier or end user with the knowledge that the sample supplied is compliant with the required standard.

Type testing is useful if a manufacturer is supplying a batch of cable to a specifier for a project. It gives the specifier the peace of mind that the cable being supplied meets the regulatory

requirements for a particular sector such as rail, marine or oil, gas & petroleum. The end 'product' of type testing is a test report which a manufacturer can provide as evidence to their customer. However, it is

only a snap shot in time and the cable cannot be marked with the certified body's mark (e.g. the BASEC name).

### **Product approval**

Product approval is an ongoing programme of testing and surveillance and is a more robust system than type testing alone. Product approval includes initial type testing of the cables to the required standard, but also incorporates factory audits and the ongoing testing of samples.

This means that the *ongoing* conformity of the cables is checked and as a result any issues will be identified more quickly than with type testing alone.



Product approval is provided by accredited bodies such as BASEC, but it is important to remember that not all schemes are equally robust.

BASEC's scheme is recognised as one of the most demanding in the industry. Manufacturers of BASEC approved cables are subject to regular factory audits – between two and four times a year depending on the size and complexity of

the business. This compares to just a single factory audit by some other certified bodies.

Regular factory audits ensure that the correct quality and manufacturing processes and procedures are being followed, which reduces the risk of faulty cable entering the supply chain. In addition to planned audits, BASEC also carries out an unannounced audit each year. This is to ensure that correct procedures are being followed at *all* times and not just when the auditors are expected.

During a BASEC audit, samples are selected independently by the auditor from the factory and are sent to the BASEC laboratory for testing.

This ongoing testing highlights any deviations from the relevant standards and gives the manufacturer regular opportunities to confirm the conformity of their cables. BASEC routinely selects more samples than other certified bodies (up to 150 a year) to ensure that all cables are re-tested regularly.

When product approval is granted, a certificate is issued that specifies the type and size of cable that has been approved and the range of that approval. The validity of certificates can be checked on the BASEC website - [www.basec.org.uk/search](http://www.basec.org.uk/search) giving specifiers and installer independent proof of conformity

Once a manufacturer receives product approval for a cable they can mark it with the certified body's mark e.g. the BASEC name. When placed on the market this then gives purchasers confidence in the ongoing quality and conformity of the product.

**BASEC**  
BRITISH APPROVALS SERVICE FOR CABLES



Whilst type testing and product approvals both have their place in the market, gaining product approval and certification is usually considered preferable. This is because, by subjecting the cable and its manufacturing process to ongoing checks and surveillance, specifiers, contractors and installers can have the confidence in its quality, safety and ongoing conformity.

To find out more about BASEC product approvals and type testing, contact:

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