

Case Study

Manufacturer: Doncaster Cables

Certificate of Assessed Design for EV-Ultra cable

As the largest British owned manufacturer of general wiring products in the United Kingdom, Doncaster Cables has a wealth of experience in the cable market. The brand has grown extensively since launching in 1984 and is internationally recognised throughout the industry.

The company produces a comprehensive range of cable products within their extensive facilities, based in northern England. Providing such a wide offering helps to meet demand for a varied range of industries. Product ranges include general wiring polyvinyl chloride and low smoke halogen free variants, fire performance cables, control cables, data communications, electric vehicle (EV) cables, coaxial and security cables, as well as a variety of cable accessories.

Doncaster Cables supply their products to a network of Electrical Wholesalers throughout the UK, in addition to exporting products to countries overseas. High quality products are of the upmost importance to the business and are integral to driving the brand forward. Aaron Walstow company director comments:

“We pride ourselves on manufacturing cables in Great Britain, to meet high levels of quality and safety. Our experienced staff and comprehensive facilities, combined with third party approvals, provides us with a competitive advantage proving expertise and verification in the market.”

Having worked with BASEC as their preferred cable testing and certification provider for over 30 years, during this period Doncaster Cables has gained accreditations for a variety of product and systems approvals. Over 40 construction products regulation, CPR certificates have also been awarded to evidence quality and compliance. This is the most comprehensive range of BASEC approvals of any UK cable manufacturer.

An innovative combination

The upturn in the use of electric vehicles and the need for widespread charging infrastructure, led Doncaster Cables to notice a gap in the market for a cable product that combines both power and data supply, to support smart charging technology. Named EV-Ultra®, the cable is available in a wide range of variants, of which the 3 core and 5 core are the most popular. The data cable element of the product is either a 2 core or category 5 enhanced cable, both with superior construction qualities including twisted pairs and ‘super-screens’. Availability includes high quality heat resistant, thermally stable and impact resistant polyvinyl chloride, and steel wire armoured (SWA) alternatives.

Aaron Walstow comments “The positive feedback from the BASEC Data Laboratory manager where they explained that ‘the data properties of the cable had exceeded all expectations’ is a true credit to the hard work of our Research and Development team, demonstrating that the BASEC accreditation process has added value to the product for the installer to demonstrate quality and conformity.”



Doncaster **Cables**



This innovative product, which was in development for an 18 month period, provides a neater, quicker install, saving valuable time for the installer. Doncaster Cables has received high levels of interest in the product from the electric vehicle and energy industry, with collaboration with the likes of Hypervolt, Myenergi and SYNC EV already in progress, indicating high product demand.

Collaboration with other leading innovative companies allowed the development of CarbonTek® technology to be born. The CarbonTek® compounds developed by Doncaster Cables now give a level of impact protection, abrasion resistance, toughness and durability that surpasses the requirements of typical British Standard compounds. With the key benefit to end users being that these compounds offer a higher level of flexibility and ease of handling. Aaron Walstow explains that "The success of the CarbonTek® compound development was highlighted during review meetings with one of our most innovative development partners, and when their review includes the phrase "this is a game changer", you just know that you're developing something special that will help the installer".

Certificate of Assessed Design

An initial challenge that Doncaster Cables faced when developing and launching the product was the lack of an existing standard that the cable could be qualified against, due to its unique combination of delivering both EV charging power and data within the construction. Therefore, installers would have been unable to evidence cable compliance once installed. This factor drove the decision to engage BASEC for a Certificate of Assessed Design, CAD, an ideal solution to ensuring the product's specification meets necessary safety and performance requirements aligned with the cable industry level quality could be achieved.

CADs are suitable for unique variant products, where no specific national or international standards exist to verify a cable's design. BASEC works closely with manufacturers to undertake an appropriate testing programme, with both initial and ongoing routine testing, to evidence the product's characteristics. The assessed design approval also incorporates ongoing surveillance testing to ensure consistent levels of quality and safety are maintained over the longer term.

Providing peace of mind

Gaining BASEC approval for the EV-Ultra® product provides installers, as well as other stakeholders within the supply chain, with peace of mind that cable quality has been verified by a specialist third party approval. As part of the process to gaining approval, samples are selected independently by an expert and tested within an external laboratory, separate to the manufacturer's facilities. Product approval permits the use of the BASEC mark to be printed on the cable as a visual statement of compliance.

Aaron Walstow comments, "As a company, providing our customers with the highest levels of conformity to support the safe installation of cabling into their projects is a top priority. Gaining the CAD product approval from BASEC helps to provide an easier sign off process for installers and end users of the EV-Ultra® cabling, as it enables them to prove that the cable has been thoroughly performance tested. To demonstrate compliance customers can also reference a BA specific number in relation to the CAD."

To view the live certifications that Doncaster Cables has been issued with approval by BASEC, or to enquire about gaining a Certificate of Assessed Design, please visit www.basec.org.uk

When quality matters.



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