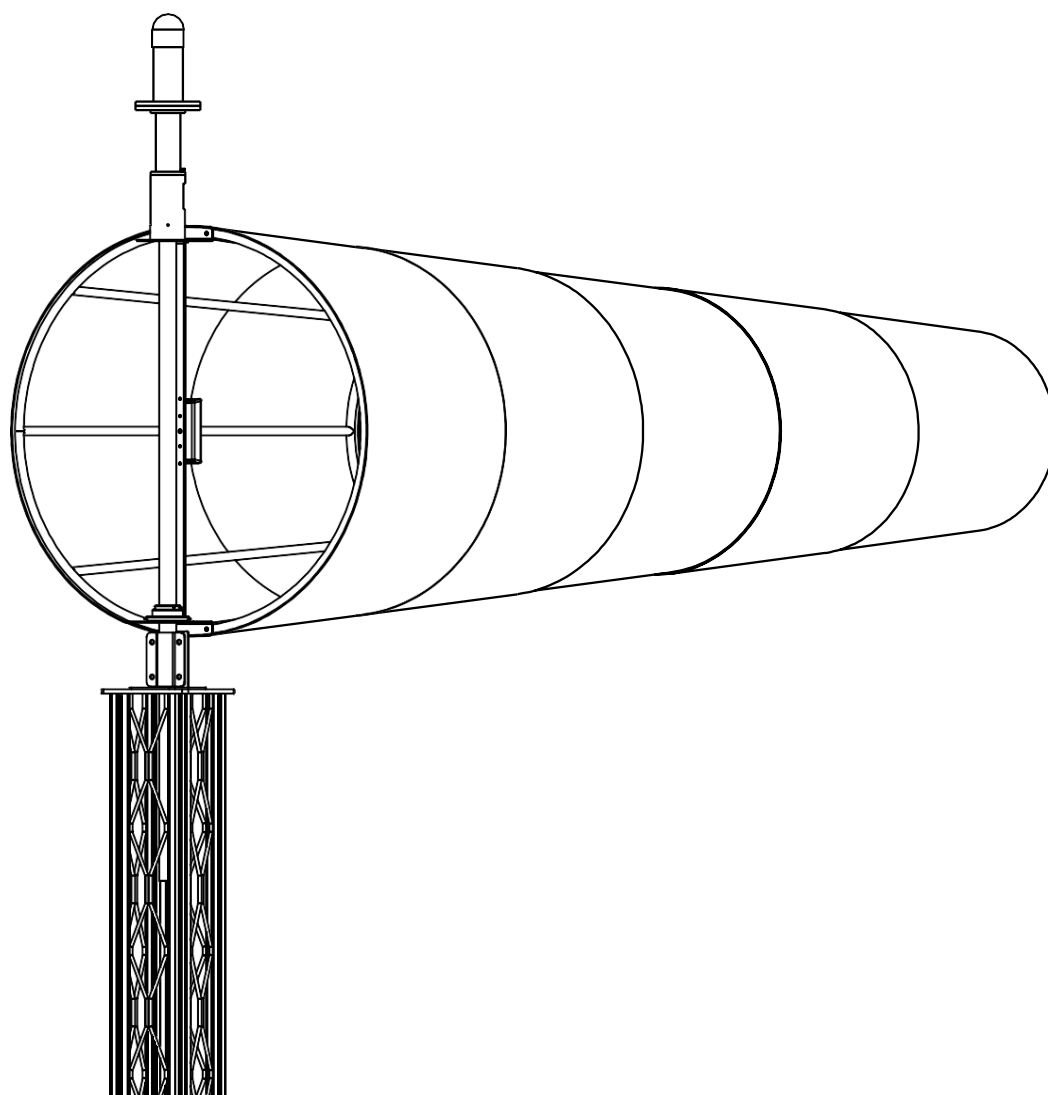


L-808 Wind Direction Indicator Indicator User Manual



CONTENT

Disclaimer/Standard Warranty.....	5
1.Safety.....	5
2. Product profile	6
2.1. Product characteristics	7
2.2.Product Structure.....	8
3.Installation	11
4.Maintenance.....	14
4.1.Check the maintenance items daily.....	14
4.2.Check the maintenance items annually.....	15
4.3.Check the maintenance items irregularly.....	15
5.Support.....	17
5.1.Customer Service.....	17
5.2.Recycling	17
5.3.About HDK.....	17

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List of Tables

Table 1	Preventive Inspection and Maintenance Of The Wind Vane	13
Table 2	Spare Parts List	15

List of Figures

Figure 1	L-808 Wind Direction Indicator	6
Figure 2	Wind Bucket Unit	8
Figure 3	The Wind Direction Indicator Structure	9
Figure 4	Technical Data Wind Vane Obstruction Light	10
Figure 5	Embedded Part of Foundation Size	11
Figure 6	Embedded Part of Foundation Installation	11
Figure 7	Frangible Mast Unit Installation	11
Figure 8	Install The Bucket Unit On The Frame	12
Figure 9	Power Cables Connection and Frangible Mast Installation	12

Disclaimer/Standard Warranty

All products manufactured by Hangdakang mechanical & electrical technology (Wuhan) co. LTD, hereinafter referred to as HDK, meet the requirements of CAAC, ICAO. All warranties provided by HDK exclude all cases of gross negligence and handling of all products.

In case of avoidable defects or failure caused by mechanical, electrical or physical defects, the company will provide the necessary spare parts for repair.

The replacement and delivery of spare parts shall meet the requirements of proper storage, installation, and maintenance of the products, and shall submit the spare parts requirements to the Company in writing.

Hangdakang mechanical & electrical technology (Wuhan) co. LTD reserves the right to inspect the avoidable defective or damaged products in its own company facilities.

The obligations of Hangdakang Mechanical & Electrical technology (Wuhan) Co. LTD are limited to the labor cost required for disassembly and assembly of the product and the delivery of the corresponding products.

Hangdakang Mechanical & Electrical technology (Wuhan) co. LTD assumes no liability for injury or damage resulting from any incorrect use of the equipment. All products and their equipment are explicitly designed for their intended use only. Any other use outside the scope of the instructions is considered incorrect and excluded from the warranty.

Included are:

- Use HDK products outside of their intended operating use.
- Any changes or modifications to products that are not explicitly approved.
- Use of unauthorized, incompatible or unapproved tools by HDK or local regulations.

Local regulations on labour safety must always be followed in addition to those of HDK.

HDK reserves the right of interpretation within the scope permitted by law.

1.Safety

Airfield Ground Lighting is installed in high voltage series circuits, where the primary voltage is usually from several hundred to thousand volts and can be fatal if operated improperly. International or national standards referring to the electrical safety and safety of electrical operations should be strictly implemented during the operation and maintenance. Correct safety regulations must be always followed during any operation in lighting circuit On and Off state conditions.

Pay attention to all safety tips and instructions in this user manual. Negligence in following safety practices and instructions can result in serious injury, accident, or death. Safety instructions are categorized following the IEC standard and accompanied by an icon accordingly. Safety instructions and icons are listed and explained below:

**DANGER:**

Risk of electrical shock or flashover. Before any operations disconnect the equipment from line voltage, never connect or disconnect live circuits. Failure to observe "Danger" may result in severe injury, death, or equipment damage.

**WARNING:**

Failure to observe "Warning" may result in personal injury, death or equipment damage.

**CAUTION:**

Ignoring or violating "Caution" may cause damage to equipment.

**Note:**

Explanations and supplements to some of the text description

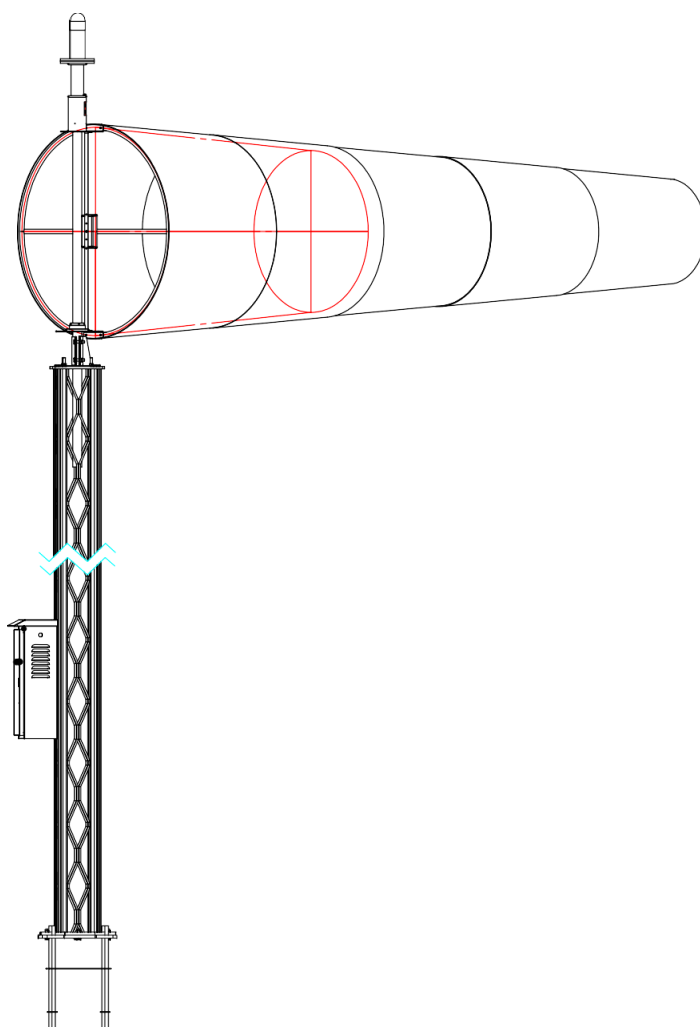
2. Product profile

L-808 Wind Direction Indicator(WDI) are markers used for the observation of wind and wind direction, which can be used during the day and night. The windsock is mounted on a bearing rotation mechanism that can rotate 360 degrees horizontally. The internal projection lamps provide lighting at night to illuminate the wind bucket, and a red obstruction light is equipped at the top.

The wind bucket is made of corrosion-resistant and waterproof nylon silk material.

The power supply of this product is the airport light series circuit (6.6A) or 220V AC power supply.

Figure 1 – L-808 Wind Direction Indicator



2.1. Product characteristics

The series of lamp air duct frame is made of light stainless steel material, rolling bearing components, flexible air duct rotation, real display of wind direction, integrated circuit power drive, reliable operation. The air duct and bracket can be removed, the rigid support rod adopt dumping structure design, the structure is simple, easy to maintain the vane support rod can be selected as frangible mast, reduce the vehicle damage when the accident occurs.

The performance indexes of the lamp meet the following standards:

- ICAO Annex 14, Volume 1, 9th Edition & Aerodrome Design Manual

2.2.Product Structure

The product is composed of foundation embedded, frangible mast unit, lighting unit, wind bucket unit, Wire unit and other parts.

- frangible mast unit: including flip bottom plate, Lattix frangible mast, etc
- Lighting unit: including a wind bucket light and a red obstruction light
- Wind bucket unit: including a red and white windsock, windsock frame and 360 degree horizontal rotation mechanism.
 - a) S-1: the effective length is 3.6m, the air inlet diameter is 0.92m;
 - b) S-2: the effective length is 2.4m, the air inlet diameter is 0.64m, and the air outlet diameter is 0.3m;
 - c) S-3: the effective length is 1.2m, the air inlet diameter is 0.34m, and the air outlet diameter is 0.15m;
- Wire unit: power cable, air switch, electricity box, etc.

Figure 2 – Wind Bucket Unit

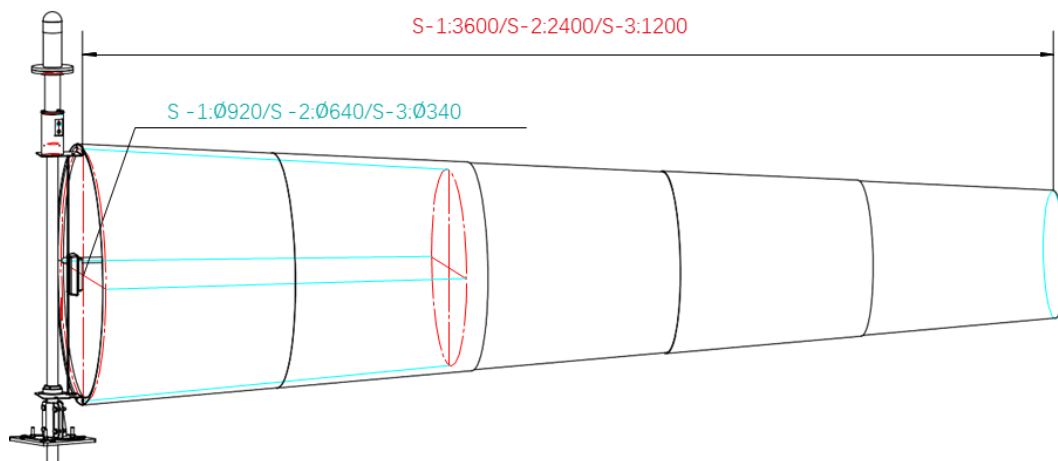


Figure 3 – The Wind Direction Indicator Structure

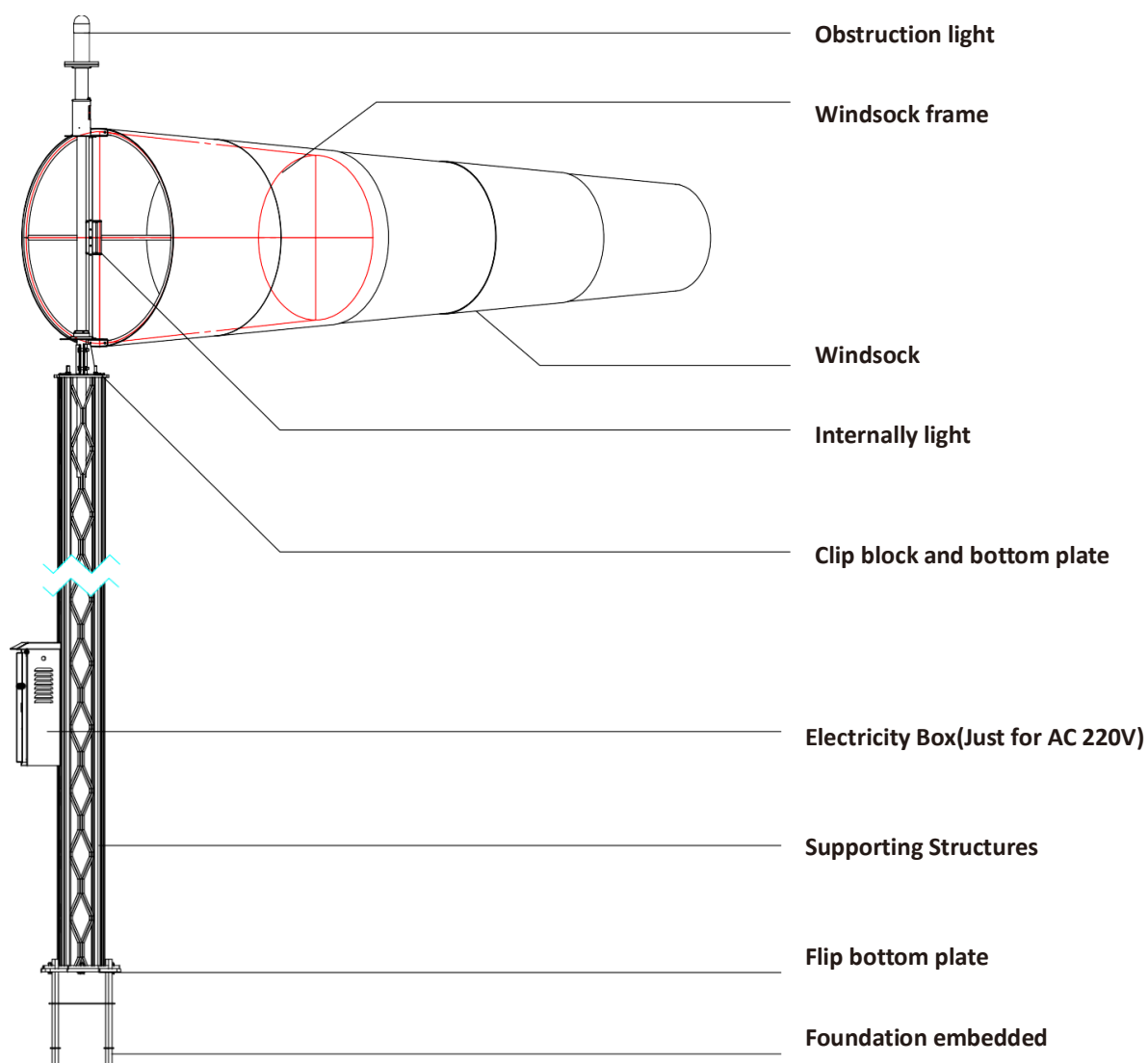
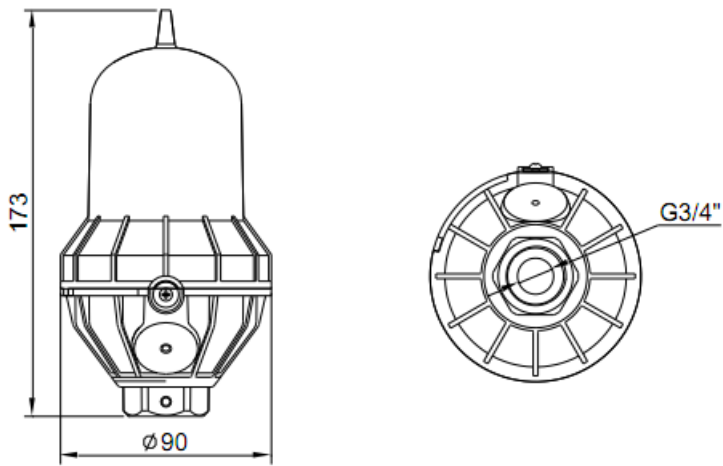
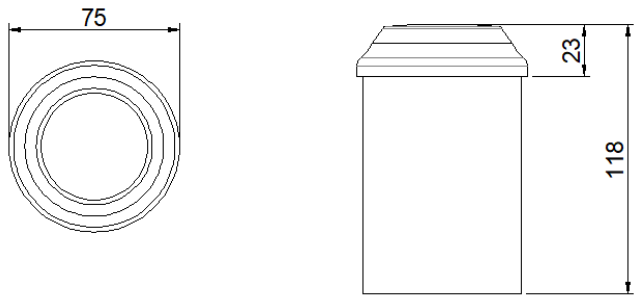


Figure 4 – Technical Data Wind Vane Obstruction Light



Light Colour:	Red
Light Source:	Led
Power Input:	220VAC
Ambient Temp:	-40~55℃
Consumption:	4 Watt
IP Index:	IP66



Light Colour:	Red
Light Source:	Led
Power Input:	2.8-6.6Aeff AC
Ambient Temp:	-40~55℃
Consumption:	5 Watt
IP Index:	IP66

3.Installation

The installation of navigation aid lamps shall be conducted according to the construction drawings and comply with the technical standards of ICAO Annex 14, Volume 1. Install embedded part of foundation in advance according to design requirements (recommended surface size 125MM), The size of embedded part of foundation refer to Figure 5

Figure 5 – Embedded Part of Foundation Size

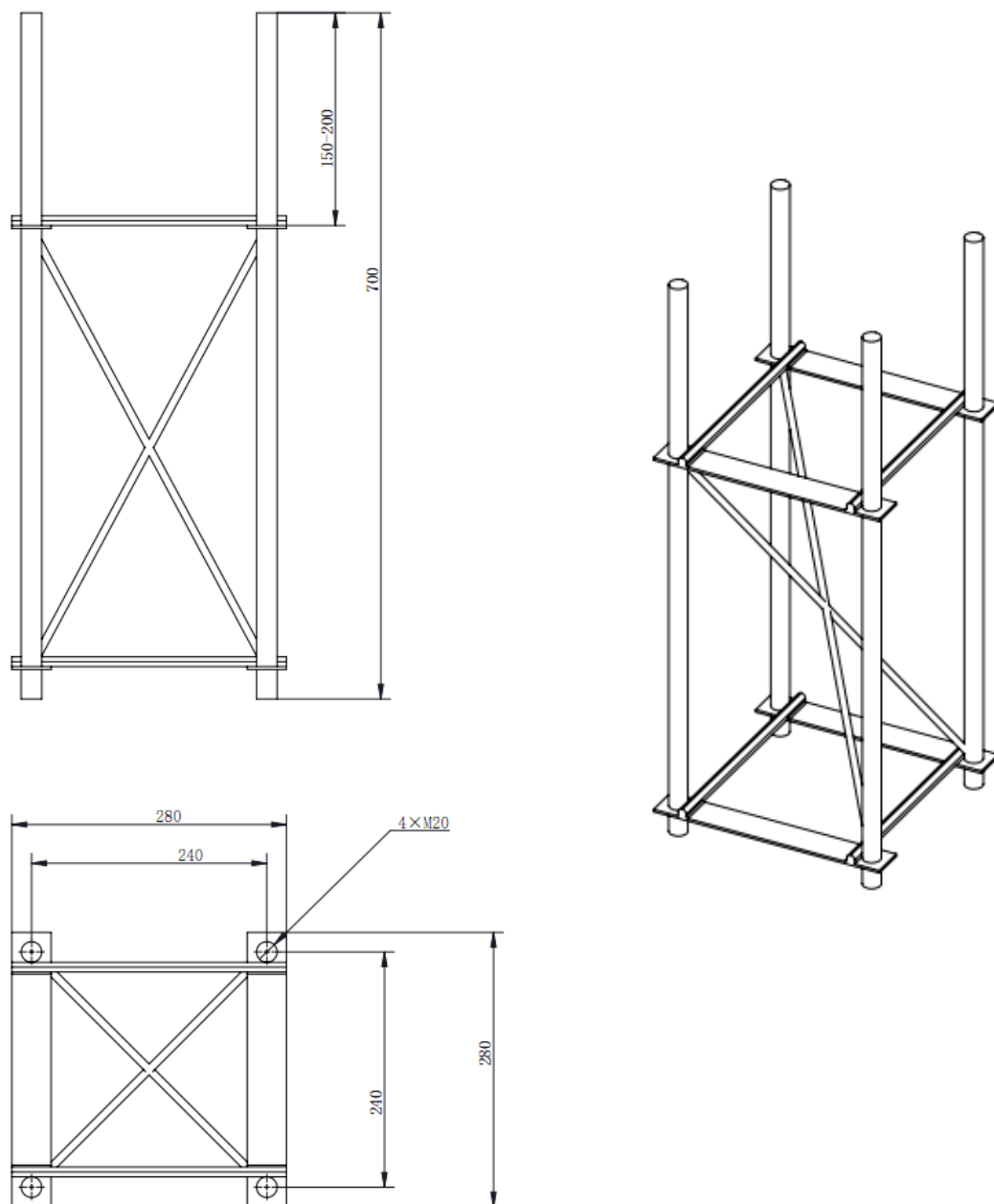
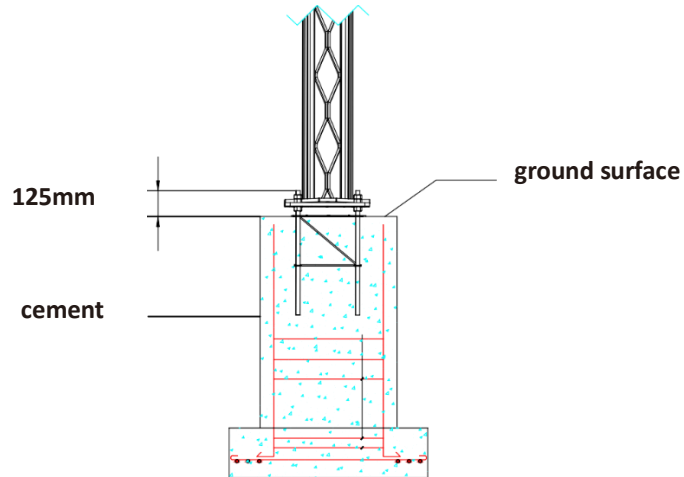
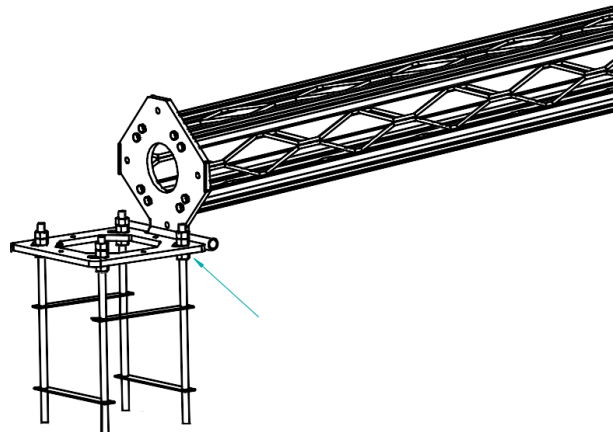


Figure 6 – Embedded Part of Foundation Installation

After the cement is harden, the frangible mast unit shall be installed on the foundation embedded parts.



Note: Frangible mast installed apeak by adjusting the M20 nut

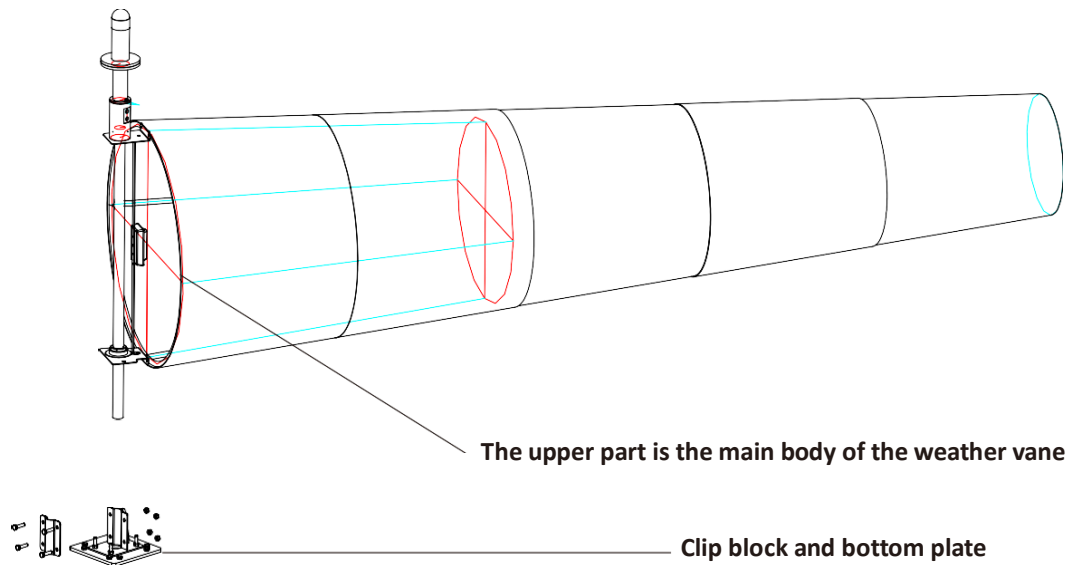
Figure 7 – Frangible Mast Unit Installation

Install the bucket unit on the frame and tighten, the bucket unit and frangible mast unit are fixed by clamping blocks as shown in the figure below.



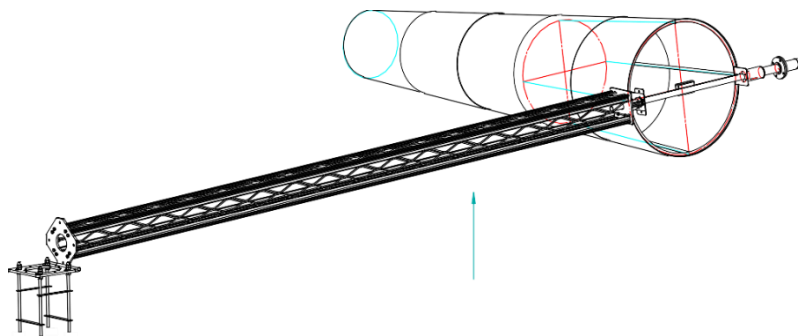
Note: make the bucket unit perpendicular to the roof of the frangible mast

Figure 8 – Install The Bucket Unit On The Frame



Then pass the two power cables through the frangible mast, then come out and connect with the respective air switch in the electricity box, and check whether the obstruction light and bucket lamp work normally. After confirming the wire connect is correct, install the wire slot and fixed it with the buckle. Attach the flip bottom plate with bolts before setting up the frangible mast.

Figure 9 – Power Cables Connection and Frangible Mast Installation



WARNING:

The voltage is 220V power supply, please operate according to the national and international electrical safety regulations. Cut off the power supply before the operation.

Different rod weights of different lengths, so manpower or engineering crane can be selected according to the actual situation. Please pay attention to the personal safety of the site environmental protection during the process

4.Maintenance

Including the illuminated indicator and unilluminated indicator, the preventive inspection and maintenance shall comply with the provisions in the following table.

Table 1-Preventive Inspection and Maintenance Of The Wind Vane

Maintain the content	everyday	annually
1 Check and record the work condition of the weather vane	★	
2 Check the mounting bracket for the weather vane	★	
3 Check the lighting and power supply of the vane		★
4 Check the anti-corrosion layer of the weather vane		★
5 Check the transmission parts of the vane		★
6 Inspection and maintenance conducted for special reasons		★

4.1.Check the maintenance items daily

4.1.1.Removal and Installation of the Light Bottom Cover

- Check the lighting of the wind vane and replace the failed light source.
- Check whether the conical wind vane is damage or fading, replace the damaged and faded windsock.

4.1.2. Check whether the fasteners of the wind vane installation bracket are complete or applicable.

4.2. Check the maintenance items annually

4.2.1. Check the lighting and power supply device of the wind vane and check the electrical connection of the lamps.

4.2.2. Check the anti-corrosion layer of the wind vane, and treat the parts where the anti-corrosion layer has fallen off.

4.2.3. Check the rotating parts of the vane and repair the failed mechanical parts.

4.2.4. Inspection and maintenance conducted for special reasons.

4.3. Check the maintenance items irregularly

The following circumstances should be irregularly checked and maintained:

Content irregularly	Check the maintenance
After the airport is newly built or put into use within a year	Installation foundation of wind vane and bracket situation
When the weather temperature changes, suddenly or strong wind, rainstorm (snow) and other severe weather occurs after	Rotating mechanism of wind bucket
Abnormal conditions	Power supply and lighting situation of the wind vane

Table 2-Spare Parts List

Description		Ordering code
1	Wind cone The effective length is 3.6m, the air inlet diameter is 0.92m,	LSWC01
2	Bucket light Series power supply 6.6A Parallel power supply 220V	LSWC11 LSWC12
3	Obstruction light Series power supply 6.6A Parallel power supply 220V	ELC-OBLA-C-R ELC-OBLA-V-R

Note: Hangdakang has a perfect spare parts supply system, and you can order from



Hangdakang if necessary.

5.Support

5.1.Customer Service

If you need after-sales service, you can contact us through the after-sales service hotline or sales consultant.

After-sales service hotline

China: +86-27-63498449

Please prepare the following information in advance in order to get the service quickly:

- Product name and serial number
- Airport code or company name
- Your phone and email address

5.2.Recycling

Improper disposal of scrapped electronic equipment may have a negative impact on the environment and human health. Regarding the recycling of electronic products, please follow the local laws and regulations.

5.3.About HDK

Handakang Electrical & Mechanical Technology Corp. Ltd., established in 2003 in Wuhan/China is a professional locally known provider of Airfield Lighting, Navigation Aids, Frangible Mast Systems and Heavy Duty Support Equipment. In 2017 HDK started to create a new LED Airfield Lighting Portfolio supported by known capacities from Europe, to become the supplier for Airfield Customers in China, Asia, Europe and all over the World for reliable, efficient and innovative Airfield Lighting Products at highest quality.

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