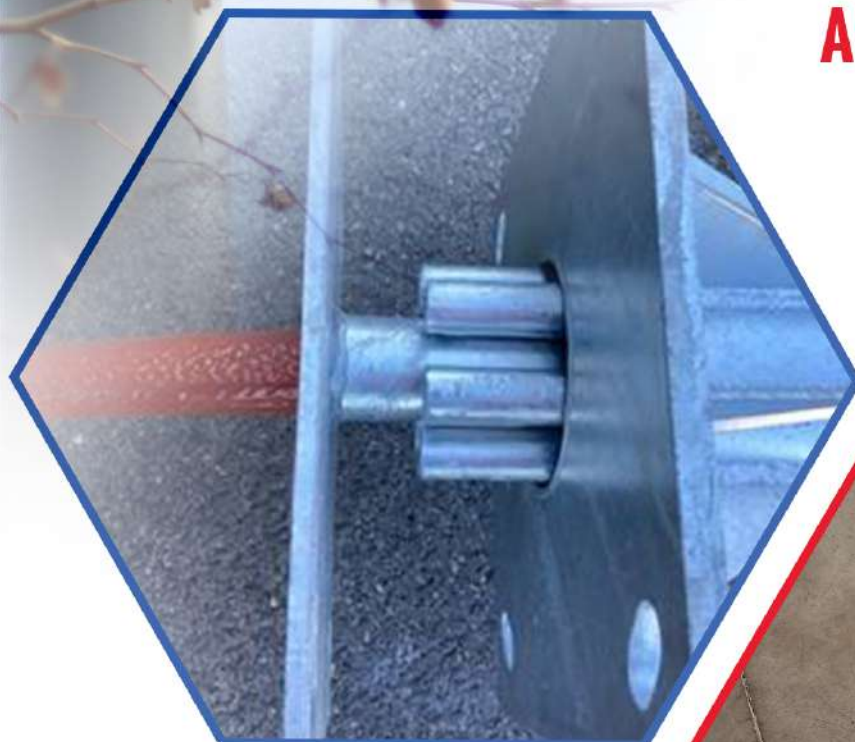


DATA SHEET

TUBOFORT 140
ANTI-VANDALISM MAST



This datasheet describes the characteristics, the installation and maintenance specifications of a self-supporting column designed to carry and protect cameras, radar or other sensors.

MAST PRESENTATION



Patented cut-off
protection device

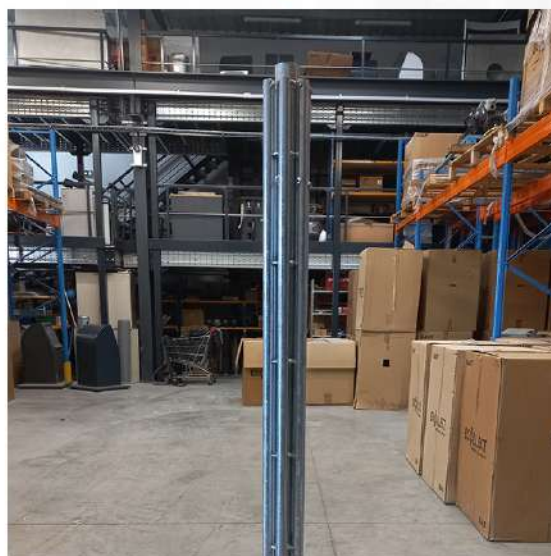


Fire proof anti-flame
sheath

Tubofort base plate



Tubofort internal protection device



TUBOFORT 140 ANTI-VANDALISM MAST

Tubular mast Ø 140mm

Optional cable outlet nozzle



Fireproof sheath and anti-vandalism screw



From 3 up to 8M

Remote inspection hatch at a height of 2.25 M

+ 3PTS antivandalism screws

H=2250mm

Stiffening gussets



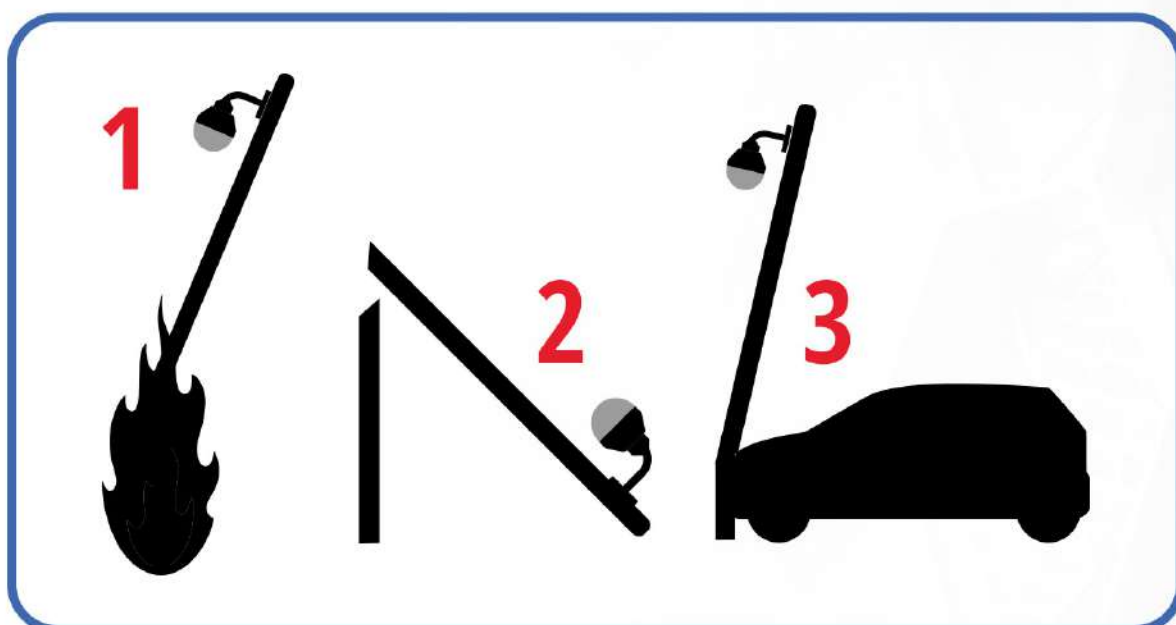
OBJECTIVES:



There are many masts as strategic sensors holders on both private and public land: cameras, radars, transmitters are subject to **daily vandalism acts** aiming at destroying these top devices considered as more or less blocking equipment. These violent acts can be of several types:

- 1** - deliberate fires set at the base of masts
- 2** - attacks on masts with a battery-powered disc grinder
- 3** - attacks on masts with ram cars

The objective of **TUBOFORT** is to provide local authorities with a technical solution adapted to these attacks, and to offer a reinforced mast, whose specific features are invisible from the outside, and therefore don't accentuate the will for destruction.



DESCRIPTION AND PRINCIPLE:

The unit consists of 3 main pieces:



Mât tubulaire Ø140mm
de 3 à 8M

A - A video-surveillance tubular pole of **Ø 140mm** and ranging from **3 to up to 8M** high. It is scrupulously adapted to the stability constraints of the cameras (thick and flat base, stiffening gussets, specific type of steel, reinforced inspection hatch, etc.).

Everything has been designed and built with maximum stability in mind.

B - A **patented inside** device made of **6 metal tubes**, each equipped with an internal drill bit mounted under pressure. This chases away, delays or blocks the disc of a battery-powered grinder, depending on the force used.

The 6 tubes are positioned on the inside periphery of the mast and are completely invisible from the outside.

C - A **fireproof sheath, Ø38mm** made of natural fibre running through a central metal tube.

The purpose of this system is to **protect the sensor supply lines** from deliberate fire at the base of the mast. The sheath runs from the pulling chamber to the mast's inspection chamber (height 2.25 M).

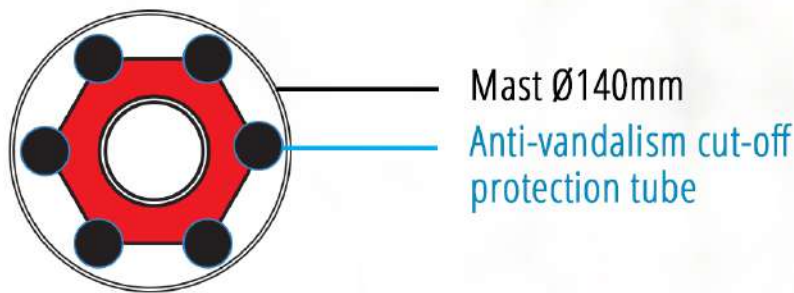
It withstands temperatures of 850°C for 15 minutes. In the event of a fire, it ensures continuity of video shooting.



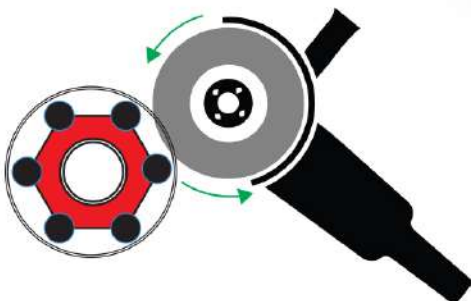
THE PRINCIPLE OF CUT-OFF PROTECTION

The mast **A** overlaps the patented **B** system. In case of an attempted attack with a battery-powered disc cutter, **the disc will cut at least one of the 6 anti-cutting tubes** before reaching the central tube containing the fireproof sheath and the sensor power supply.

The immediate effect of breaking this tube is to apply such force to the disk that it is either **driven away, blocked or delayed** before reaching its target.



ROTATING DISC



BLOCKED DISK OR DRIVEN AWAY OR DELAYED



! WARNING !

The customer /user must be aware that **if attacked, the mast will inevitably be damaged**. If the cut caused by the cutting tool is deep and represents more than 160° around the mast, **the mast must be replaced**.

The primary purpose of TUBOFORT is to **maintain a video shooting during the attack** and to prevent the mast from falling onto the road in the event of cutting.

If the cut is **less than 160°**, after analysis, the mast may remain in place using a repair sleeve.

INSTALLATION

1 - Position the fireproof anti-flame sheath (C) inside the central tube of the patented system (B).

The sheath must protrude at least 50 cm from the baseplate in the direction of the draught chamber to be fully effective. Thanks to its external diameter, it's easily integrated inside a 63 mm diameter cable protection tube (if a sheath of this type has been pulled between the chamber and the mast).

2 - Run the necessary supply lines inside the fireproof anti-flame sheath, or use a wire puller if you want to do this later. Then hook the sheath to the base of the mast inspection hatch using the pin set for this purpose.

3 - Then lift the mast in the usual way and fit it out.

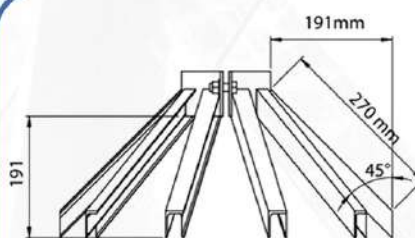
The mast is delivered with the patented B device already inserted.

Optional equipment for TUBOFORT 140 mast



270° PROTECTIVE HOOP

Protects the mast foot from impacts.



ANTI-CLIMBING COLLAR

Protects the camera against direct attack from individuals climbing to the top of the mast.



ANTI-PROJECTILE DEVICE

- Is clamped under the camera
- For video shooting at the foot of the mast
- Protection against impact up to 20 J.

