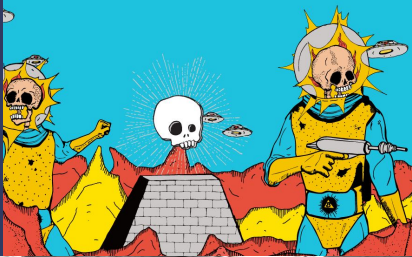


CASE STUDY
15809



BEAVERTOWN

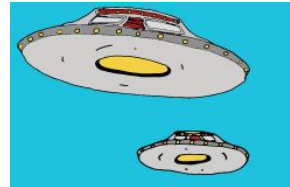
In London, the UK birthplace of the IPA is witnessing a beer renaissance. Where pale ales were once considered traditional styles, and room temperature ESBs were king—now American-influenced, juicy, experimental recipes are being pushed.

At the heart of this growth is North London's Tottenham-based Beavertown Brewery. The founder Logan Plant was playing in bands touring the likes of the US, Europe and New Zealand. His interest in beer began as a child following his frontman father [Yes, 'Plant', as in that Plant], around pubs in the West Midlands. The community aspect of the pub is what drew him, and at the source of those pubs.. this mysterious thing called 'beer.' Fast forward a few years, and Logan was at a crossroads. Choosing beer over music, he went on to form the UK's fastest growing brewery.

In June 2018, it was announced that Heineken N.V. would be buying a minority stake, so that Beavertown could spend £40 million on a new brewery and visitor site. The new brewery will have a capacity of 450,000 hectolitre production, a ten-fold increase in their previous capacity, and will create 150 jobs in London.

It's been a busy time for the North London company. 2018 saw the Beavertown Brewery strike a deal with Tottenham Hotspur to open a microbrewery and taproom at the club's new stadium. Heineken is Tottenham's official beer partner.

BEAVERTOWN



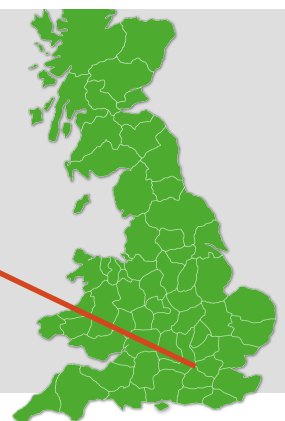
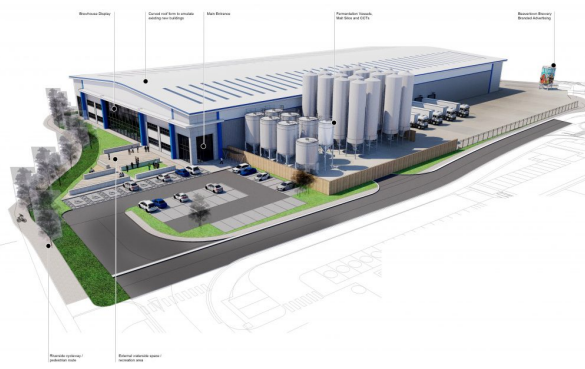
Beavertown Brewery the brief:

Beavertown's ambition is to continue to shape their own future. Their relationship with Heineken is an arm's length minority deal only. This partner was chosen as they offer long term stability for Beavertown and Team Beaver so that they can continue to chase their dreams, grow at a fast pace and fulfil their prophecy of getting great beer on to every street corner, constantly innovating and stimulating more drinkers than ever before.

They are focused on making their beer even better and as part of his ambition.... expansion.

Beavertown Brewery wanted a new high voltage supply via a HV/LV transformer and LV supply to the site. As a back-up they also wanted the facility to connect a standby generator to the LV panel in the event of loss of supply to the site.

As a high voltage (HV) engineering contractor Powersystems were chosen as the preferred partner to assume the responsibilities of designing, procuring, installing and commissioning the HV electrical infrastructure for the Beavertown Brewery facilities at Enfield.



Beavertown Brewery – 2000kva HV/LV Transformer

CASE STUDY 15809



Powersystems partnerships:

The electrical work was undertaken in partnership with HWM Building Services on behalf of the client Beavertown brewery.

Major design considerations:

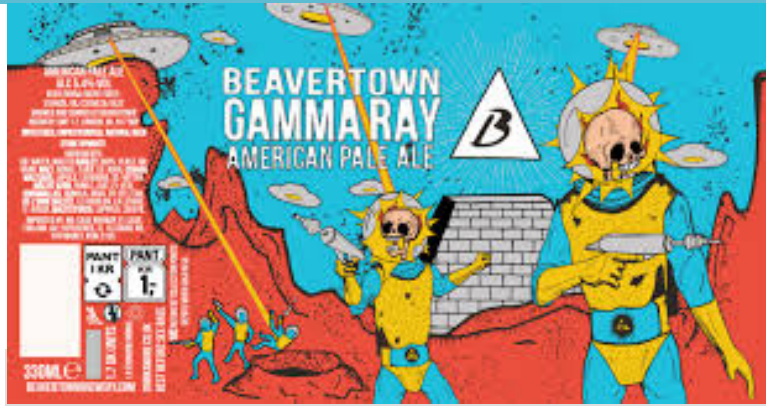
The main scope of works was to install a 2000kva HV/LV transformer with close coupled HV circuit breaker and LV connection box.

Firstly the clients engineers required the ability for the incoming High Voltage (HV) electrical supply to be isolated and earthed on the client private 11 kV electrical system. This avoided the need to bring the local District Network Operator (DNO) onsite to isolate and earth the DNO 11 kV, metering circuit breaker for isolation purposes.

This benefit gives the client greater flexibility to Isolate and earth their 11 kV incoming supply and place this under their own client control, as opposed to the DNO.

Powersystems met these criteria by providing an 11 kV isolator switch, by doing so offering all the isolation and earthing capabilities required without the added costs an 11 kV circuit breaker would have incurred.

The disconnecter was factory close coupled and fitted by the transformer manufacturer. Allowing the transformer to be delivered as a composite unit.



How Powersystems helped:

As leading experts in HV design and installation, the LV circuit design was carried out by our in-house design team.

Design considerations included; the rating of power cables when factoring de-rating of circuit cables. As well as providing an installation allowing for pedestrian access this included installing on a high- level cable bridge support, separating circuits for both the main feeder circuit and generator cables, and to design a restricted earth fault protection (REF) scheme for the protection of extended LV circuits in the event of an earth fault within the protected zone.

Project facts and figures:

- ▶ A 2000 KVA cast resin transformer provides nearly 3000A to the site
- ▶ A 2 tier ladder rack system 900mm wide was designed to carry the 34 x 500mm² LV cables 3m above ground floor level to allow a pedestrian walkway underneath it
- ▶ Powersystems are a Lloyds registered (NERS) approved independent connection provider (ICP), who in addition carry out private wire infrastructure project works

The results:

- ▶ Powersystems were delighted to meet the critical milestones of this project enabling the client to increase the power supply to ultimately upscale the Beavertown brewery business. This work was completed on time and to budget ready for the first production of beer due for March 2020.

For over 43 years Powersystems has delivered high voltage (HV) engineering projects across a wide variety of sectors. Contact us today to find out how we can help your business



For more information

T 01454 318000

www.powersystemsuk.com

Powersystems UK Delivering Greener Power Solutions

