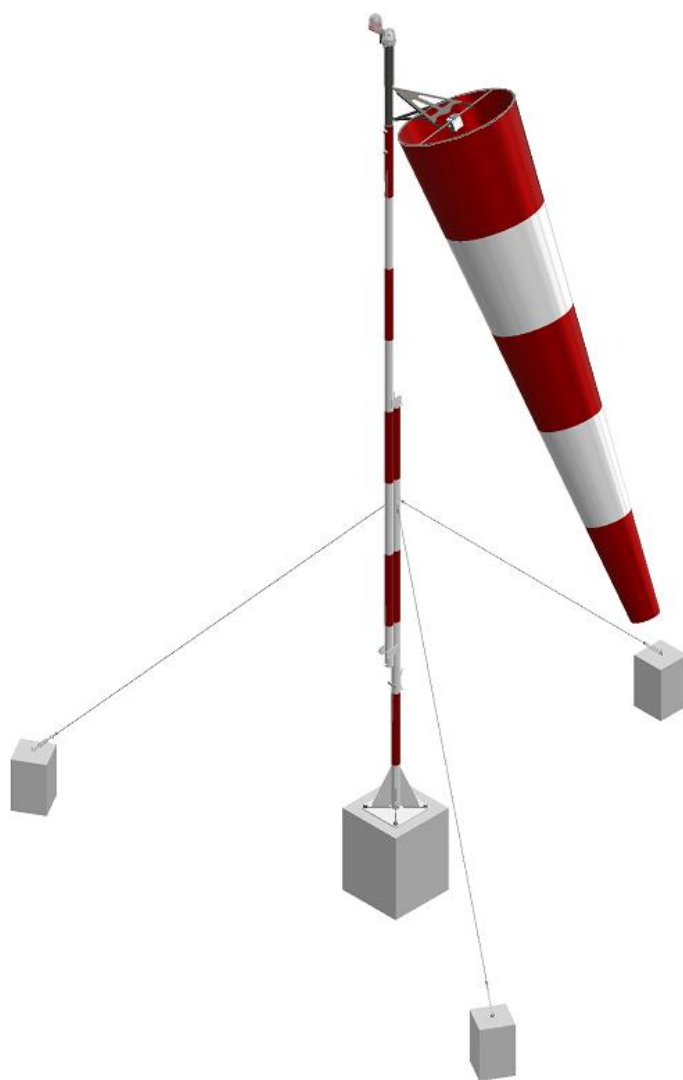




STNA MAST ICAO TYPE MAST



NOTICE

Summary

English	
1. INTRODUCTION	3
2. DIMENSIONS	3
3. GROUND PREPARATION	4
4. WIND VANE ASSEMBLY	4
5. INTERNAL LIGHTING SETUP	7
6. SETUP OF THE OBSTRUCTION LIGHT HOUSING	7
7. MAST ASSEMBLY	8
8. MAST RAISING	10
9. FASTENING THE WINDSOCK ON THE HOOP	11
10. TIPPING THE TOP OF THE MAST OVER	11
11. Connection to the grid : 230Vac	12
12. Connection to the grid : 6.6A	12

1. INTRODUCTION

CONGRATULATIONS, you just came into possession of a DELTA BOX quality mast, Made in France.

This document is a description of the installation and commissioning of a wind indicator mast.

a. Documentation

This document is the property of:

DELTA BOX
540 RUE LEO LAGRANGE
59500 DOUAI France

This documentation, or any part of this documentation, may not be reproduced or distributed in any form or by any means without the prior written consent of Delta Box.

b. Safety

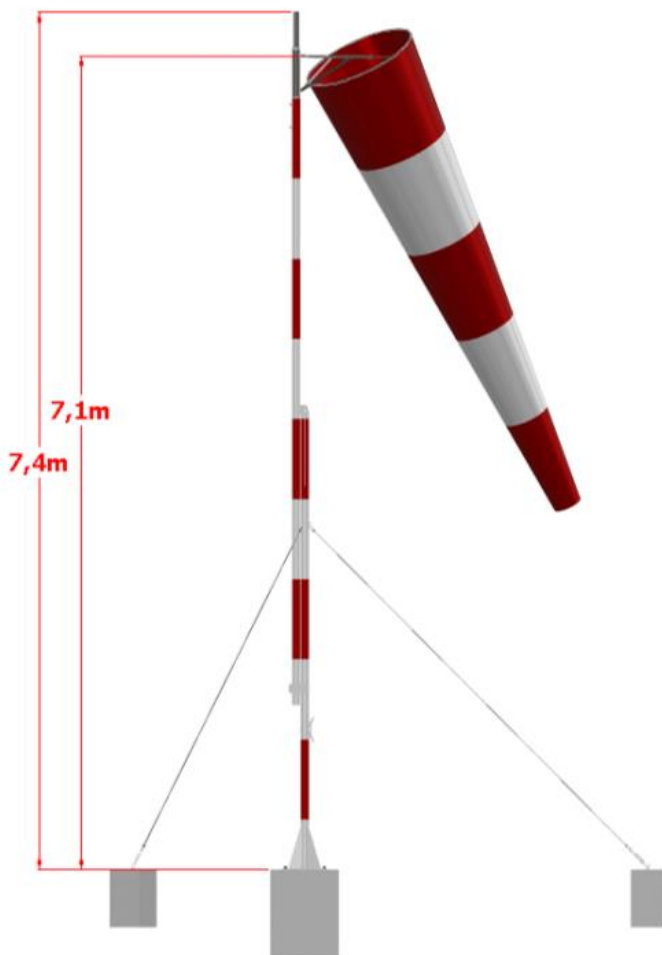
Before installing, it is essential to verify the consignment of the electrical installation. The electrical consignment shall only be realized by an authorized entity.

c. Declaration of conformity

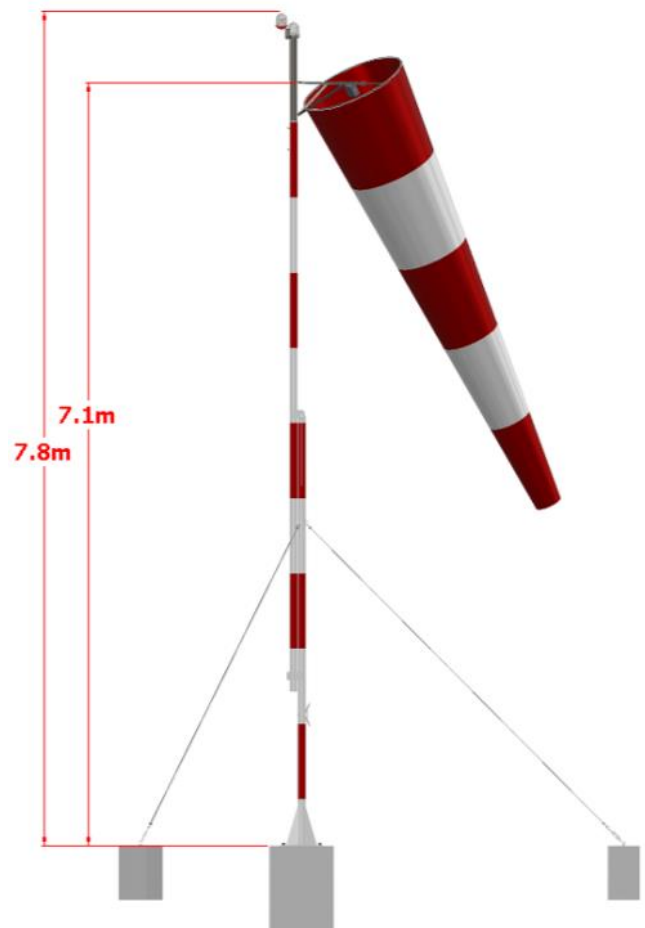
In compliance with the following norms: 2014/35/UE
 EN60947-1/A2
 CEI60364, NF C15-100/A5
 OACI Annex 14 Volume I Paragraph 6.3

2. DIMENSIONS

a. STNA Mast



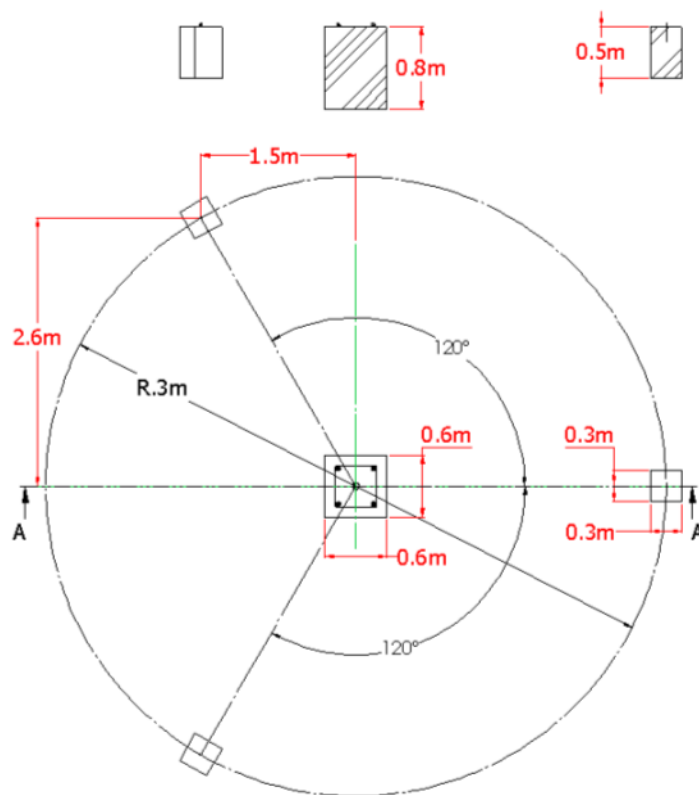
b. With the windsock lighting and a top-mast beacon



3. GROUND PREPARATION

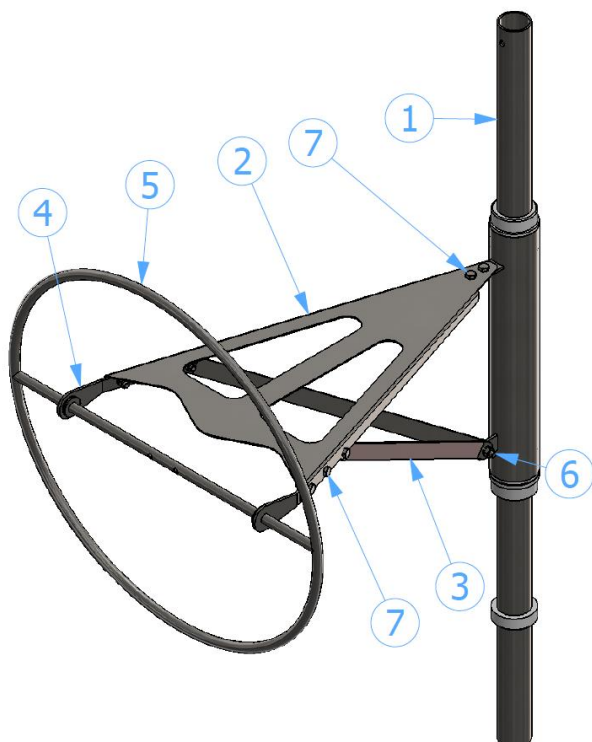
Build the concrete foundations and drown the embedding plate.

The dimensions expressed below are indicative and can be summited to adaptation given the nature of the ground. In any case, they must not be inferior.



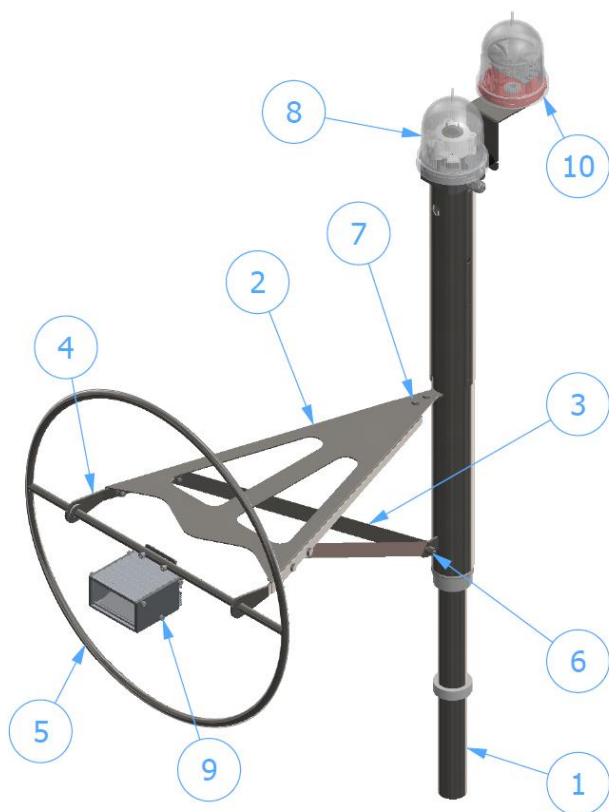
4. WIND VANE ASSEMBLY

With no windsock lighting or top-mast beacon



N°	DESIGNATION	QTY
1	ROTATING TUBE	1
2	SUPERIOR TRIANGLE	1
3	HOLDING BAR	2
4	HOOP HOLDING BAR	2
5	STNA HOOP	1
6	SCREW H M8x25 + GROWER WASHER + NUT H	1
7	SCREW H M8x20 + GROWER WASHER + NUT H	8

a. With windsock lighting and top-mast beaoning

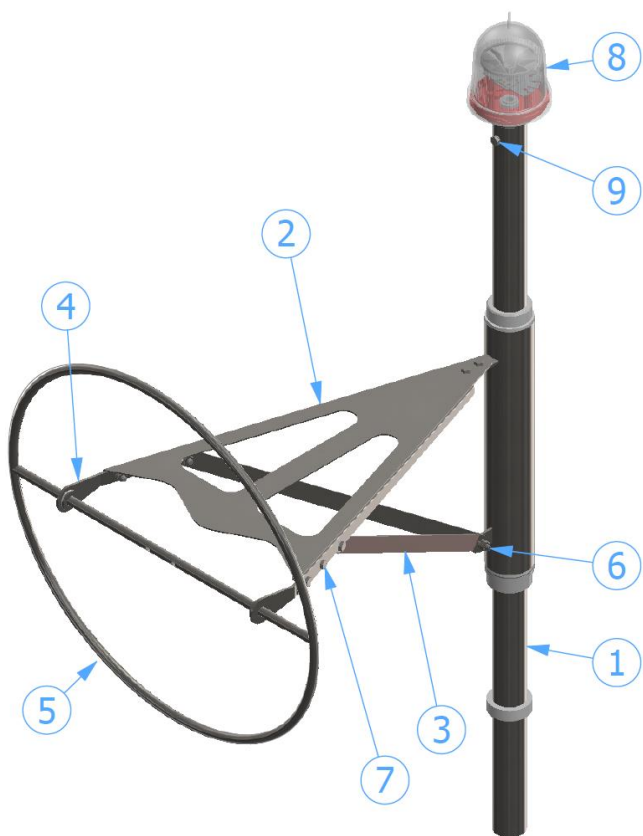


N°	DESIGNATION	QTY
1	ROTATING TUBE	1
2	SUPERIOR TRIANGLE	1
3	HOLDING BAR	2
4	HOOP HOLDING BAR	2
5	STNA HOOP	1
6	SCREW H M8x25 + GROWER WASHER + NUT H	1
7	SCREW H M8x20 + GROWER WASHER + NUT H	8
8	OBSTRUCTION LIGHT HOUSING	1
9	WINDSOCK LIGHTING for 6.6A mast	1
10	LBIA-HMA	1



N°	DESIGNATION	QTE
1	ROTATING TUBE	1
2	SUPERIOR TRIANGLE	1
3	HOLDING BAR	2
4	HOOP HOLDING BAR	2
5	STNA HOOP	1
6	SCREW H M8x25 + GROWER WASHER + NUT H	1
7	SCREW H M8x20 + GROWER WASHER + NUT H	8
8	OBSTRUCTION LIGHT HOUSING	1
9	WINDSOCK LIGHTING for 230V mast	1
10	LBIA-HMA	1

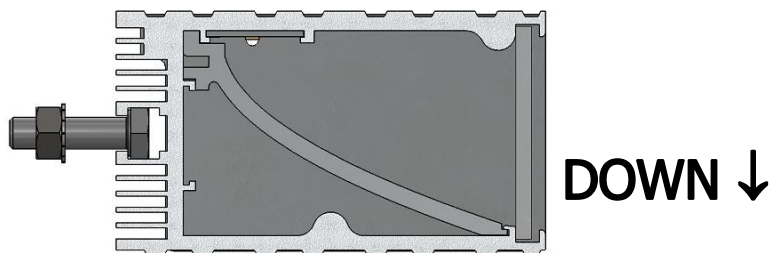
b. With top-mast beaconing



N°	DESIGNATION	QTY
1	ROTATING TUBE	1
2	SUPERIOR TRIANGLE	1
3	HOLDING BAR	2
4	HOOP HOLDING BAR	2
5	STNA HOOP	1
6	SCREW H M8x25 + GROWER WASHER + NUT H	1
7	SCREW H M8x20 + GROWER WASHER + NUT H	8
8	LBIA-HMA WITH 8 M OF CABLE	1
9	SCREW H M8x20 + SPRING WASHER	1

5. INTERNAL LIGHTING SETUP

In order to maximize the efficiency of the lighting on the sock, the reflector must lean downwards.

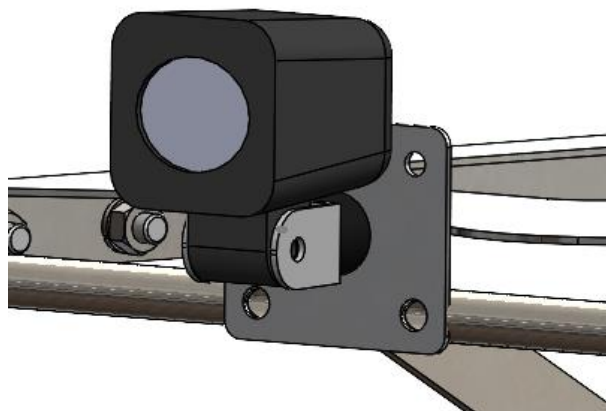


a. Windsock lighting for 6.6A mast



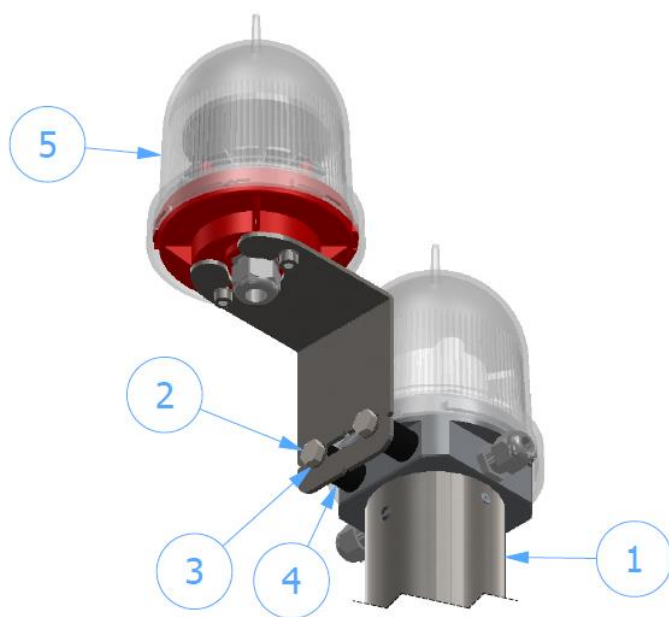
N°	DESIGNATION	QTY
1	WINDSOCK LIGHTING	1
2	SCREW CHC M6x25 + 2 SPRING WASHERS + LOCK NUT	2
3	STNA HOOP	1

b. Windsock lighting for 230V mast



N°	DESIGNATION	QTY
1	WINDSOCK LIGHTING	1
2	SCREW CHC M6x25 + 2 SPRING WASHERS + LOCK NUT	2
3	STNA HOOP	1

6. SETUP OF THE OBSTRUCTION LIGHT HOUSING

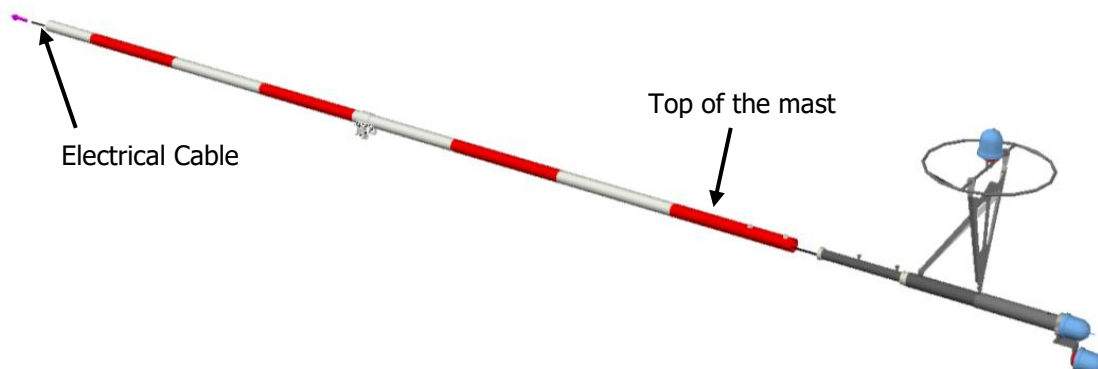


N°	DESIGNATION	QTY
1	HOUSING	1
2	SCREW H M8x40 A2	2
3	SPRING WASHER	2
4	STUT Ø8.2 Lg. 25mm	2
5	LBIA-HMA WITH BRACKET	1

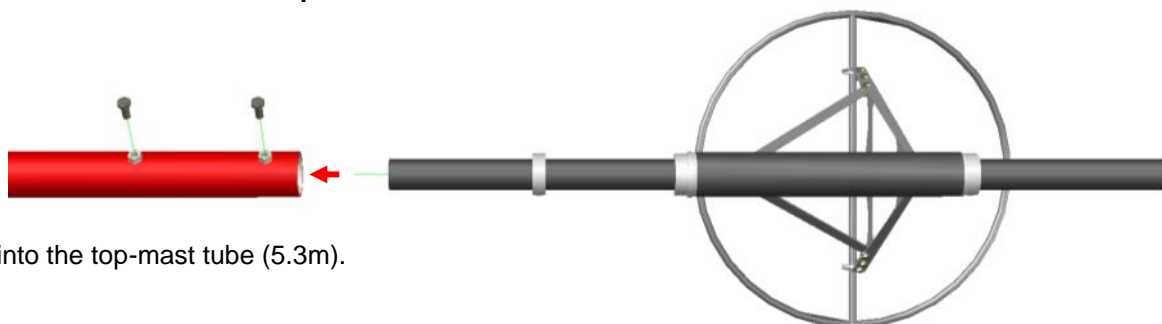
7. MAST ASSEMBLY

1. Internal lighting and top-mast beaconing in option

With a needle, pass the power cable through the top-mast tube until you see the unwired extremity come out of the tube.



2. Assembly of the wind vane on the top of the mast



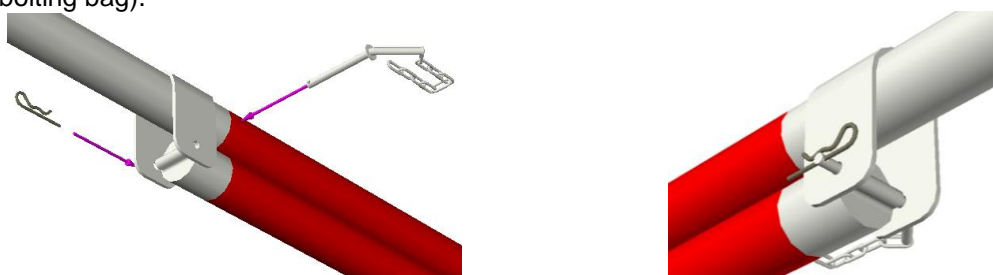
3. Assembly of an M30 wind vane on an M30 top-mast.

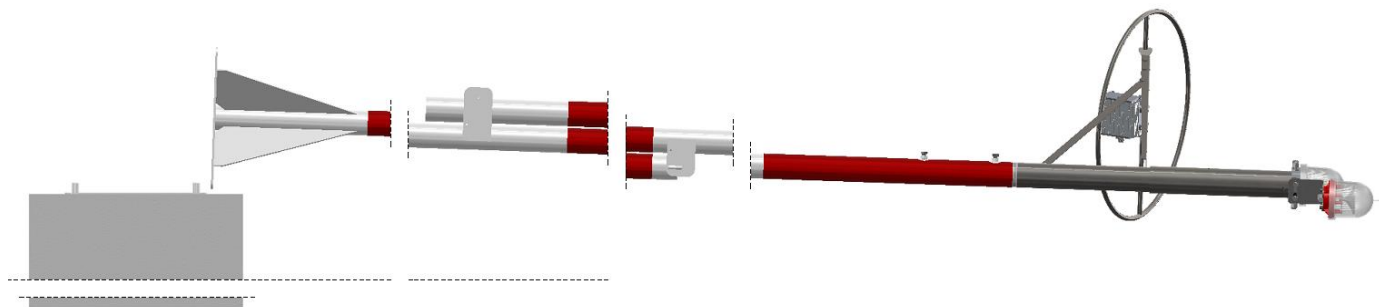


4. Assembly of the top-mast and the bottom-mast



Fasten the top-mast onto the bottom-mast with the axis attached to the top-mast. Place a beta pin on the axis (provided in the bolting bag).



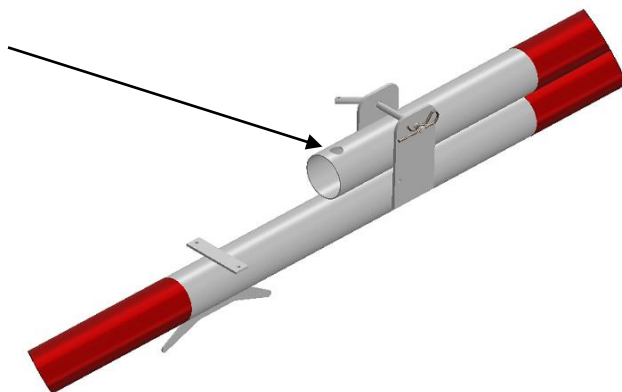


Put the mast in front of the embedding plate and remove the nuts and washers from the plate.

5. Attach the rope to the bottom of the top-mast

Fix the rope in the following hole

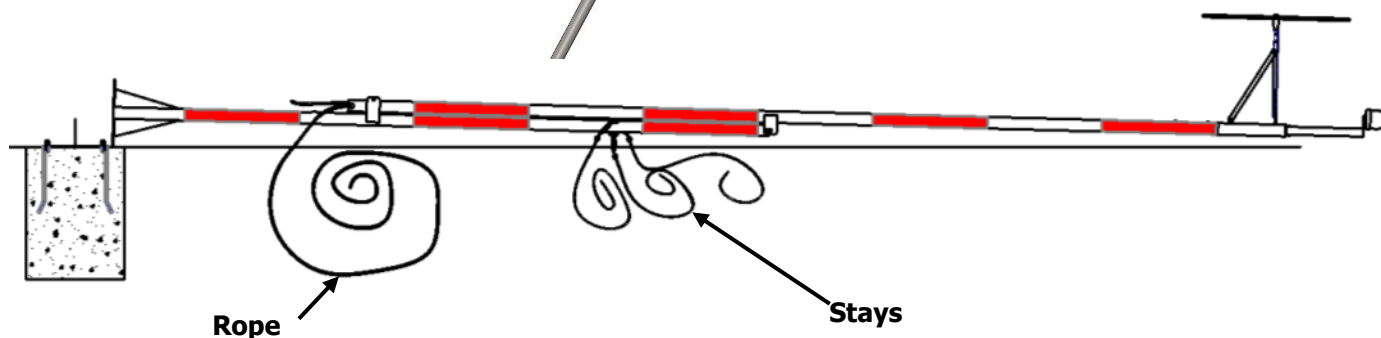
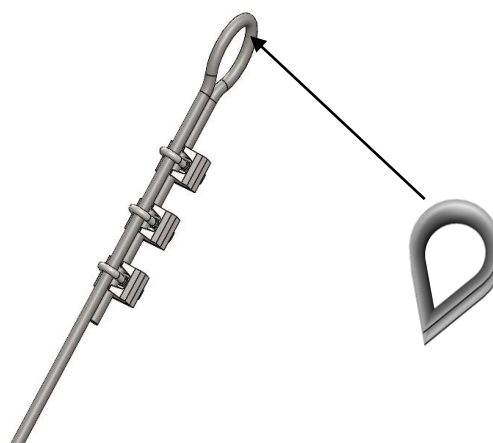
For the rope, use the thimble and the 3 cables grips Ø8



6. Fasten the stays to the base of the mast

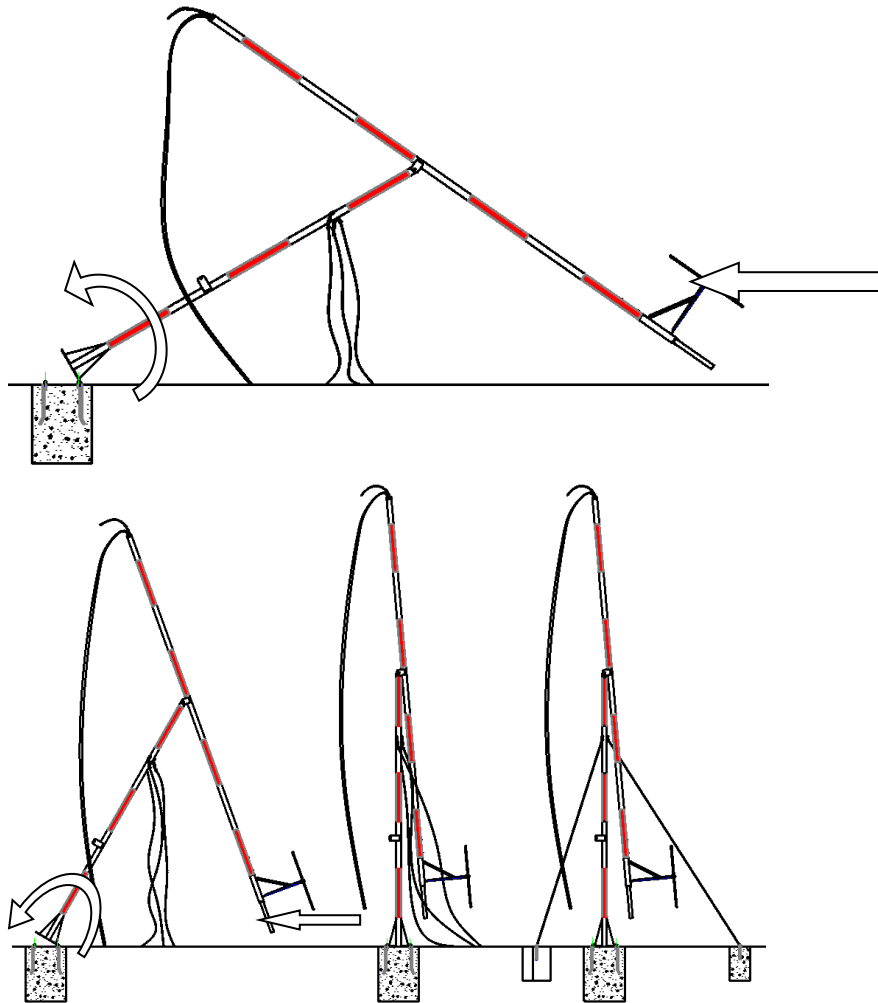
For the stays, use the 6 cable grips Ø5 and the 3 wire-strainers M10.

Assemble a stay : At one extremity of the stay, make a loop in a welded ring, on the mast, and setup 3 cables grip.
At the other extremity, fix the wire-strainer M10



8. MAST RAISING

Position the bottom-mast in front of the threaded rods of the embedding plate to block the mast. By pushing on the bottom of the mast, lift the base of the mast onto the concrete block.



In vertical position, tighten the 4 nuts of the embedding plate, and then fasten the stays on their respective concrete block.

Stays have to be extended at 160Kg (1600N), this pressure improves the resistance of the mast facing the wind and avoids breakage.

This pressure must be checked after one month of commissioning and then every year.



WARNING:

THE TIGHTENING OF THE
SCREWS MUST BE DONE
UNIFORMLY ON BOTH THREADS
(see illustrations)

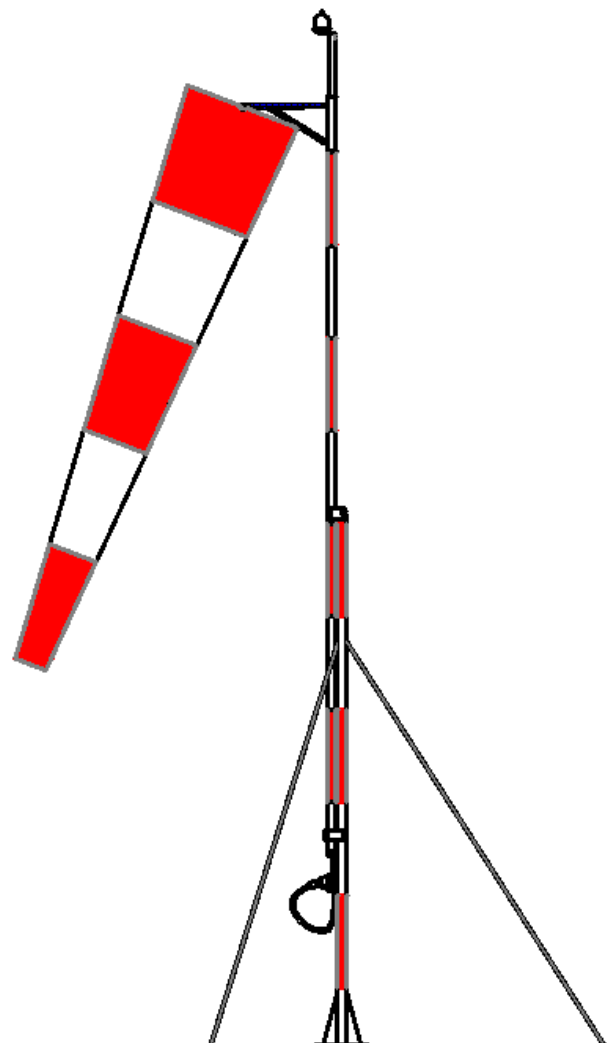
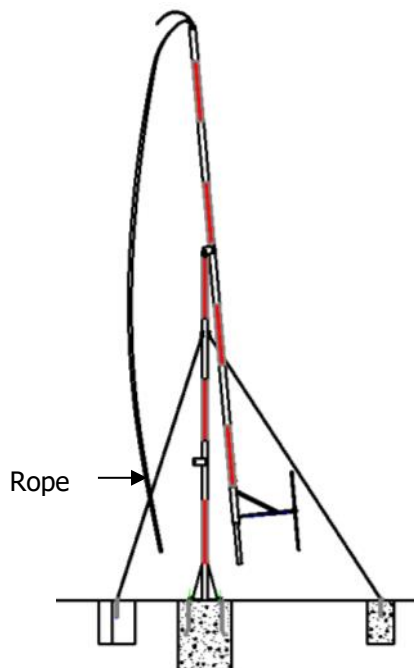
9. FASTENING THE WINDSOCK ON THE HOOP

Use the suitable collars.



10. TIPPING THE TOP OF THE MAST OVER

Tip the mast over by pulling on the rope and fasten it with the pin.



Wind the rope on the reel.

11. Connection to the grid : 230Vac

It is mandatory to unplug the lights before un-stepping the mast, for changing the windsock for instance.

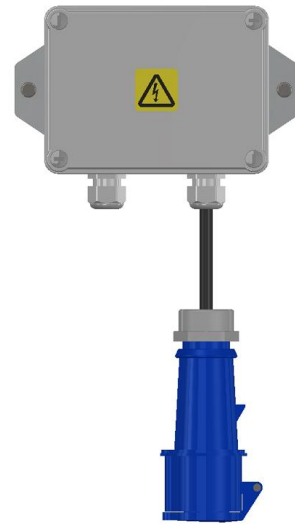
Attach the box to the mast, with the 2 M6 bolts provided.

Open the box with a flat screwdriver.

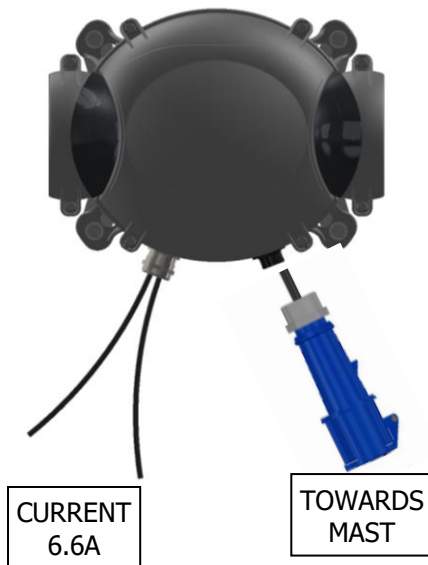
Connect it to the electrical grid after having switched off the current and the tension.

Connect the extremity of the cable (coming out of the top-mast) to the plug.

Hook the plug (of the top-mast) to the outlet located below the electric box.



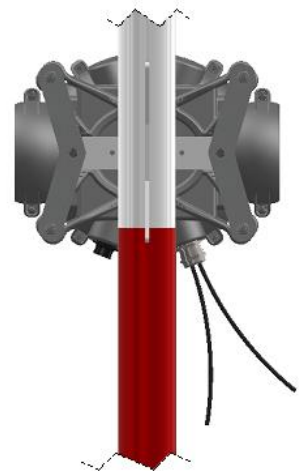
12. Connection to the grid : 6.6A



It is mandatory to unplug the lights before un-stepping the mast, for changing the windsock for instance.

Attach the Twiny box to the mast with the 2 M6 and the 4 M8 bolts provided along with the 2 Twiny backing plates.

The Twiny box is not an isolating transformer, it only lowers the current so the lighting of the windsock, and the top-mast beacon, can function. The Twiny box can be installed behind an isolating transformer to prevent a power failure of the 6.6A grid in case of defect on the mast.



Verify the absence of current on the 6.6A grid and connect the 2 wires of 4mm² (coming out of the Twiny box) to the electrical 6.6A grid, in series.

If you have complaints, technical questions or you need more information, do not hesitate to contact our technical department :
 Mail : servicetechniques@delta-box.com Tél. : +33 (0)3 27 94 09 22 Fax. : +33 (0)3 27 97 31 88