Technimast
Poles, supports and accessories

DATA SHEET

TUBOFORT SPE

INPI PATENTED
(National Institute of Industrial Property)

RAL powder-coating

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.

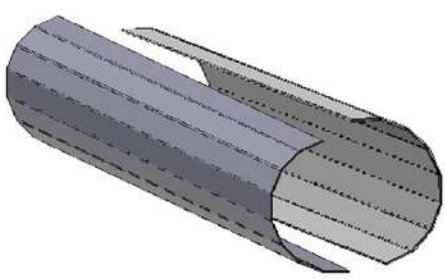
Technimast
Poles, supports and accessories

MAST PRESENTATION

Patented cut-off protection device

Fire proof anti-flame sheath

Double external shell system

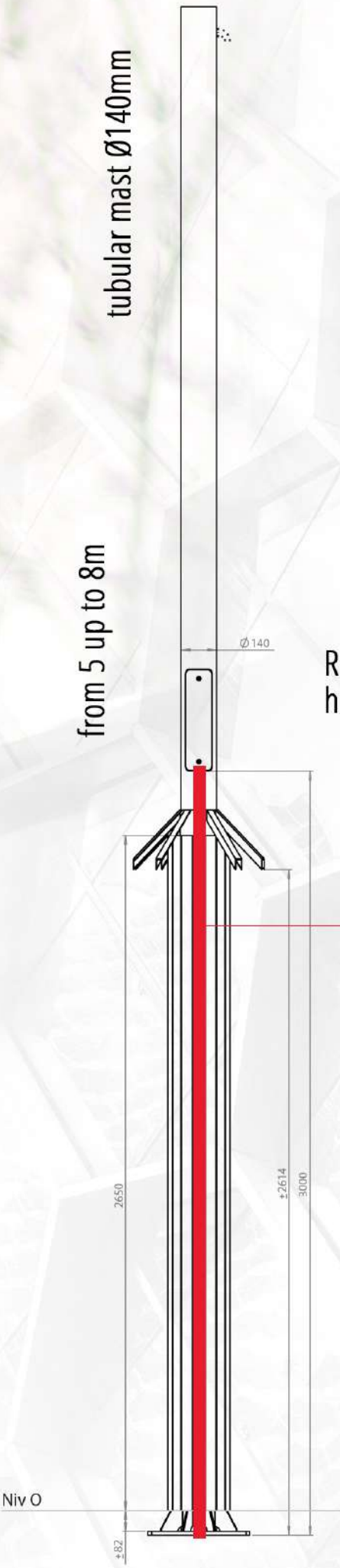


Tubofort SPE general aspect

TUBOFORT SPE ANTI-VANDALISM MAST

tubular mast Ø140mm

from 5 up to 8m



Remote inspection hatch at a height of 3 M +antivandalism screws

Fireproof sheath and anti-vandalism screw

Strengthening gussets

Technimast
Poles, supports and accessories

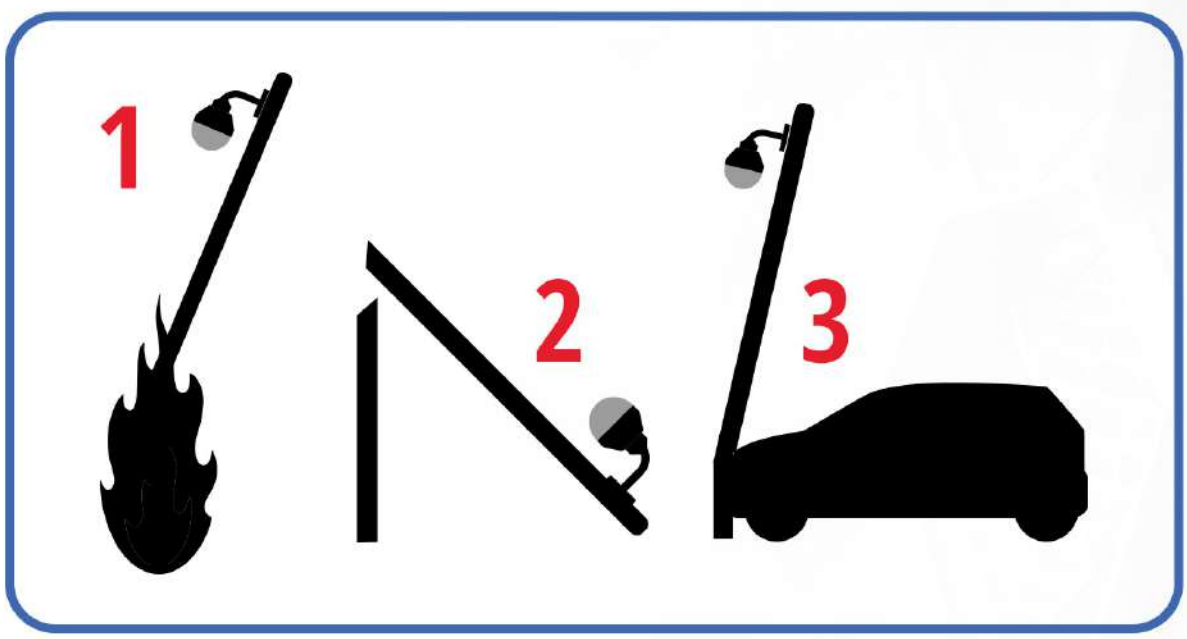
OBJECTIVES :

There are many masts on both private and public land holding strategic sensors such as cameras,radars, transmitters.

But the images collected may be embarrassing or blocking for some individuals, and these sensors may be vandalized and purposely destroyed.
There are different ways to do it:

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 SPE** is to provide local authorities with a technical solution adapted to these attacks, and to offer a reinforced mast, with a strong repairability in case of destruction.



DESCRIPTION AND PRINCIPLE:

The S.P.E. TUBOFORT consists of 4 main pieces:

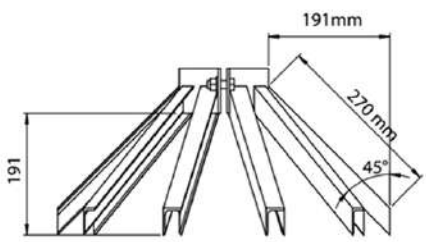
A - A CCTV tubular pole of Ø 140mm and ranging from **3.5 to up to 8M** high. It is scrupulously adapted to the stability constraints of the cameras (thick and flat base, stiffening gussets, specific type of steel, reinforced inspection hatch, etc.).
Everything has been designed and built for the maximum stability of **SPE TUBOFORT** mast.

B - A patented external device made of two half shells, each one is fitted with **6 specific, removable and replaceable tubes**. These two half-shells are **assembled to form an external envelope around the entire periphery of the mast** in order to protect it from attacks by a battery-powered disk grinder. This is achieved by **delaying, blocking or expelling the malicious grinder disc**.

The special feature of the system ? In case of deterioration, the damaged part of it can be replaced without having to invest in the pole itself.

C - **A fireproof sheath, Ø38mm** made of natural fibre runs through the mast centre.
The purpose of this system is to **protect the sensor supply** lines from deliberate fire started at the base of the mast. The sheath runs from the pulling chamber to the mast's inspection chamber **(height 3.00 M)**.

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



D - **A one-way anti-climbing device fixed 2.65M high** (under the inspection chamber) has a dual function: it prevents malicious persons from climbing and reach the inspection chamber and allows joining mast and shells.

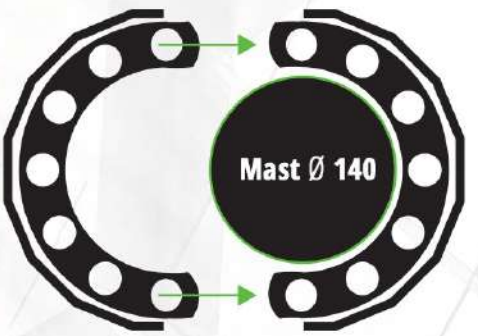
THE PRINCIPLE OF CUT-OFF PROTECTION

The **A** mast overlaps the patented **B** system. In case of an attempted attack with a battery-powered disc cutter, t**he disc will cut at least one of the 12 anti-cutting tubes** before reaching the central mast containing the fireproof sheath and the sensor power supply.

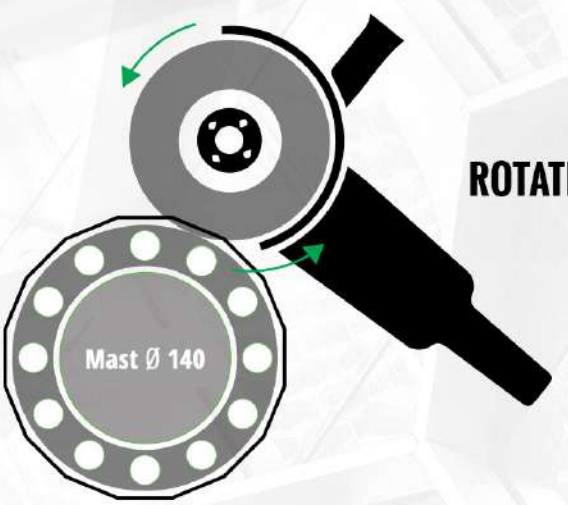
The immediate effect of breaking this tube is to apply such force to the disk that it is either driven away, **blocked or delayed** before reaching its target.

Diagram of cut-off protection principle page 6

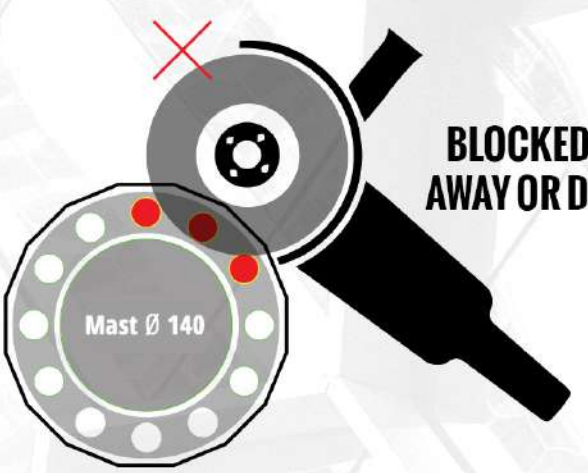
Double shells to be assembled



Anti-cut off tube



ROTATING DISC



BLOCKED OR DRIVEN AWAY OR DELAYED DISK

Technimast
Poles, supports and accessories

INSTALLATION

1 - Position the fireproof anti-flame sheath (C) inside the mast (A) before lifting it. 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 - Then lift the mast in the pre-cast base.

3 - Position the two half-shells opposite each other at the base of the mast, making sure they rest against the gussets on the pole base.

4 - Insert the 12 anti-cut off tubes from the top of the half-shells in the dedicated space.

In addition to their anti-cut off function, the tubes enable the two half shells to be joined together.

5 - Finally position the one way anti-climbing device.

Optional equipment for TUBOFORT SPE

270° PROTECTIVE HOOP

Protects the mast foot from impacts.

ANTI-PROJECTILE DEVICE

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

Technimast

Poles, supports and accessories