

SPORTS PROJECT CASE STUDY

Port Vale FC: Consultancy, upgrade, and maintenance project



About Port Vale

Based in Stoke-on-Trent, England, Port Vale FC competes in League Two, the fourth tier of the English football league. Unlike most English clubs it's not named after a specific geographical location. Instead, its name refers to the valley of ports on the Trent and Mersey Canal.

Port Vale's home ground since 1950 has been Vale Park. It was originally planned to be the 'Wembley of the North' with a massive 80,000 capacity. However, this ambition wasn't fulfilled for various reasons and its current capacity is 19,000.

The challenge

When Port Vale contacted us in July 2020 it had two issues. Firstly, its current lighting wasn't meeting the required levels specified for their league. Secondly, the club didn't have the funds to cover a new system that would bring it in line with what was needed. So, they asked us to work initially as consultants to see what could be done with their current lighting to make it compliant.

The lighting at Vale Park, when the club approached us, was far from ideal. It was a mix of low-quality LED lights (not supplied by us of course!) and costly to run and maintain old Metal Halide ones. This mismatch meant that only some areas of the pitch were lit adequately, whilst others were very dark in comparison, and the overall pitch uniformity was not adequate. Addressing this problem was going to be quite a challenge – but our in-house Lighting Designers and Engineers were more than capable of taking it on.

Find out more: midstreamlighting.com or call +44 (0) 207 584 8310

MIDSTREAM

At a glance

Customer: Port Vale FC
Project date: August 2020
Number of floodlights assessed: 85

New LED Lights: Modus R 1200
Club founded: 1877
Stadium capacity: 19,000

Uniformity: Before – 0.4 (Emin/Eave)
After – 0.6 (Emin/Eave)

Uniformity ratio: Before – 0.18 (Emin/Emax)
After – 0.34 (Emin/Emax)



Our Solution

When we visited Vale Park to carry out our lighting assessment, it was quickly apparent that the amount of light being generated wasn't the main issue. The biggest thing that needed to be tackled was how the available lighting was being directed onto the pitch – especially in one corner that was covered by the shadow of an existing mast. Once they got back to Midstream HQ, our Lighting Designers set about creating new layouts that would help solve the uniformity issue.

Repositioning some lights and adjusting how others were aimed at the pitch would deal with the largest part of the pitch's uniformity problem. The shadow in the corner caused by the position of the existing tower couldn't be solved just by this, however. So, some extra lighting would be needed. The Design Team was able to provide a complete solution that used just two of our Modus R 1200 though – see below for more details. This is just a fraction of what a new, overall system would've required.

With these designs in hand, our Engineering Team revisited Vale Park and carried out the repositioning and installation work needed in just a few days.

That wasn't all they did.

The electrics supplying the lighting were not up to the job and unsafe. So, they upgraded them to comply with NIC and EIC standards. They also carried out a full maintenance on all the lighting and thoroughly cleaned them too for good measure. That's the 'Midstream Difference' – we go that extra mile!

The result? A well-lit pitch, with an overall uniformity more than enough to comply with the lighting regulations for their league.

Features and benefits of the Modus R Series:

- The series is constructed with stainless steel to improve the structural integrity and life of the product – a critical need when used across sporting environments.
- Its modular design allows for versatile and tailored solutions.
- The high lumen package it delivers, up to 144,000, meets the requirements of any sporting facilities.
- Thanks to its highly versatile asymmetric or symmetric distribution it can be used in a wide range of sporting applications.
- It's perfect for easy 1 vs 1 replacement/retrofit solutions.
- The single remote driver is outdoor rated for ease of access and maintenance.
- The series comes with light shields as standard to control light spill, reduce glare and increase uniformity.
- It's manufactured in Europe for fast delivery.

