

## PST-54 / PST-54-30 / PST-54-40

Assembly instructions:

The antenna can be assembled in different ways:

Assemble it on two trestles and then transport it on the entire mast or pre-assemble the elements and then complete the assembly on the mast.

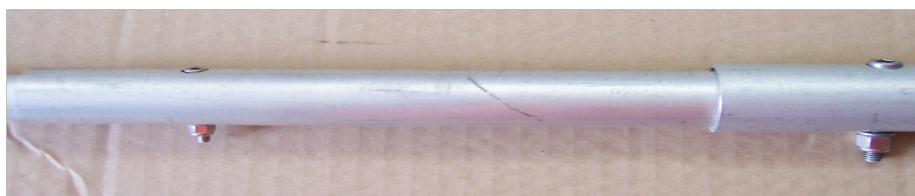
In both cases it is preferable to prepare the elements first and then the boom. If possible, given the delicacy, the supply lines should preferably be installed with the antenna already on the mast.

Extracting the elements from the packaging, you will find all the tubes that make up the elements already pre-assembled, in a scaled sequence. By tilting the package, make sure that all the heads of each diameter come out of the main tube. Don't forget to lightly lubricate the thread of the stainless steel bolts, they may get stuck if dry.

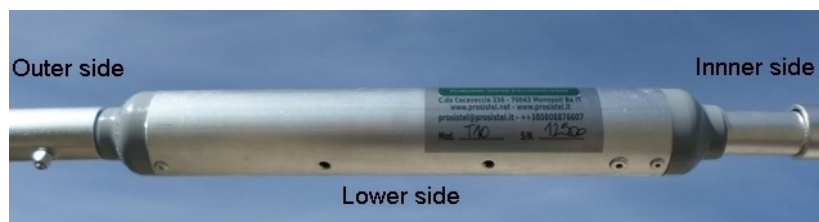
Place the element on a plane, and start pulling out the smaller diameter.

Match the hole in the inner tube with the hole in the outer tube. The elements are fixed by inserting the bolt on the side of the larger hole so that the cylindrical head of the bolt is well recessed and rests on the inner tube fig.2. Some sections are multi-drilled to facilitate calibration, always starting from the central hole, to shorten it if it is long or if it is too short. With the same technique, extract and join all the sections and the traps.

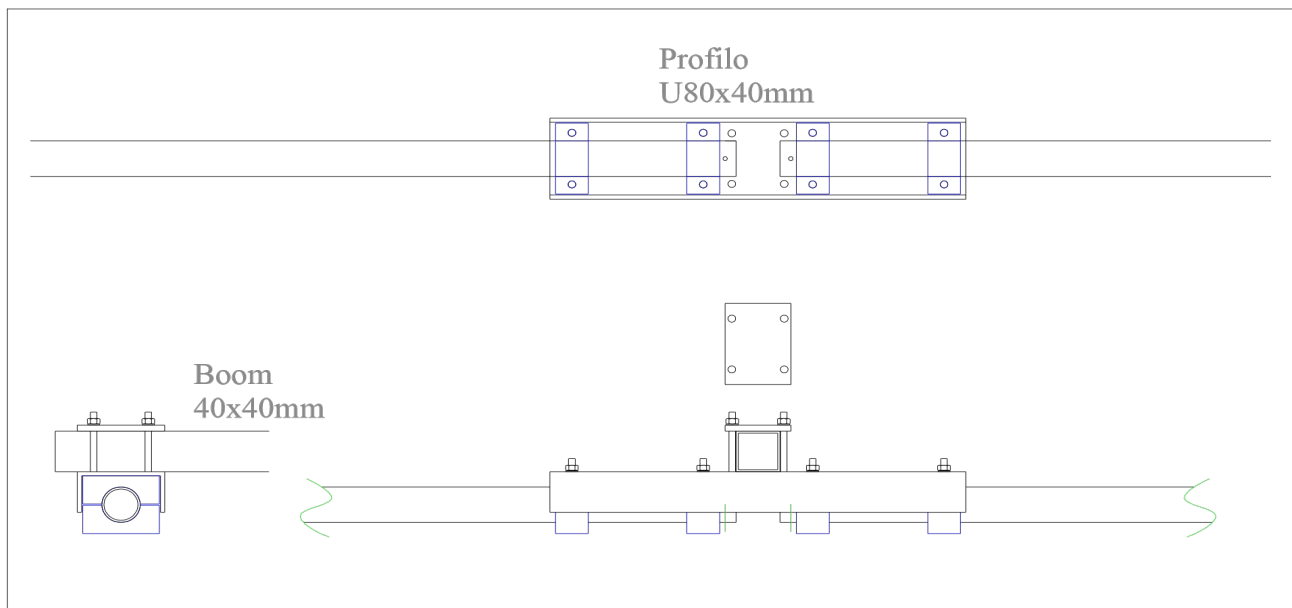
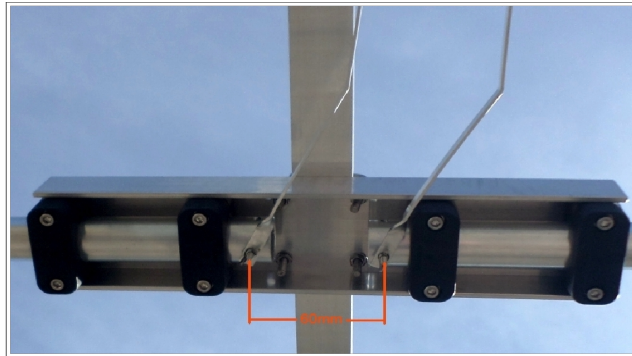
Tighten the nut firmly. Make sure that all the heads of the pins are on the same side.



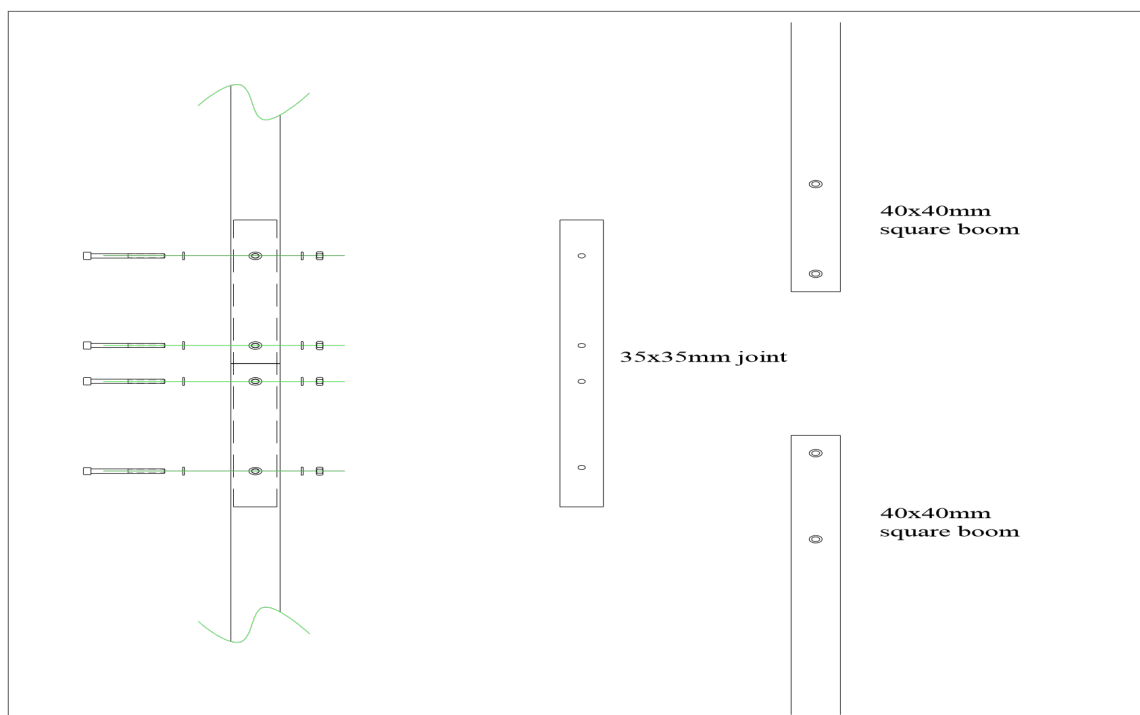
The center element of the director and radiator is a single piece already preassembled on the boom fixing plate. It will then be connected to the boom with the square U bolts supplied.

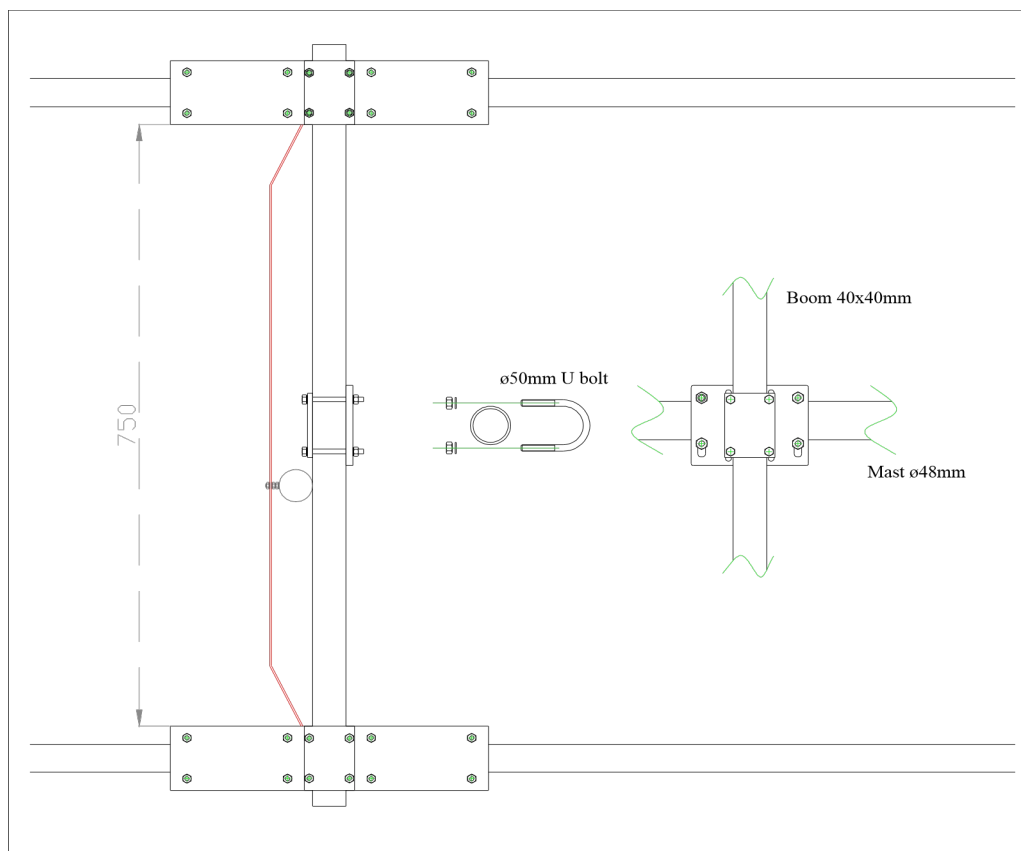


When the two semi-elements are ready, prepare the central units of the two radiators as shown in the photo and drawing.

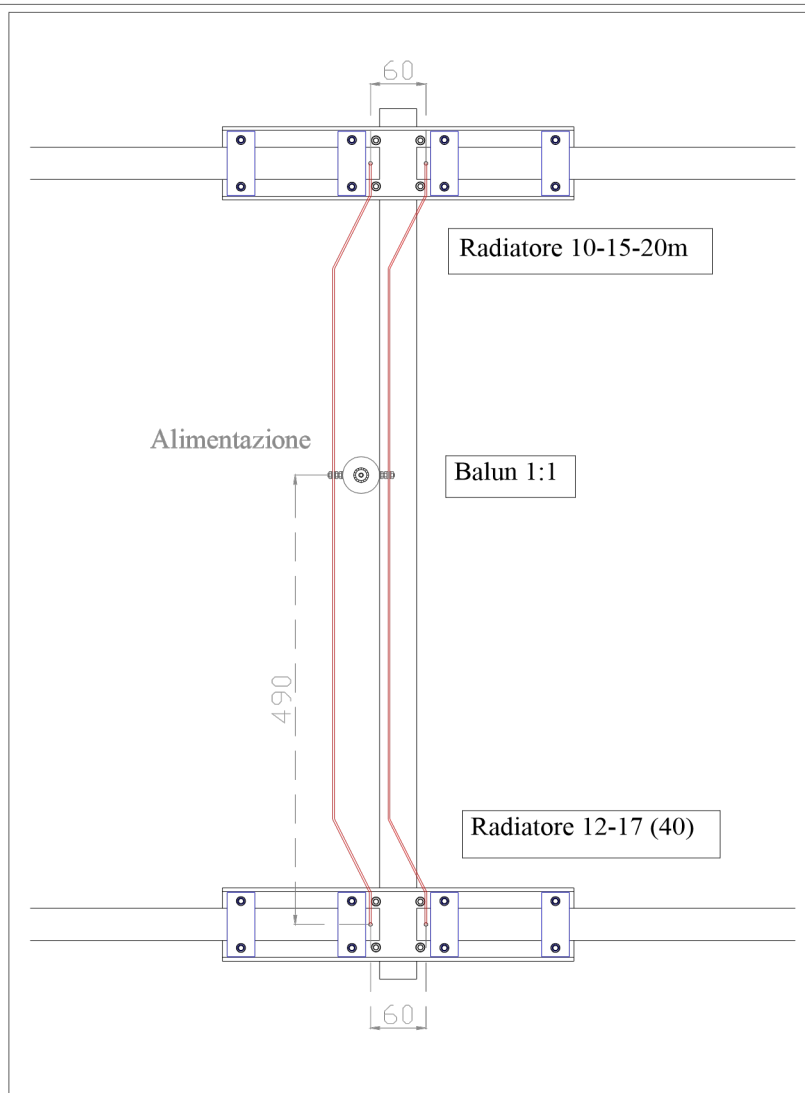


Assemblare il boom come da disegno e posizionare la piastra di interfaccia boom-mast.





Le contropiastrine di fissaggio della piastra porta elemento e della piastra mast-boom sono state sostituite con collari ad U quadrati



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## PST54

5 bands, 4 elements yagi trapped antenna

3 elements 10-15-20m

Rotating dipole 12-17m

Max power: 2KW balun 1:1 included- SO239

Boom length = 3,60m Rotating radius = 5m

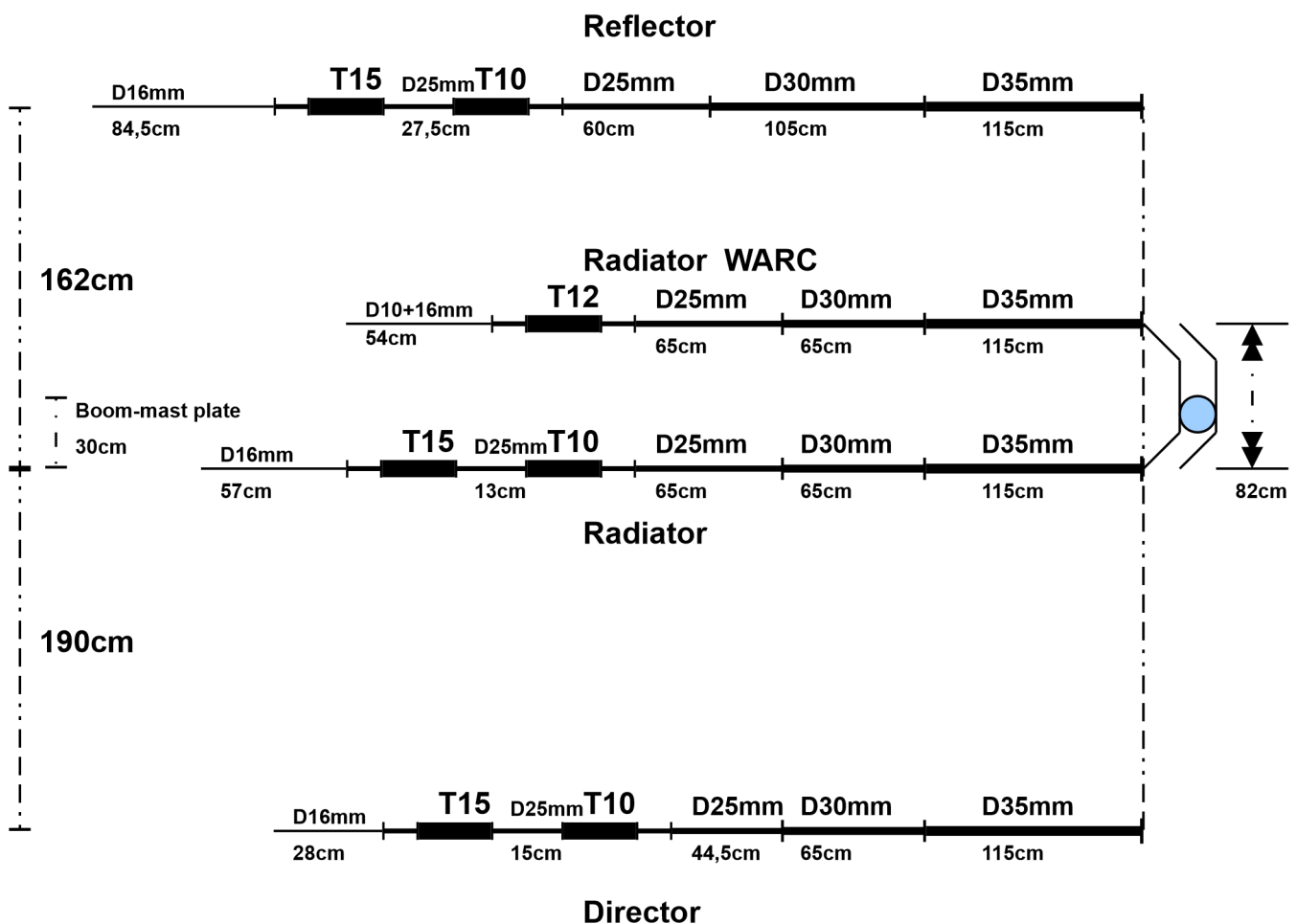
Weight: ~25Kg

### Schema di montaggio semi elemento.

Le misure degli elementi sono di massima e possono subire piccole variazioni per esigenze di taratura e massa a punto

### Half-element assembly diagram.

The measures of the elements are may change due fine tuning requirements



Band width (if minimum swr  $\leq 1:1,3$  to swr limits  $\Rightarrow 2:1$ )

10m = full

12m = full

15m = full

18m = full

20m = ~ 250 Kc/s

SWR limits may change due to environmental influences.

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## PST54 + 30m

5 bands, 4 elements yagi trapped antenna

3 elements 10-15-20m

Rotating dipole 12-17-30m

Max power: 2KW balun 1:1 included- SO239

Boom lenght = 3,60m Rotating radius = 4,86m

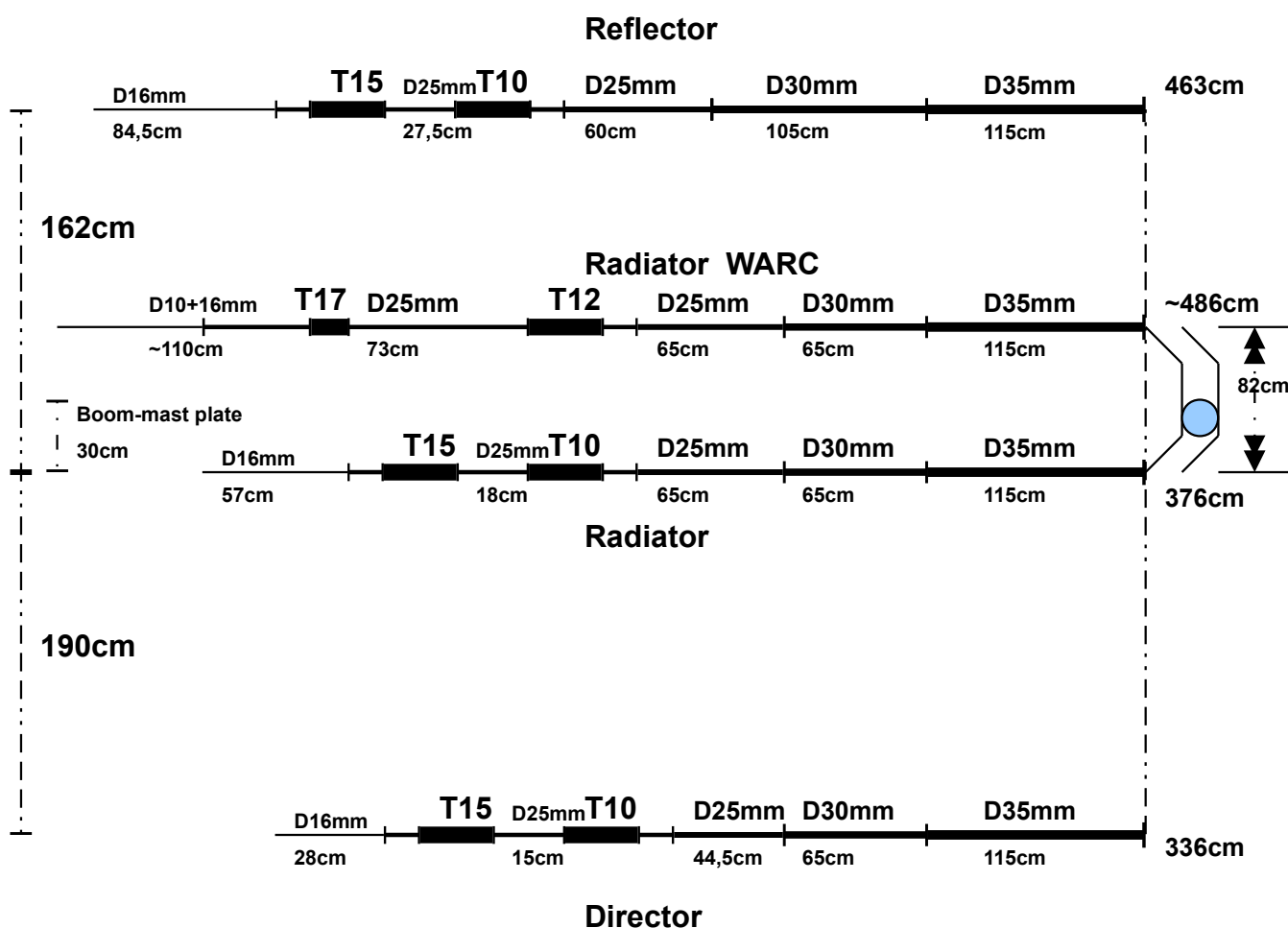
Weight: ~27Kg

### Schema di montaggio semi elemento.

Le misure degli elementi sono di massima e possono subire piccole variazioni per esigenze di taratura e massa a punto

### Half-element assembly diagram.

The measures of the elements may change due fine tuning requirements



Band width (if minimum swr  $\leq 1:1,3$  to swr limits  $\Rightarrow 2:1$ )

10m = full

12m = full

15m = full

18m = full

20m = ~ 250 Kc/s

30m = ~ full

SWR limits may change due to environmental influences.

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## PST54 + 40m

5 bands, 4 elements yagi trapped antenna

3 elements 10-15-20m

Rotating dipole 12-17-40m

Max power: 2KW balun 1:1 included- SO239

Boom lenght = 3,60m Rotating radius = 5,36m

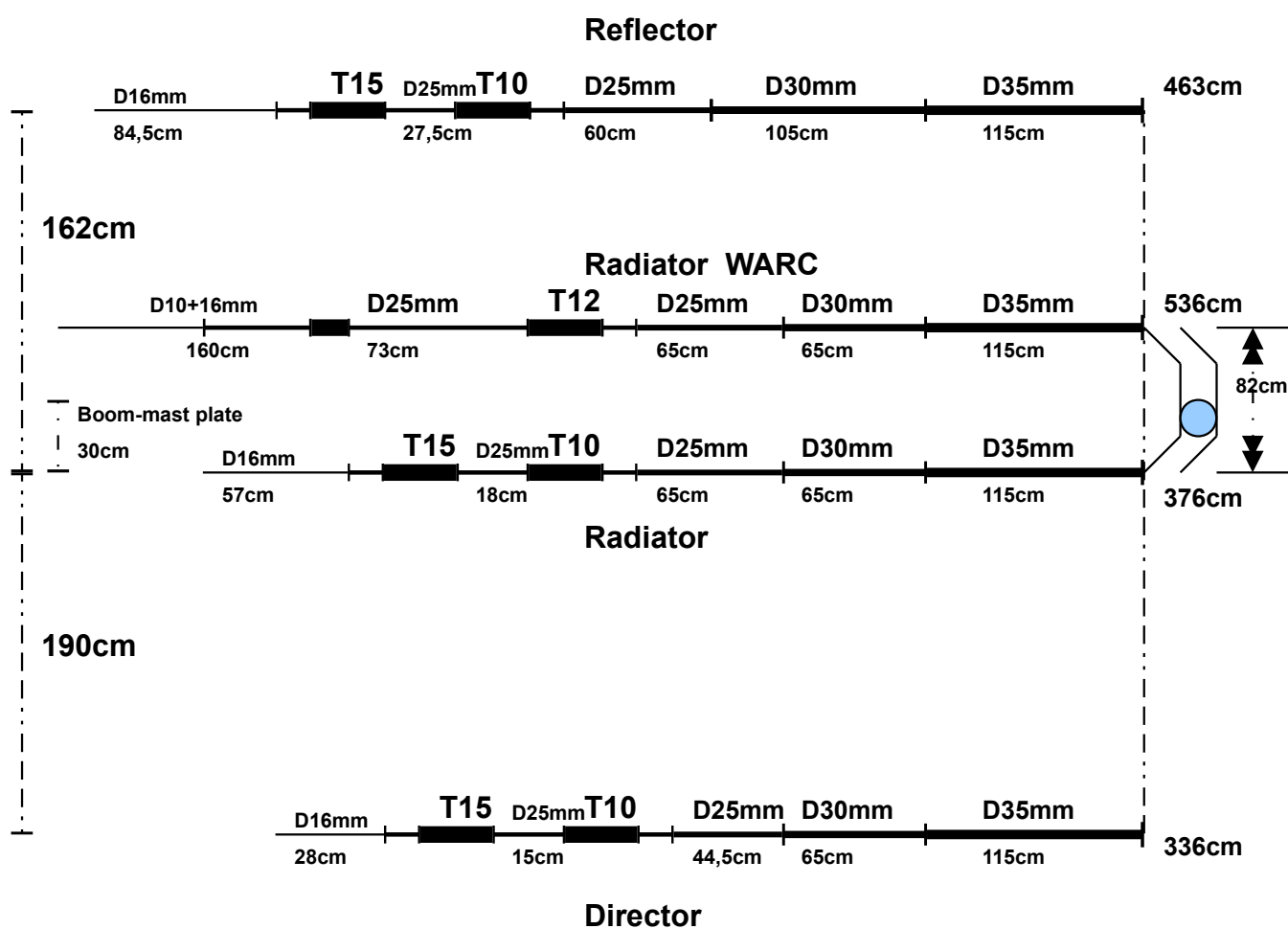
Weight: ~27Kg

### Schema di montaggio semi elemento.

Le misure degli elementi sono di massima e possono subire piccole variazioni per esigenze di taratura e massa a punto

### Half-element assembly diagram.

The measures of the elements may change due fine tuning requirements



Band width (if minimum swr  $\leq 1:1,3$  to swr limits  $\Rightarrow 2:1$ )

10m = full

12m = full

15m = full

18m = full

20m = ~ 250 Kc/s

40m = ~ 100Kc/s

SWR limits may change due to environmental influences.

**Final view PST54**



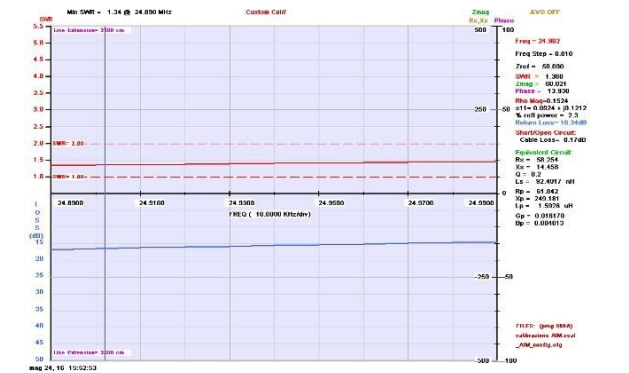
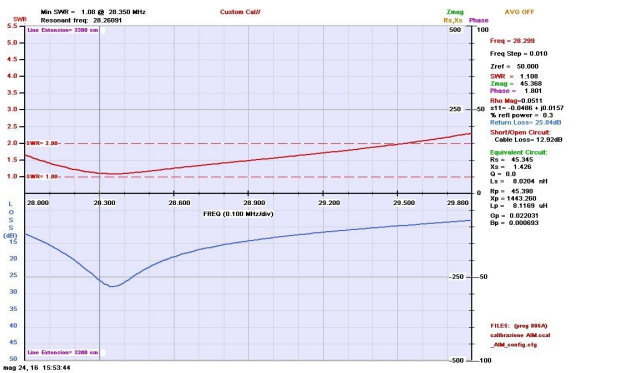
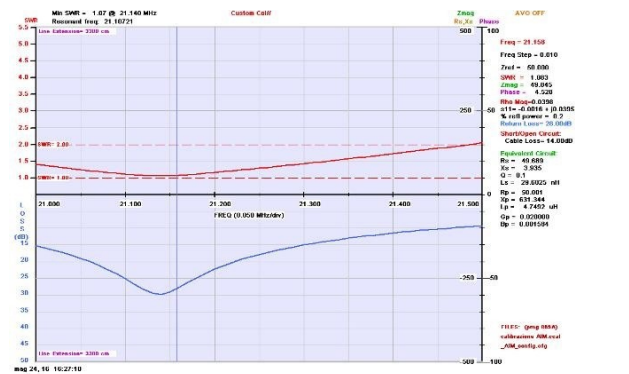
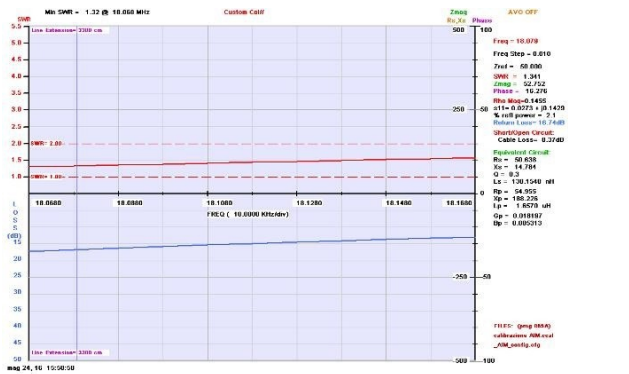
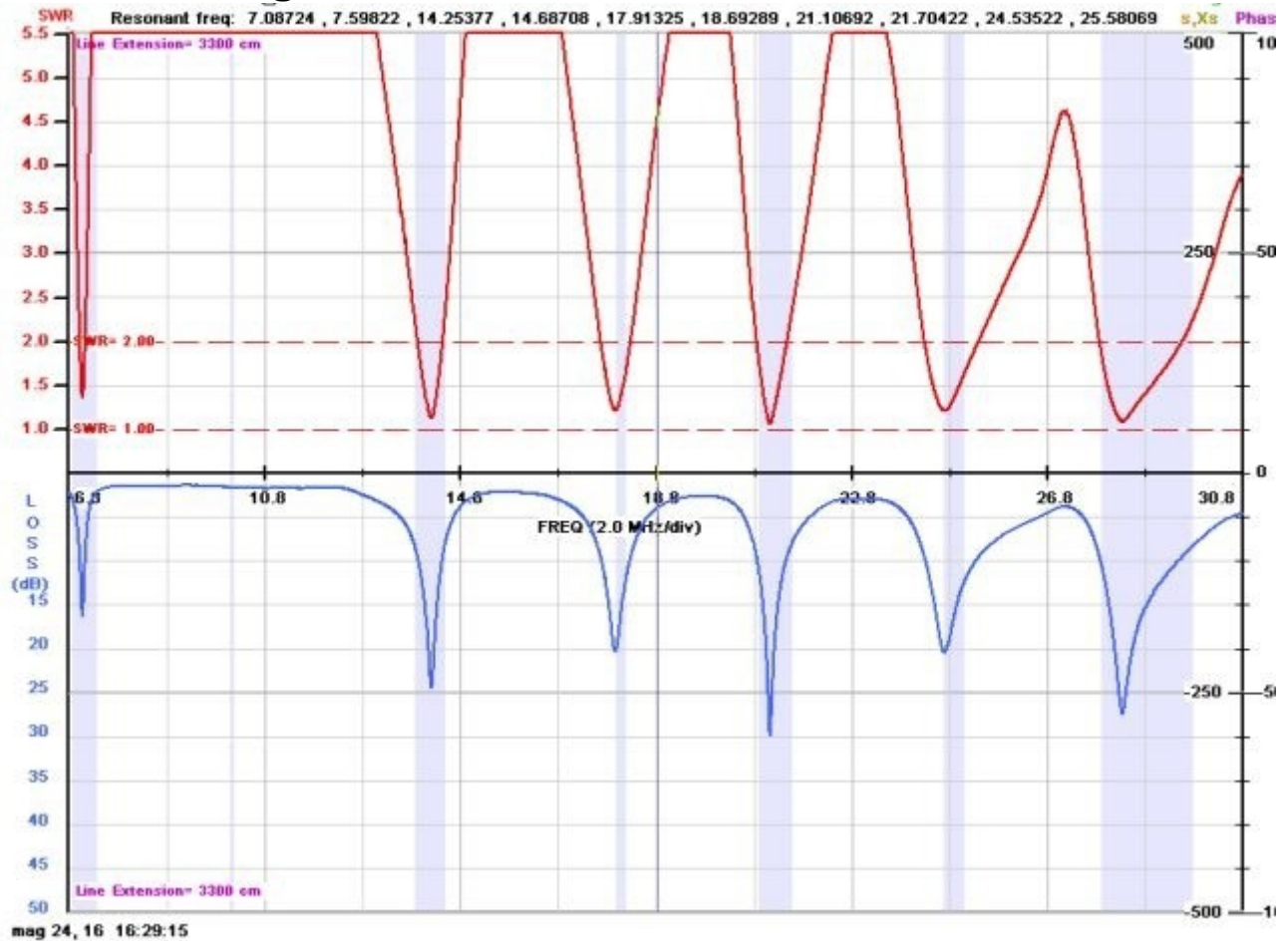
**Final view PST54-30/40**

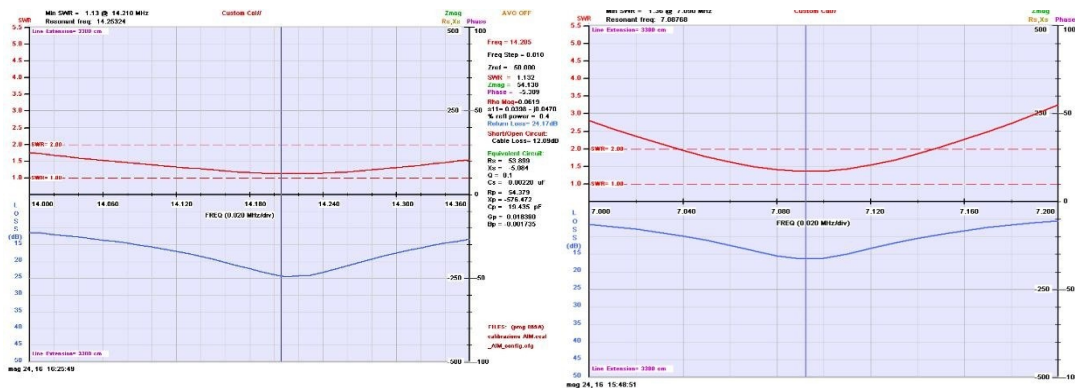


**For better performance we recommend mounting at a height of at least 8-10m from the ground.**

**DO NOT SEAL THE JOINTS, ANTENNAS MUST BREATHING, condensation could seriously affect regular operation**

# SWR diagram (if antenna installed in right way).





The ros diagram can be influenced by the surrounding environment.

Mounting at heights lower than the recommended might compromise operation on the 20 and / or 40m band depending on the version purchased.

### General specifications:

- Bands = 10-15-20m beam 12-17-30/40m rotating dipole
- Gain = 6-8 dBd 12-17-30/40m 0dB
- Impedance = 50 ohm
- F/B = 20m 6-8dB, 15m 8-10dB, 10m 10-12dB
- F/S = >20dB
- SWR = within 1:1,5 or better (see diagram)
- Boom lenght = 4m
- Rotating radius = about 5m
- Weight = 25-27 kg
- Tower mast = 48-50mm (series) or 60mm (optional)
- Material = AL6060T6, Stainless steel hardware.

Thank you for your preference for our products.  
If you are satisfied, tell others, if you are not satisfied, tell us.  
Positive or negative comments help us improve our work.

73 de IK7MWR  
Annamaria Fiume

### ! WARNING Defend the environment

Disposal of components and materials

The antenna consists predominantly of aluminum, in the event of disposal, transfer the scrap to a specialized disposal center, in compliance with the provisions of the law

