



Overview

A lot more than a nozzle, a lot more than a simple camera. TPN - The Proving Nozzle - is the jetting unit tool you cannot do without.

Characteristics

What it does

Used immediately after a cleaning job, it allows to inspect the sewer in order to certify the status and the condition on to proof the quality of the cleaning.

How it works

- **Remote control:** once activated wireless with the tablet, the operator inserts the TPN on the pipe; TPN captures the video while going back and forth in the pipeline.
- **Real time control:** out of the pipe and with the wireless connection restored, the tablet automatically loads the video file, just created and georeferenced; this file is immediately available and it can be viewed and shared.

Advantages

For the operators

- With TPN it is possible to proof when and where the cleaning was done
- The output of TPN is the inspection of the pipe with no need for an another cctv crew with the the required equipment
- With TPN it is possible to collect data about the condition of the pipe with no additional costs
- It helps to populate the cleaning jobs database
- It generates new opportunities for cctv, cleaning and rehabilitation

For the Utility/Municipality

- Correct information about the cleaning jobs performed
- More information at a lower cost, for a better control of the structural condition of the pipes
- Quick information about the hydraulic performance of the sewer network

- It allows to define standard for the cleaning jobs, while contributing to improve the quality of the procedures
- More efficient planning of the short/medium/long term maintenance, while optimizing the cleaning/cctv/rehabilitation activities

For the Public Population

- Decreased CO₂ emissions, thanks to the limited interference with the traffic.
- With a more efficient maintenance the damages related to flooding and other critical situations are strongly reduced
- More trust and confidence with regards to the sewer utility and the Administration

Technical Specifications

Nozzle

- **Dimensions (DxL):** 90×295 mm (without centralizer)
- **Weight:** 6,2 kg
- Made of Stainless Steel
- 7 jets at 20°, interchangeable inserts
- Working DN greater than 150 mm with proper centralizer
- **Inlet:** 1 1/4" (1" - 3/4" with adapter)
- **Flow range:** 150-650 lt/min
- **Working pressure:** 125-175 bar

Camera

- Self leveling HD camera
- Internal memory (32 GB) for video recording in *.AVI 720i 1280×720 format
- Integrated Wi-Fi Router for wireless communication
- 7 LED ultrabright lightening
- Battery Pack Lithium-Ion (duration 8 ore)

Tablet

- Rugged tablet Windows 10 Home Edition, IP 68
- Display touch screen, 8"
- Micro USB and SD-card slot
- Integrated GPS receiver GPS
- Rear and Front Camera
- HDD 28 GB

Software V2018

- Touch screen functional keys
- Download video wireless
- Language: English

Centralizers

- TPN120 for pipes from DN150 mm
- TPN160 for pipes from DN200 mm
- TPN240 for pipes from DN300 mm

Items

Part No.	Description
6.X80P-00	TPN – COMBINED SYSTEM FOR CLEANING AND CCTV
6.X80-00	TPN NOZZLE WITH SELF-LEVELING CAMERA AND WIFI
6.X80-001	PLASTIC CASE FOR TPN NOZZLE
6.X80-002	CHARGER FOR TPN 240V – 29V
6.X80-003	TIPS KIT M10X1.25 SS
6.X80-004	MANUAL PUMP FOR PRESSURISATION
6.X80-01	TABLET WINDOWS TPN
6.X80-02	WORKING SOFTWARE FOR TPN
6.X80-100	TPN120 PIPE CENTRALIZER – STARTING FROM DN150
6.X80-105	TPN160 PIPE CENTRALIZER – STARTING FROM DN200
6.X80-110	TPN235 PIPE CENTRALIZER – STARTING FROM DN300

GALLERY IMAGES

