



LOUGHBOROUGH
TENNIS HALL

ABOUT THE CLIENT

Loughborough University has become internationally renowned as a centre of excellence for the study of sport, exercise and health through science. So much so, that in the 2018 QS Subject Rankings, the University ranked 1st in the World for sports related subjects. It is little surprise then, that Loughborough University take their sports facilities very seriously.

Dextra Lighting have been providing schemes and services to Loughborough University for many years and they have come to trust in Dextra and the service that we offer. In May 2017, the University approached Dextra once again to see if we could provide them a solution forming part of a broader refurbishment of their impressive Dan Maskell Tennis Centre.

Loughborough University's Dan Maskell Tennis Centre is proud home to both the LTA National Academy and Tennis Leicestershire, working in partnership with the Lawn Tennis Association and Tennis Foundation, Loughborough. This remarkable sporting hub features eight indoor acrylic courts, three outdoor clay courts, three outdoor tarmacadam courts, a player lounge, and two large function rooms, along with countless Performance Analysis facilities. The Tennis Centre hosts everything from mini tennis and coaching development through to International tournaments and Elite training.

Being no strangers to optimal performance, Loughborough Tennis Centre knew that a revised and upgraded lighting system had the potential to not only save energy and reduce the running maintenance costs, but could also enhance the experience and better facilitate the performance of the tennis centre members and staff using the building. The University sought to completely refurbish their lighting in the Tennis Centre by installing brand new LED lighting, with an aim to improve both the effectiveness and efficiency of the centre. Energy savings were factored heavily into consideration at all times, as achieving an energy reduction would not only save energy but could also save the University substantial costs long-term which could be re-invested into other avenues to further benefit the University and it's tennis centre.



THE SOLUTION

Due to the mutual trust and confidence Loughborough University has long established with Dextra solutions, Dextra were chosen as the best suitable candidate for the job at hand. This particular job was taken on by Group brands Dextra Lighting and Dexreco. From the get go, Dextra Lighting worked closely with the University to establish an optimal solution for their lighting system, which could effectively reduce costs while enhancing lux levels and the aesthetic of the building.

Upon inspection, the Tennis Centre were using old and extremely inefficient T8 fluorescent light fittings which more frequently required new lamps and this was causing maintenance costs to spiral in addition to the already less than desirable running costs.

Following a full survey, Dextra Lighting calculated that it would be possible to achieve a staggering 50% energy reduction while also increasing lux level by two thirds due to the existing lighting having faulty fittings and old lamps and this could be achieved simply by switching to the latest LED technology from Dextra Lighting's range. This saving could be further enhanced by precision-engineered LED luminaires which could substantially minimise the level of maintenance required. Exceptional quality of light is crucial in any sporting application to provide satisfying player experience and we knew this would be best achieved using Dextra Lighting's exemplary Prosport LED.

Dextra Lighting began Phase 1 in early 2018, removing the new light fittings to be recycled by Dextra's in house brand Dexreco, and installing the new highly efficient Prosport LED lighting. The most challenging part of the project was ensuring the new lighting scheme was able to work proficiently in the existing locations. In order to attain this goal, Dextra set about creating a bespoke bracket, which was specially designed and manufactured to be a steeper angle than usual, in order to achieve maximum light uniformity while simultaneously preventing too much glare on the tennis court.

This was achieved by ensuring that the customised bracket met with the Sport England guidelines for uniformity and lux levels. In addition to the customisation of the light fittings, Dextra Lighting also dedicated careful consideration to the placement of the lighting, assuring the visibility and performance of users would not be compromised, but would be optimised as much as possible.

Following the profound success of the first phase, Loughborough Tennis Centre were keen to extend the project and subsequently, Phase 2 fell quickly into place in August of this year, totalling the cost for the tennis centres new light fittings alone in excess of £100K, with Dextra Lighting supplying a total of 180 brand new luminaires for the building.

Dextra Groups's in-house recycling division Dexreco worked in conjunction with Dextra Lighting throughout both phases of the project, disposing of all the old light fittings quickly and efficiently and in strict accordance with WEEE regulations at all times. This helped to further reduce carbon pollution caused by transportation, as the old luminaires were able to be more efficiently transported using Dextra's liveried fleet of vehicles and Dexreco's innovative "back load" process.

Completion of the refurbishment was timely, finalised to a tight deadline and on budget. Ensuring maximum aftercare and ease of maintenance, all new Dextra Lighting products were supplied with a 12 month warranty, further underwritten by Dextra's suppliers with an 'enhanced' 5 year warranty comprising all labour and parts for the first three years.



THE PRODUCTS

The Prosport LED comprises durable steel housing, injection moulded polycarbonate end caps and a clear polycarbonate diffuser. This distinctly robust lighting is specially designed to be capable of withstanding ball strikes from the majority of sports, with the housing designed to provide IK10 impact resistance. Designed with a cleverly angled housing, the Prosport LED is purposely constructed to minimise the risk of balls getting stuck on the rear of the light, while also appearing aesthetically pleasing and providing the most effective lighting for the court. These qualities make it especially ideal for use in tennis courts. Offering a range of distributions and up to 30,601lm luminaire lumens output, the Prosport LED allows lighting schemes to be uniquely designed to achieve optimum light level output and uniformity, while also offering superb energy efficiency and far lower maintenance in comparison to fluorescent and HID lighting.



FEATURED PRODUCTS



PROSPORT LED

Location: Sports Hall

Overview: The Prosport LED is made with steel housing, injection moulded polycarbonate end caps and a clear polycarbonate diffuser ensuring the ability to withstand ball strikes from most sports.