



BADRY Fixed masts: Sports and large area

BADRY design and manufacture a huge range of products suitable to use for sports stadium, ports and wind turbines. Tackling complexities is what we do best; so whatever and wherever your project – small or large-scale – BADRY has the solution.

Brilliant design has to be carefully thought-through. And with lighting, that means considering:

- Methods of access for maintenance
- Wind levels in the proposed location
- Aesthetic options such as 'designer' headframes
- The location of control gear and protection equipment

Specification

At BADRY, we take incredible pride in our work – and it's that quality and attention to detail which has set us apart from the competition for over 20 years. In addition to our seal of quality, you can also be assured of the following specifications as standard:

- Masts are designed in accordance with ILE Technical Report No. 7

- Masts above 20m are made from friction-fit tapered polygonal shafts – typically 18-sided for minimum wind resistance
- Masts are hot-dip galvanised to ISO EN 1461

We take great pride in our workmanship, from design through to assembly and installation.



Carting Club, Formula-1 Egypt



High quality manufacturing

Problem-solving the world over

BADRY has come up with complete solutions for fixed-mast floodlighting all over Egypt.

Visit Banha Stadium in BANHA City, for example, and you'll see the 40m masts we designed made and installed – not to mention the 125 floodlights atop each one. Or, a little closer to home, the innovative circular headframes we designed and installed for the Alexandria Airport and Titan Cement in Alexandria.

Often, extreme weather plays its part in shaping our designs. For instance, the 35m masts we installed at the Sheben El-Koum in Menofaya Gov. were designed to withstand hurricane conditions.

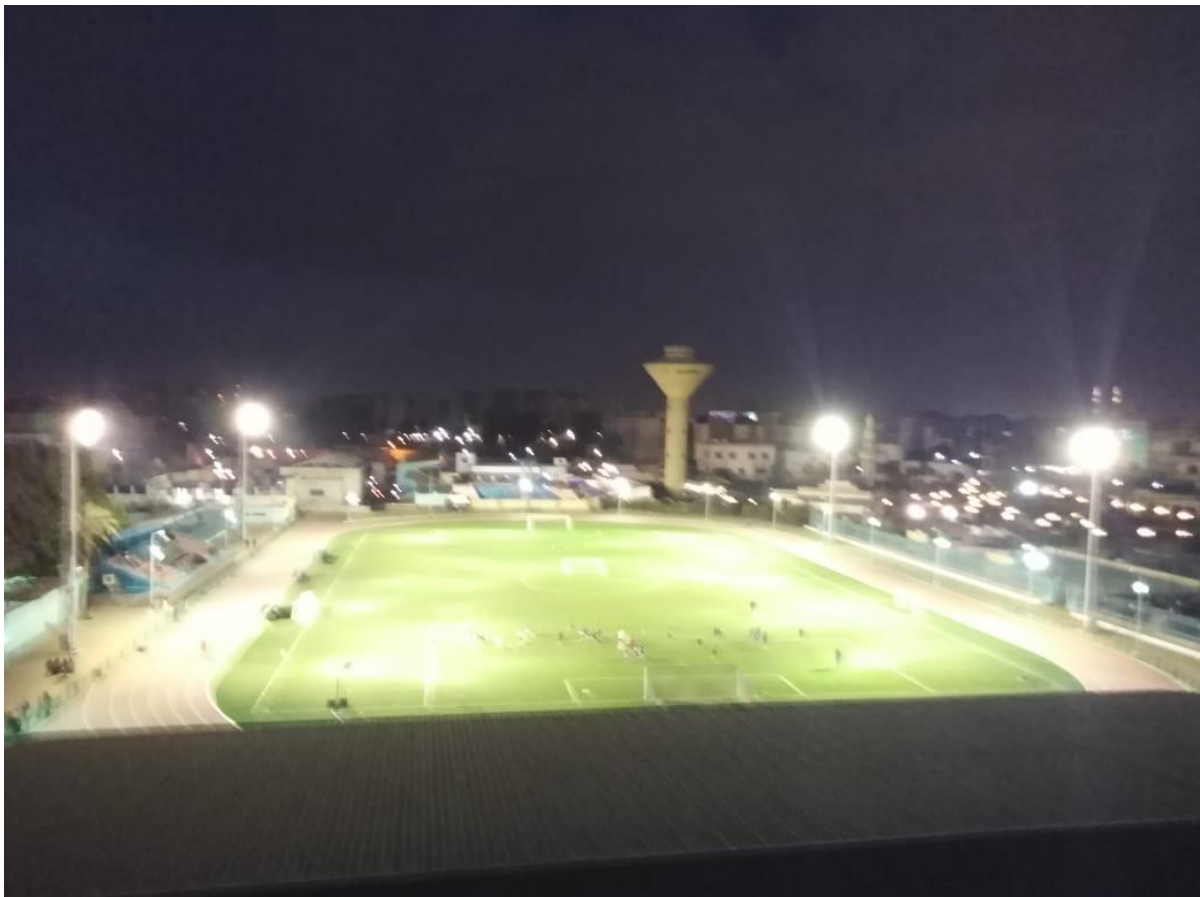
Tricky locations also pose their own set of challenges. Installing seven masts up to 45m high in Suez Port, for example, was no mean feat when we lit the Suez Airport.

Sometimes it's not the masts themselves but the ongoing maintenance that informs product choice. For instance, many airports and large commercial areas choose fixed masts over base-hinged or winch-lowering headframes, employing trained maintenance specialists (often BADRY or one of our national partners) to maintain their lighting at height.

Whatever your requirements, we'll find a solution that fits.



FC.Court Masts



The Club range (15m–30m)

Choose from our standard range or commission a bespoke mast, depending on your project.

- 15–20m: Tubular or octagonal steel construction
- 20–30m: Multi-sided steel construction

Whichever option you choose, control and protection equipment can be factory-fitted into the base of the mast itself, or placed in an external cabinet close to the mast's base.

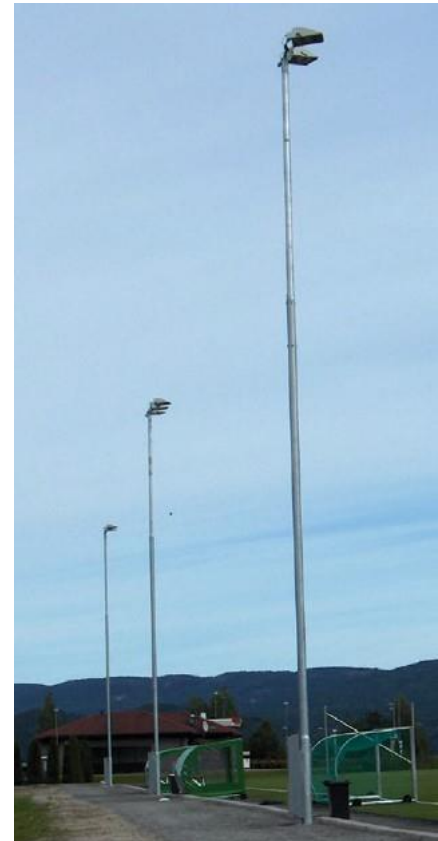
This fixed mast has electrical equipment factory-fitted and mounted into a cabinet in its base. Lights are accessed by a 'cherry picker' for maintenance.

Maintenance access

There are three options for maintaining our Club range:

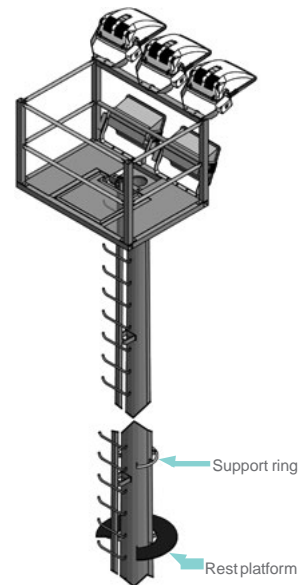
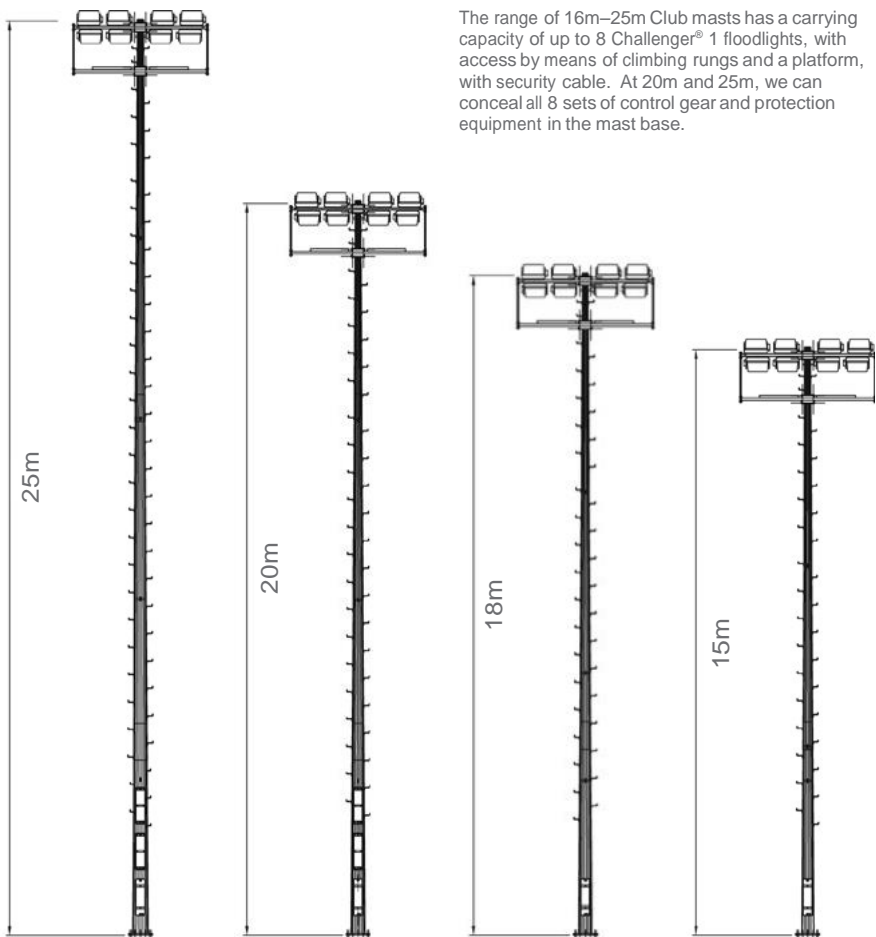
- Ladder fixed permanently to mast, with security cable system
- Removable climbing rungs with security cable system
- Cherry picker vehicle mounted platform

Fixed mast with ladder and twin platform

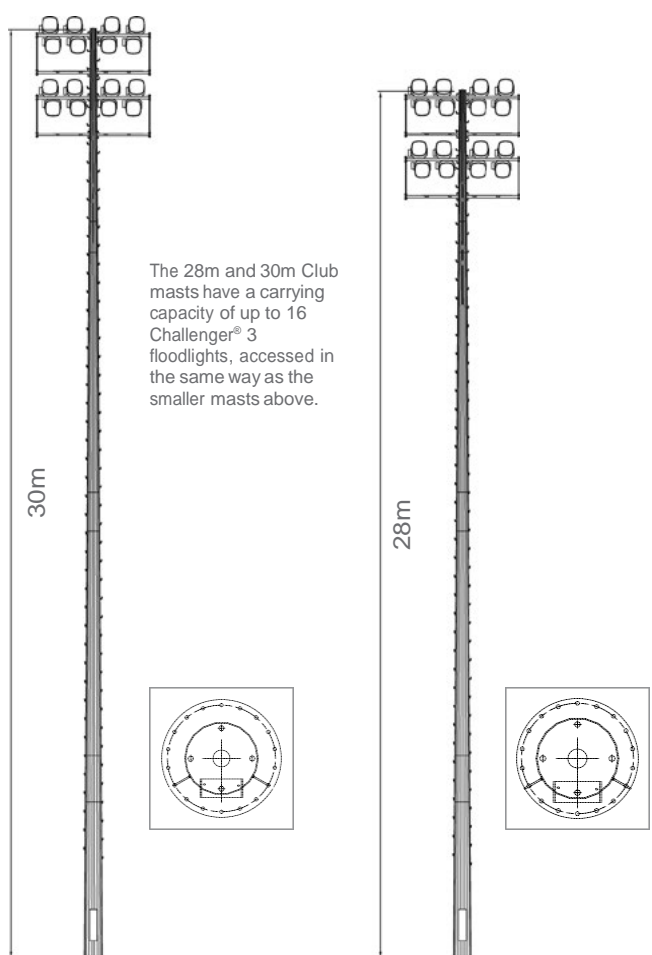


Fixed mast system, for Football Stadium

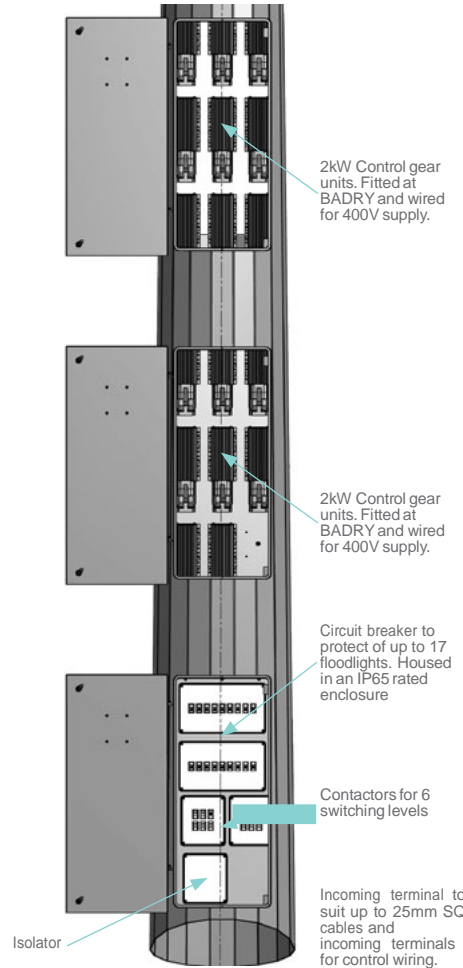
The range of 16m–25m Club masts has a carrying capacity of up to 8 Challenger® 1 floodlights, with access by means of climbing rungs and a platform, with security cable. At 20m and 25m, we can conceal all 8 sets of control gear and protection equipment in the mast base.



Area lighting masts feature a ladder or climbing rungs, a rest platform (optional) at 20m on the higher masts, and an enclosed platform onto which floodlights can be mounted on any side.



The 28m and 30m Club masts have a carrying capacity of up to 16 Challenger® 3 floodlights, accessed in the same way as the smaller masts above.



Control gear and protection equipment can be integrated into the mast and factory-installed by BADRY, enabling fast on-site operations. Control gear can be either IP65 or standard, depending on specification or local conditions.

Fixed Stadium and Area masts (15m–60m)

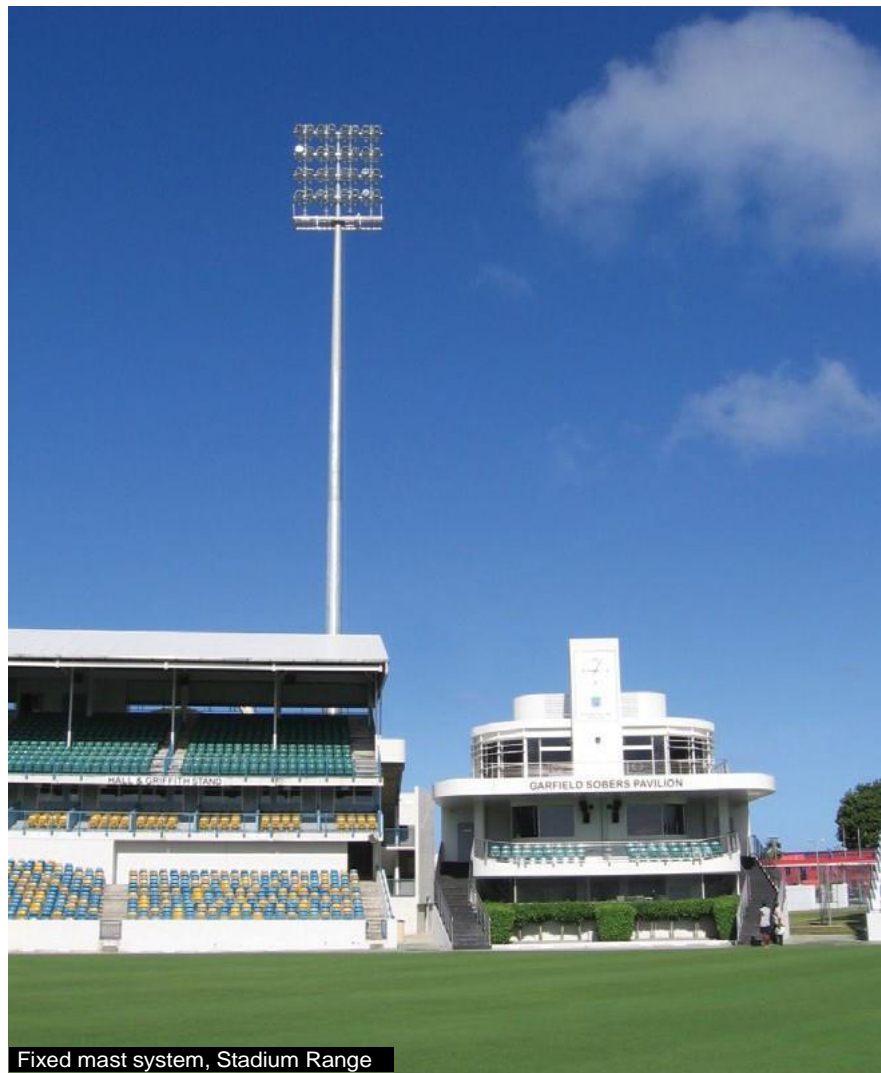
In addition to our base-hinged range, BADRY design and manufacture a wide range of fixed masts for large-scale floodlighting.

20 years' engineering experience on projects all over Egypt has taught us a lot about the importance of flexibility, attention to detail and customer service. As such, we offer a range of solutions to suit you.

- External ladder access with optional rest platforms
- External access using the manrider elevator system
- Internal access, with a ladder running up the inside of the mast
- External access by means of crane and basket

Foundations

Part of our mast-design service includes providing you with a mast foundation reference, which can be cross-referenced in our standard foundations guide. This will indicate the dimensions and volume of concrete and steel required to support your mast in situ.



Fixed mast system, Stadium Range

The manrider external-access system at work.

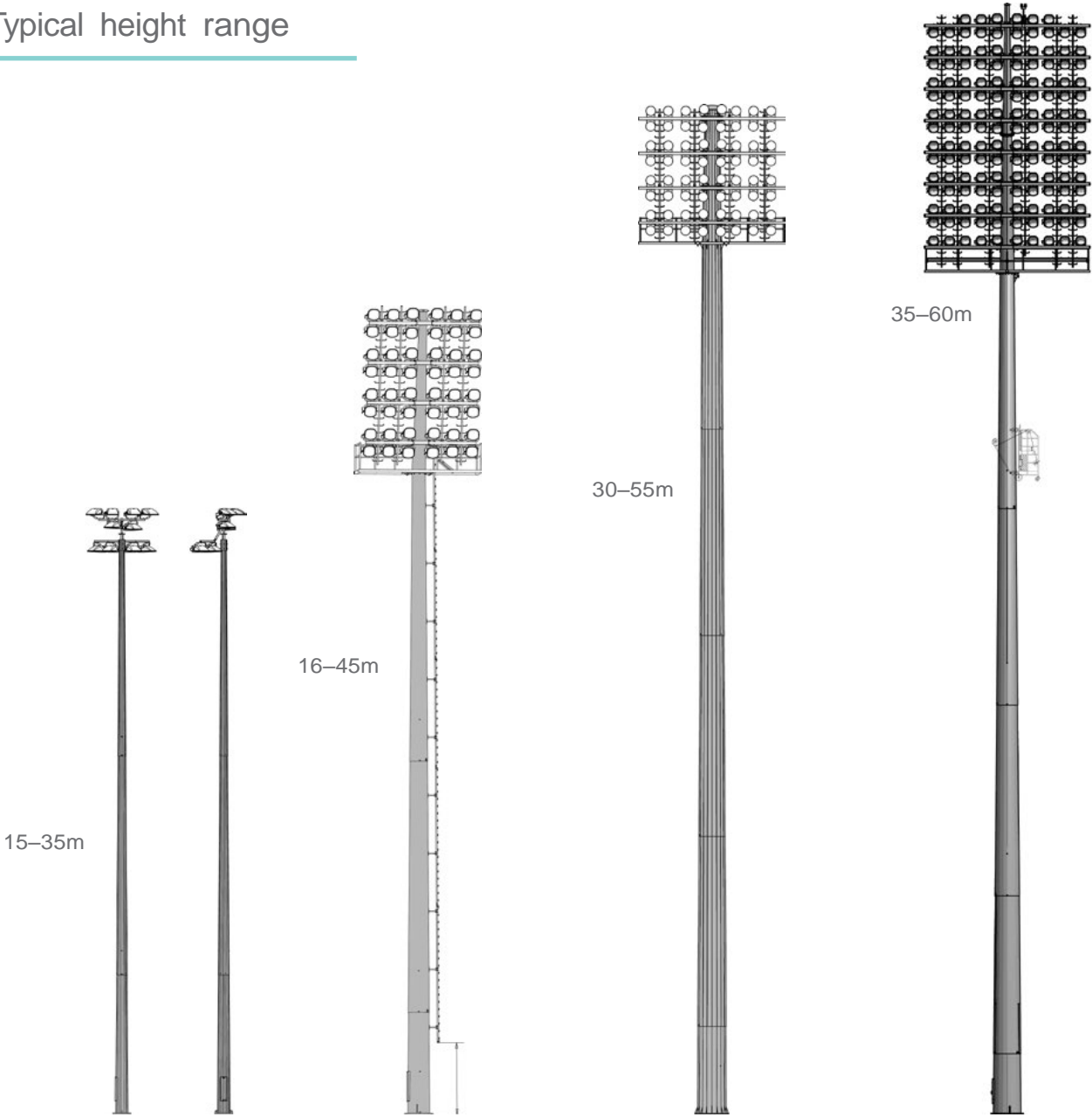


A 40m external-access mast example being lifted into position @ stadium with Mobile Crane.



Access systems

Typical height range



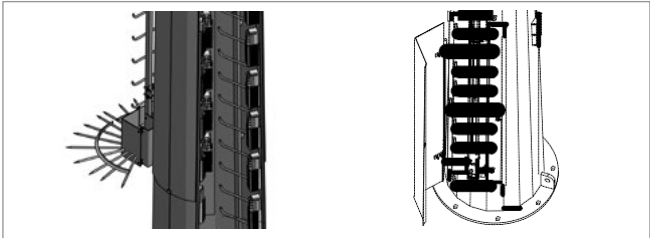
EXTACC/MOBILE
Access by independent mobile platform

EXTACC/LADDER
Access by fixed external ladder to platform

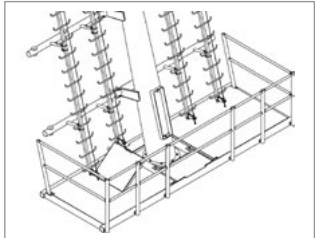
INTACC/LADDER
Access by fixed internal ladder to platform

EXTACC/MANRIDER
Access by external manrider elevator to platform

Access systems close-up



Two anti-climb devices are available: the anti-climb door for ground-level ladders, or the anti-climb collar for ladders which start 3m above ground level.

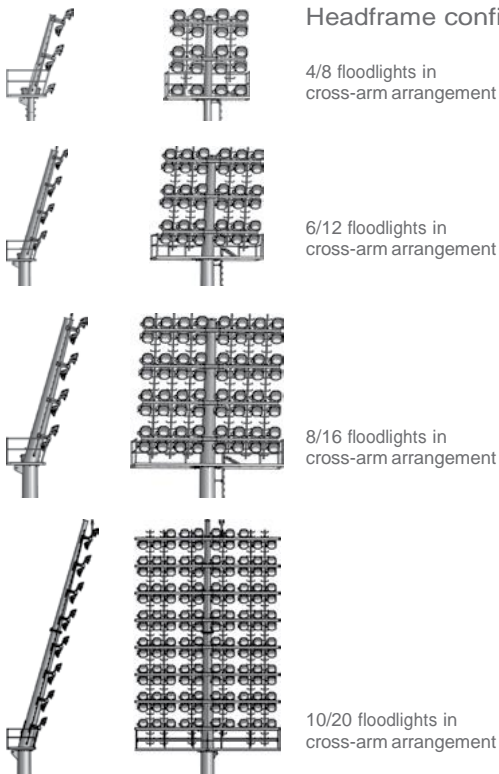


A hatch provides direct access to the platform.



The manrider uses a winch to reach the maintenance platform.

Sports stadium headframes



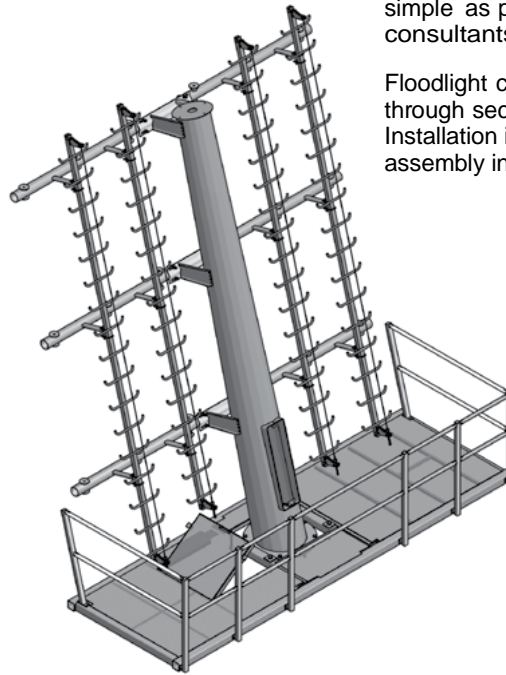
Headframe configurations

4/8 floodlights in cross-arm arrangement

6/12 floodlights in cross-arm arrangement

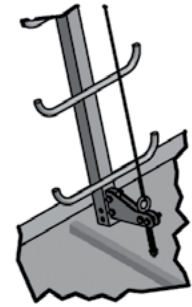
8/16 floodlights in cross-arm arrangement

10/20 floodlights in cross-arm arrangement



Whatever the quantity of floodlights required, configurations are always logical, making project planning as simple as possible for both consultants and engineers.

Floodlight cables enter the mast through secure cable glands. Installation is straightforward, with clear assembly instructions included.



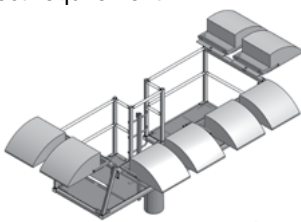
All headframe and ladder systems incorporate a security fall-arrest cable, in conformity with EN353-1 and EN353-2.

Accessories

| Product | Product code |
|--|-----------------|
| Safety harness and karabiner: to be used in conjunction with MIS3014 fall-arrestor | BHMIS3013 |
| Fall-arrestor for use with Cable Security System: for use on 8mm security cable system | BHMIS3014 |
| Double obstruction light: 2 x 55W lamps, each with an 8,000hour life | BHMTHO003 |
| Bracket to mount double obstruction light onto 114mm diameter cross-arm | BHMBKT/F22 |
| Twin obstruction light LED | BHMTOL/LED/220V |

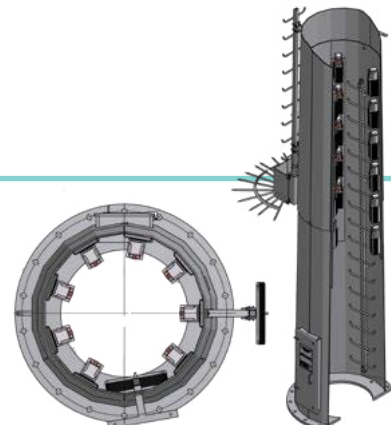
Area lighting headframes and platforms

Headframes are generally accessed by a ladder and platform or by a cherry picker. These are designed to suit each project requirement.



Control gear and protection equipment

Most of the time, control gear and electrical protection equipment is mounted in cabinets at or near the mast base. If space is limited, however, or you'd rather preserve the clean, straight lines of your mast, we can increase the dimensions of its base and conceal the equipment and access ladder inside (up to a limit of around 60 kW floodlights).

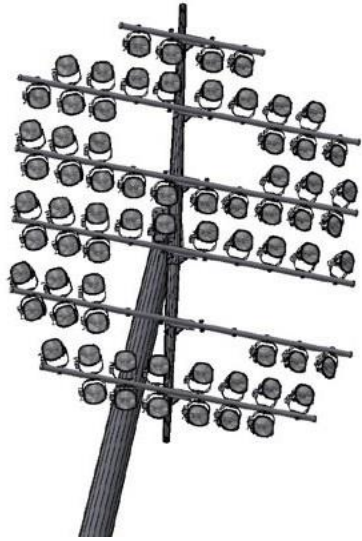
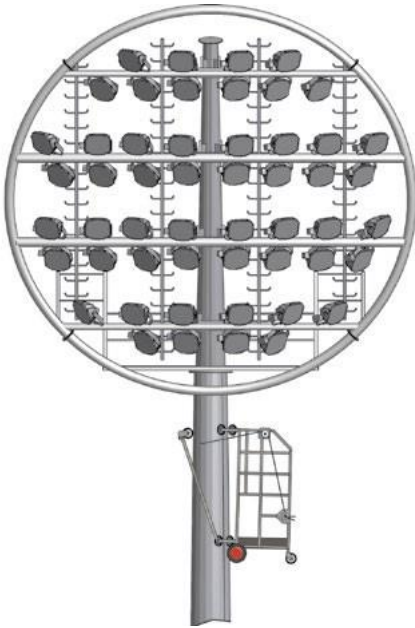


Control gear is mounted on the inside wall of the mast and accessed by ladder.

Custom headframe design

As leaders in lighting, BADRY is always developing innovative new engineering solutions to enhance the stadium environment.

Talk to us about your ideas – you'll be amazed at the possibilities.



Circular LED Headframe Model



Crutch H.M Headframe Model



Oval H.M Headframe



Headingly H.M Headframe



Triangle H.M Headframe

