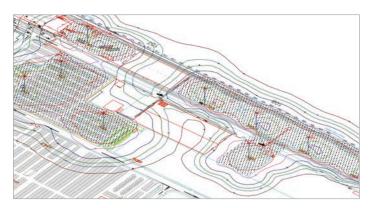


Step 1 - Audit & Design





Every high mast scheme is different and requires a custom design. We will visit your site to carry out a detailed audit in order to fully understand the requirements of your project.

Once the audit has been completed we can give you the best structural and lighting project design possible - offering the perfect combination of mast system, lighting and controls.

Our project design team are all LIA trained and design with the latest 2D & 3D software. The team will create the most efficient scheme for your project along with calculations on energy consumption and light output so you can easily see the benefits of your high mast scheme.

Step 2 - The Mast

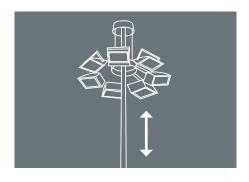
We can help simplify the technical nature of high mast lighting. At Kingfisher we specify the right system to suit the purpose and budget of your project.

Selecting the right mast is important and depending on the desired end use, maintenance requirements and available space, there are a number of mast options we can offer.

We will guide you through mast selection as well as our range of extras such as obstruction or warning lights, custom paint finishes and control systems.



Mast Options

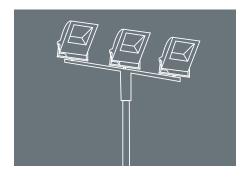


Lowering Head Frames

This mast allows the fitting to be fixed to a movable frame which can be secured in position or lowered down the length of the mast using a powered winch and pulley system. This mechanism simplifies the process for regular maintenance.

The Benefits

- Maintenance is carried out safely at ground level
- No need for expensive high level platform equipment
- Great for areas with space restrictions as no ground clearance is required

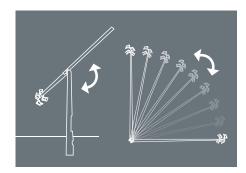


Fixed Masts

Fixed masts are exactly that – fixed. Teamed with efficient lighting they offer a great way to light large areas. Don't forget maintenance must be carried out on specialist equipment at height.

The Benefits

- Easily maintained mast no moving parts
- Standard installation process



Mid-Hinged Masts & Base-Hinged Masts

Hinged masts are popular on sports facilities. They hinge in the middle, or at the base allowing the lighting to be accessed at ground level. Remember that ground clearance is needed in the lowered position.

The Benefits

- Installation and maintenance is carried out safely at ground level
- No need for expensive high level platform equipment



Head frame assembly



Head frame with canopy



Complete head frame & fittings

Lowering Head Frame Systems Explained

The lowering head frame mast is a comprehensive system that makes light work of accessing the fittings.

- 1. An aluminium spun canopy provides protection for the pulley assembly at the mast head
- 2. A junction splitter box provides wiring within flexible conduits to luminaire spigots
- The head frame and carriage are fabricated from mid-steel and galvanised for strength and durability
- **4.** Fully sealed maintenance free aluminium pulleys, needing no lubrication, allow the cable to run smoothly

- Stainless steel hoist ropes are robust enough for any high mast system
- 6. Mechanical winch systems are used to safely raise and lower the high mast head frame. Single or double winches are available depending on the headframe load.
- A dedicated power tool and accessory pack come as part of the package for easy winding of the pulley system.

Step 3 - Lighting & Controls

Our energy saving LED lighting provides instant white light ideal for security and task lighting. Our floodlights are designed to minimise light pollution and glare making them the perfect choice for your site, your neighbours and wildlife.

Flood Lighting



Galileo

Galileo is a transformational LED flood light with a low glare reflector-based optic. Its high performance and modular technology make it ideal for projects requiring high lighting levels.

Controls & Accessories



Obstruction/Warning lights

Bright, long-life and low maintenance LED lighting available in either a single or double lamp.



Italo Flood

A performance LED street light body with a flood light optic, available in three sizes with four optics. Low-glare reflector technology ensures a comfortably lit environment.



Custom Paint

Customise your mast to company or industry colours with our made to order options.



Scorpius

This high-output performance HID floodlight is ideal for sports and high mast applications.

It comes with tool-free access for easy maintenance, a range of photometric distribution options as well as a range of hood accessory options.

VEmesh Control Systems

Our DALI based controls system, VEmesh, can offer even more energy efficiency and can be retrofitted with easy integration in to luminaires with a DALI compatible driver. The integral Wi-Fi enabled bridge nodes alleviate the need for an external antenna.

VEmesh provides all the features you need to manage a smart lighting system. It offers pre-set dimming and constant light output. The visual dashboard reporting tool is easy to use and can be accessed via the VEhub on any smart device or PC.



Retrofit Options

We have the capability and technical knowledge to upgrade your existing high mast system to new energy saving LED technology.



Step 4 - Installation & Commissioning

Our experienced high mast installation team work on all types of projects and sites.

We can give you peace of mind with our HERS registration, full insurance (including airside cover), ISO 9001, 14001 and 18001 certifications.

We can also fully commission your lighting scheme and provide lux level reports to ensure the reality matches the design.















Step 5 - Maintenance

Taking care of your current high mast lighting, or planning a maintenance programme for your new system is vital to ensure both the performance and health & safety of your lighting and to remain compliant with site insurance requirements. It's your responsibility.

Our fully trained and certified team can maintain and repair all kinds of high mast lighting, both our own and non-Kingfisher systems.

Our maintenance packages, which are compliant with ILP PLG07, have been designed to make sure you have the right level of cover for your system. Why not consider an LED upgrade during your planned maintenance visit?

Activity	Level 1	Level 2	Level 3
Check the winch and fixings	\checkmark	\checkmark	\checkmark
Lower the carriage ring to check rope suspension points and suspension belts	\checkmark	\checkmark	\checkmark
Repair of lanterns and control gear	\checkmark	\checkmark	\checkmark
Check base mounted electrics	\checkmark	\checkmark	\checkmark
Raise the carriage unit and leave the mast fully lit	\checkmark	\checkmark	\checkmark
Use of cherry picker to visually check the head and pulleys, the wire ropes over the full length and the mast structure itself	-	\checkmark	\checkmark
Visual check of foundations, foundation nuts and protective material	-	\checkmark	\checkmark
Structural assessment	-	-	\checkmark
Ultrasonic testing	-	-	\checkmark
Torque pull out tests	-	-	\checkmark
NDT if required	-	-	\checkmark

High mast at a glance

Step 1: Audit & Design

Step 2: The Mast

Step 3: Lighting & Controls

Step 4: Installation & Commissioning

Step 5: Maintenance

Why Kingfisher?

- Experience We have been designing and installing high mast systems across the UK for over 25 years working on ports, airports, rail, highways, sports, retail and industrial sites. We are experts and sit on a variety of industry technical committees. We understand high mast design and installation and we can guide you with expertise through your project.
- Technical support We work with our clients to create the optimum design and then translate this into a real installation.
 Our structural and project design experts will design to suit the custom requirements of your project. Every one of our high mast projects is managed by an experienced project manager.
- End-to-end solutions We wrap around supply with a full end-to-end solution, from the initial audit through to new designs, product supply, installation and eventually the maintenance programme. Effective, safe implementation now and for years to come.

Examples of high mast use

- Ports, harbours and docklands
- Railways and marshalling yards
- Water and energy facilities
- Manufacturing and storage facilities
- Motorway networks and intersections
- Airports
- Retail parks
- Sports stadiums
- Container terminals
- Military bases

