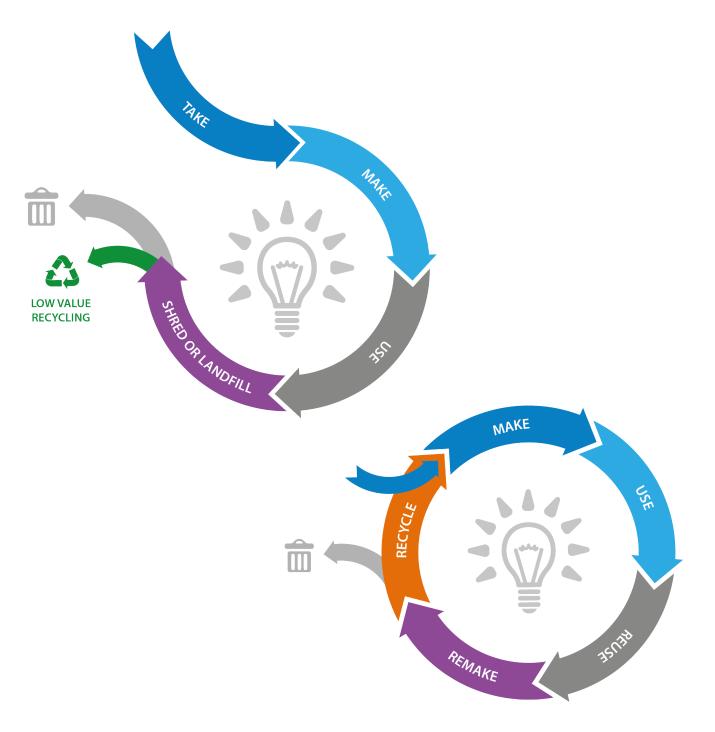


TM66 CIRCULAR ECONOMY



A critical aspect of our commitment to minimising the carbon and environmental impact of our ranges is to adopt the principles of circular economy product design contained in CIBSE TM66 to ensure that our luminaires are designed for longevity, ease of repair and simplicity of upgrade.

When the lifecycle has been completed with all avenues of repair and upgrade exhausted products must be easily separated into individual components to enable recovery of as much of the original material as possible. In order to avoid the worst outcomes of climate change and environmental destruction it is crucial that the world moves away from a disposable consumer model where products are designed at minimal cost with short lifecycles with frequent disposal and replacement towards a repair and upgrade model designed to ensure maximum longevity and simple recycling.



These design methods have long been at the heart of the Dextra product range, since the inauguration of the company 45 years ago all of our product ranges have been designed with the following principles in mind:

- All luminaires are assembled with screws or other easy to remove fixings ensuring simple access to the electronic components with commonly available tools. We do not use bonded assemblies or fix components with permanent methods such as rivets.
- We only use European branded components from respected companies such as Tridonic, Philips and Osram for our drivers and emergency modules ensuring both longevity and that replacement components can be easily sourced in the event repairs are required. All Dextra luminaires are supplied with a five year warranty including three years on-site repair, therefore quality, longevity and simple repair benefits both supplier and end user.
- All luminaires are labelled with a unique identification label allowing us to trace full manufacturing details of the product ensuring that the components used can be easily identified and replacements sourced.

In other areas of Dextra Group, since 2008 we have operated Dexreco, our own WEEE registered recycling company, to provide our customers a recycling service for old luminaires as part of our complete service ethos. Our long history in the recycling sector means ease of disassembly of luminaires into their constituent materials has long been a fundamental part of our design process, aiding compliance to the requirements of circular economy design. All Dextra instruction leaflets are supplied with detailed maintenance information showing how to replace key components in the event of failure allowing end users to extend product lifetime. Alongside this our key electronics supply partners are developing driver ranges that allow operating hours, temperature and power supply to be monitored, as a result their lifetime can be accurately estimated preventing disposal of luminaires before their full useful life has been consumed.

Many luminaires in our product range already contain dedicated gear trays for the key electronic components such as driver, emergency module, battery and LED circuit board. This allows the luminaire to be upgraded at end of life with a simple tray replacement ensuring the housing and diffuser can be retained minimising wastage and also reducing the cost of replacement both in materials and labour. Examples of such ranges include the Amenity Plus, Exterior, Decorative, IP65, Secure and Halo, Discalo, Graduate, Runway, Tanek, Typhon, Hydra, Splash and IMPR amongst others.

"In other areas of Dextra Group, since 2008 we have operated Dexreco, our own WEEE registered recycling company, to provide our customers a recycling service for old luminaires as part of our complete service ethos." Whilst we feel our manufacturing methods and design practices sit in stark contrast to many low cost imported products which are often constructed using sealed designs with inaccessible low life expectancy components making repair impossible, our commitment to minimising the environmental impact of our products and desire to fulfil the criteria of CIBSE TM66 means we must commit to further improvements.

Our future product designs will wherever feasible consist of a modular design with key components mounted on a single replaceable tray. These modules will allow access to individual components for replacement on failure, however the complete tray can be also be replaced allowing installations to be upgraded for efficiency gains or at end of life without discarding the entire luminaire. We will use recycled and locally sourced materials and components where possible both lowering carbon emissions from transportation and simplifying procurement of replacements. We will also seek to gain independent accreditations to verify the our environmental claims. Longer term we aim to publish EPD ratings for our ranges encompassing all areas of environmental impact including circular economy, embodied carbon, material health and factory emissions amongst others. Furthermore we will continue to invest in new equipment and production methods to reduce our energy consumption, emissions and factory wastage. As always we welcome any questions regarding our intentions to minimise the environmental impact of both our products and our manufacturing processes.

