



USER AND MAINTENANCE MANUAL

MECHANICAL TELESCOPIC MAST ENVitech



version 2017

This manual contains information regarding the correct use and ordinary maintenance related to the telescopic masts, in all its variations, in order to assure all necessary security measures for the user; in the event the use of the system should not be conform with what is stated in this manual, the manufacturer considers void all forms of warranty and declines liability for damage or harm caused to people, animals or property due to improper use.

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We recommend reading carefully this manual in order to complete the necessary training for the personnel intended to use the MECHANICAL TELESCOPIC MAST ENVitech. In particular this manual should be read by authorized and qualified personnel before use and before any ordinary maintenance work.

1. IDENTIFICATION DATA OF THE MANUFACTURER

ENVitech s.r.o. is the manufacturer of the MECHANICAL TELESCOPIC MAST ENVitech, described with the generic term of appliance. Mast assembly and functional tests have been carried out at ENVitech production plant in Trenčín, Slovak Republic. The "declaration of conformity" is part of this manual.

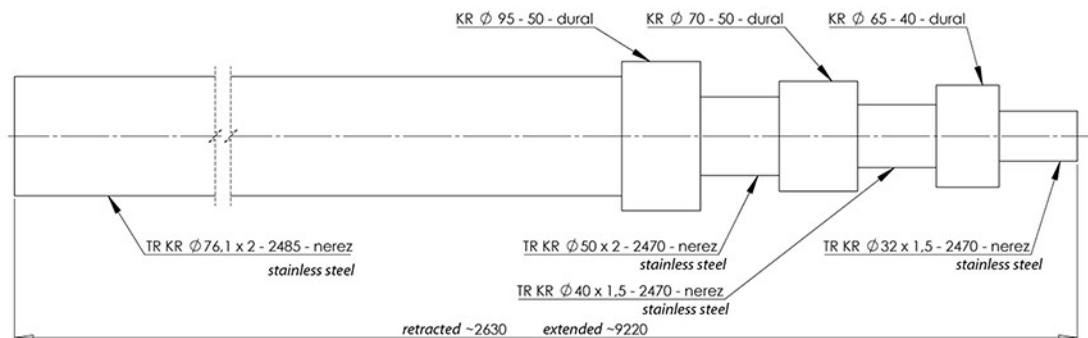
For servicing and information please refer to: envitech@envitech.sk

2. PRODUCT DESCRIPTION

The present manual describes following model:
MECHANICAL TELESCOPIC MAST ENVitech
model: light

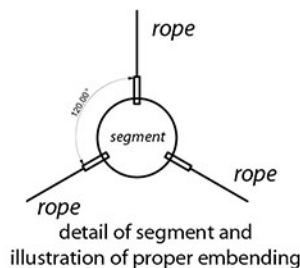
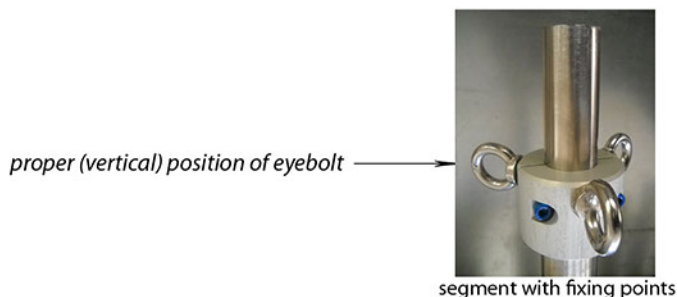
Mast is made of high quality materials e.g. anodized tubes etc. and a wide range of accessories is available. Each mast, constructed with quality materials, such as stainless steel tubular sections, special seals, accessories in anodized aluminium, stainless steel or other quality materials etc., is completed with specific extras, supplied in order to use the appliance in secure conditions.

Mast is made of 4-segements
Diameters of segments: $\varnothing 76$, $\varnothing 50$, $\varnothing 40$, $\varnothing 32$ mm
End section diameter: 32 mm



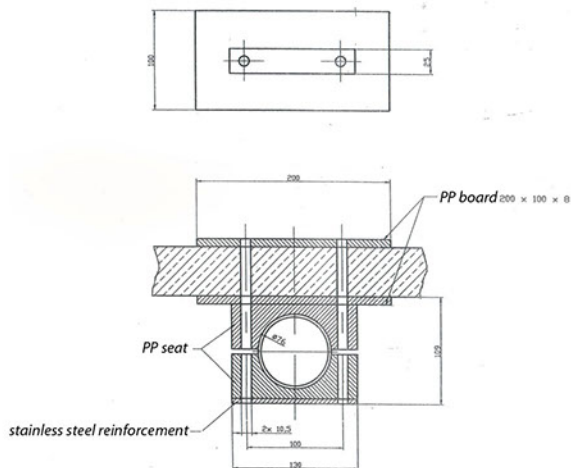
Retracted height: 2 630 mm
Extended height: 9 220 mm

On 3rd segment of mast there is part with eyebolts, fixing points.



Accessories for anchoring for example ropes and anchors are not part of supply.

Each segment is bolted with M6 stainless steel screws, screwed with inbus screw no. 6
 Coach bolts to the clips on the container is not supplied, screw length varies according to the thickness of the container,
 nut is located inside of the container. All bolts must be tightened properly to prevent deformation of the supporting tube mast.
 Type of screw DIN 603 M10



The limits of use:

The two most important factors to consider are **MAXIMUM TOP LOAD** and **WIND PRESSURE** related to the exposed surface.

Note. Exposed surface(s) is the total area of appliance exposed to wind force.

Maximum top load is the max amount of weight which can be installed on the top of the mast within safety levels.

Any use condition which exceeds these levels is to be considered dangerous and will end all warranty coverage.

Wind pressure on the mast and especially on the appliance, is equally as important.

Also in this case, the constructor poses some limiting values.

Ropes and pickets, to be fixed to the ground, enhances the mast's stability, limiting wind action on the mast.

With strong wind conditions, over the given limiting values, the constructor is not responsible for any damage that may occur from mast use.

Note. In case of snow, the total weight may increase; note that 10 [cm] of damp snow can weigh up to 0,3 [kg] per 1 [dm²].

In case of, or forecast bad weather, it is necessary to lower the mast in order to avoid risky situations; if the event should be sudden and unexpected, retract the mast immediately, if this should not be possible, restrict access to the area of installation.

Restrict access to the area also in case of long term installation, or in the case of non continuous surveillance to the area.

Mast is resistant against wind pressure with speed up to 100 km/h without need to be anchored, at higher wind speeds, we recommend anchoring attached by wires.

Maximal load condition at the top of mast is up to 5000g. At higher load of mast, producers do not guarantee resistance against wind pressure with speed written above

The limit for low temperatures is – 40 [°C]

RISKS CONNECTED WITH THE USE OF THE MAST:

The first is the risk of the mast falling on its side, caused by the action of wind on the mast and/or bad fixing of related structures. The manufacturer provides all information relative to placing and fixing of the product. These instructions must be followed to assure operational security.

The second risk condition is related to the possibility of contact with suspended structures, particularly electric cables. This can be avoided only by correct use by the operator which must consider the extended height of the mast and the existence of such limits. Please note that for high tension lines, it is possible to cause a discharge just by proximity, even without contact with the line. Risk connected with atmospheric events such as lighting must also be considered, so it is necessary to adopt precautions such as ground dispersal devices and maintaining an appropriate distance.

ORDINARY AND PREVENTIVE MAINTENANCE:

It is advisable that these servicing operations are carried out by qualified technicians, to avoid damage to the product and especially not to compromise security for the end user. When working on the mast it is advisable to signal the fact the mast is being serviced.

Any service work, repair or cleaning of the mast must be carried out with the appropriate light conditions.

Note: all the following indications are relative to ordinary maintenance and are the essentials for perfect efficiency of the mast. For other repair work and extraordinary maintenance it is necessary to request direct support from ENVitech s.r.o.

ORDINARY SERVICING:

It is recommended to retract mast once in 3 months. When the mast is retracted it can be clean with a damp cloth.

PART DISPOSAL:

The disposal of residue, grease, or any other material used or replaced must be carried out in accordance with local regulation.

In the event of part or complete disposal of the product all parts must be disposed of adequately, and all different materials divided (e.g. aluminium, plastic, steel etc).

All these materials must be disposed of in accordance with local regulations.

WARRANTY

All described products are covered by a warranty.

ENVitech s.r.o. also reserves the right to check for any tampering or unauthorized repair work carried out by the customer or others.

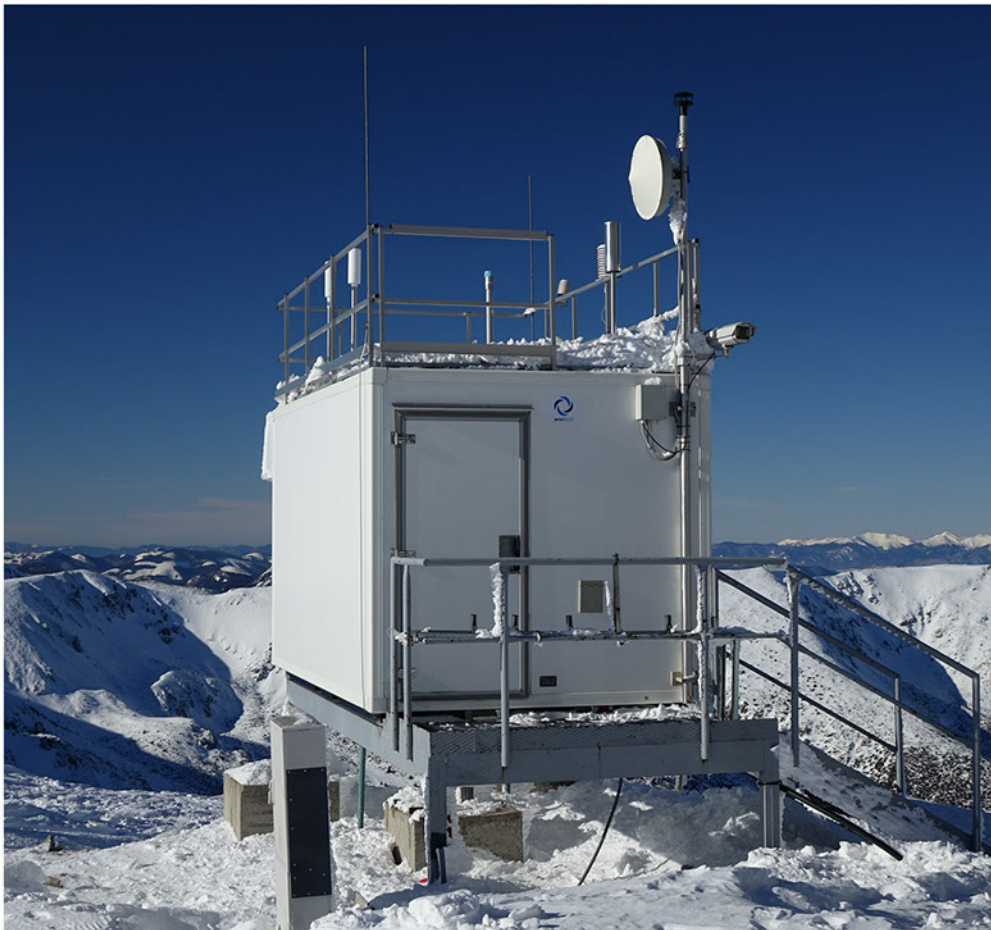


Illustration of use the mechanical telescopic mast ENVitech on monitoring station Chopok / Slovak Republic



ENVitech, s.r.o.

Janka Kráľa 16

911 01 Trenčín, Slovak republic

PREHLÁSENIE O ZHODE **DECLARATION OF CONFORMITY**

Výrobca : Manufacturer's Name	ENVitech s.r.o. Trenčín
Sídlo výrobcu : Manufacturer's Location	Janka Kráľa 16, 911 01, Trenčín, Slovak republic
Model -typ zariadenia : Type or model number	Teleskopický stožiar Telescopic mast
Popis zariadenia : Description	Teleskopický stožiar: mechanický, nerezový, 4- segmentový, celková dĺžka ~10m Kód: B.21 Telescopic mast: mechanical, stainless steel, 4- segment, total length ~10m Code: B.21

Zariadenie bolo vyrobené v zhode s nasledujúcimi predpismi a normami :

Equipment meets all required standards and regulations stated below:

STN EN ISO 12100:2010
2006/42/CE



Trenčín, 13.3.2017

ENVitech s.r.o.
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Ing. Bernát Radoslav
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