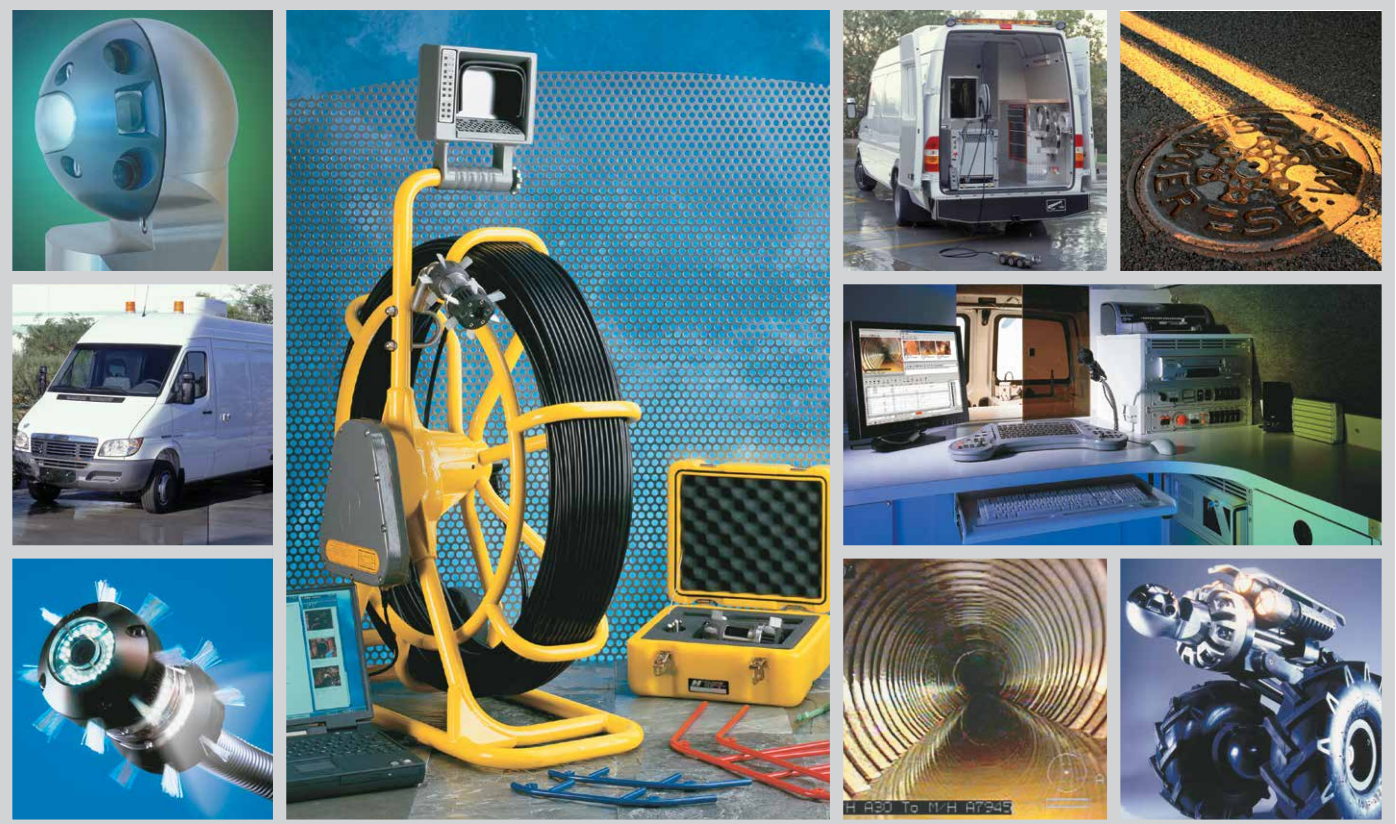


# a world of inspection solutions

ADVANCED PERFORMANCE – GLOBAL SOLUTIONS



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With over 30 years experience in the field of pipeline survey, Pearpoint is a global provider of video inspection solutions. From pushrods to fully customized tractor systems, Pearpoint is also a leading manufacturer of inspection equipment specifically designed to survey hazardous areas, where the use of standard inspection equipment is not possible.

Pearpoint can provide the quality, safety, versatility and after-sales support needed to get inspection projects done right, on time and on budget.



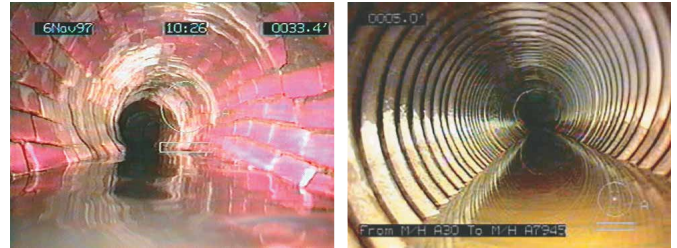
# Pan & Tilt Mainline Cameras

Pearpoint, an industry leader in video inspection technology offers a variety of quality-built mainline camera solutions designed to meet the varied and challenging demands of video pipeline inspection. These cameras are approved, labelled and listed by a nationally recognised testing laboratory (NRTL) for use in Class I, Div 1, Gas Groups C & D, T3 environments.



## ONE CAMERA BODY, TWO CAMERA HEAD OPTIONS

- Versatile pan and tilt operation.
- Standard head operates in pipes 6" (150mm) and larger in diameter.
- Zoom head operates in pipes 8" (200mm) and larger in diameter.
- Digital video processing for the sharpest, crispest image available at over 450 TVL.
- Digital video processing for a sharp, crisp image. Available with a resolution of over 450 TVL.
- Constructed of rugged 300 Series stainless steel and anodised aluminum, waterproof to 11 Bar (150 PSI).
- Full 360° continuous pan and tilt available on both P494 camera heads.
- Better than 1 lux sensitivity.
- Built-in directional lighting with both camera heads.
- Approved, labelled and listed by an NRTL for use in Class I, Div 1, Gas Groups C & D, T3 environments.
- Compatible with other Pearpoint NRTL approved, labelled and listed components.



## P494 STANDARD CAMERA

The **P494 Standard Camera** from Pearpoint features full 360° pan and tilt for maximum viewing capacity and better than 1 lux digital video processing. The P494 can be utilized on all P400 series tractors, as well as selected other systems via the use of suitable adaptors. The standard camera head is designed for inspection in lines 6" (150mm) in diameter and larger.

## P494 ZOOM CAMERA

**40:1 Auto-focus, Pan & Tilt and Zoom colour camera** is designed for inspection in lines 8" (200mm) and larger in diameter. The 10X optical zoom followed by 4X digital zoom camera technology provides optimum clarity and the ability to capture the small details during mainline and lateral inspections. It is especially helpful when surveying large diameter pipe and for viewing past large obstacles.



# Mainline Tractor Systems

**P400 Series Mainline Tractors** are powered forward and reverse and provide significant performance advantages over track crawler systems in harsh environments such as unclean and debris filled lines.

- Downhole equipment approved, labelled and listed by a nationally recognized testing laboratory (NRTL) for use in Class I, Div 1, Gas Groups C & D, T3 environments.
- Inspection capabilities in lines 6" (150mm) and larger in diameter.
- Powered forward and reverse.
- No external wiring to lighthoods.
- Wide variety of lighthoods and wheels available for inspection versatility in various pipe materials such as PVC, concrete, VCP and corrugated.



## P448

4-Wheel drive large steerable tractor with remote controlled elevator for pipes 20" (500mm) and larger; up to 200W of lighting; negotiates bends and turns on its own axis.



## P420

6-Wheel drive small tractor for pipes 6" to 30" (150mm-750mm) in diameter; up to 110W of lighting.

## P400

4-Wheel drive large tractor with remote controlled elevator for pipes 12" (300mm) and larger; up to 200W of lighting.

### PRODUCTIVITY PLUS

The compact length of these robust tractors allows for easier manhole entry and maneuverability in difficult areas such as tight turned or curved bench inverts, offset joints, small spaces and tight pipe entries.

With the Optional P420 Tractor Swivel Tail Cable Connector deployment into challenging and small entry points is made even easier.

# System Control

## P377

An ergonomic keyboard designed for ease of use and high productivity.

Constructed of rugged polyethylene, the **P377 System Control Center** features a “QWERTY” keyboard (laptop layout), function keys and two ideally placed joysticks. Large enough for normal finger strike operation, the keyboard is 22" (558mm) wide by 12" (304mm) deep.

- Full-size, standard “QWERTY” keyboard
- Operates as text writer
- Ergonomic design
- Combines center keyboard with easy-to-reach integrated joysticks
- Rugged polyethylene construction
- Easy-to-clean, splash proof, tactile keyboard
- Joystick camera control
- Joystick crawler operation
- Control lighting requirements
- Control P599 cable drums
- Compatible with Pearpoint mainline systems
- SVHS, RGB & BNC video outputs
- CE and FCC compliant



Simple thumb movements operate the uniquely designed joysticks without having to relocate hands away from the keyboard.

Joysticks operate tractor movement and camera functions. Cable drum and light controls are also built into this ergonomically designed keyboard which can be desk top mounted or custom-cut inset.

# Mainline Configuration

A mainline inspection system consists of several key components along with a specific range of accessories such as lightheads and wheels to provide a solution ideally suited to the client's unique application and environment. This configuration is installed into a vehicle or other transport device of the client's choosing.



**P377 Controller** for operation of cameras, tractors, drum and lighting

**P494 Standard or Zoom Camera**  
with **P420 Tractor**

**P599 Motorised Drum** with up to  
1315' (450m) of Kevlar® reinforced cable



P599 works with all  
P400 Series cameras  
and tractors



**P494 Standard or  
Zoom Camera** with  
**P400 or P448 Tractor**

**P378 Pendant Controller**  
provides a convenient alternative  
method for controlling the system  
from outside of the operator control  
room directly at the deployment site



or



# Custom-Built Inspection Vehicles

Pearpoint is your source for complete CCTV inspection equipment, vehicles and software solutions.

Numerous vehicle makes, models and styles are available to suit each client's specific requirements. Custom cabinetry, bathrooms, sinks, washdown systems, tool chests, work benches and specialized workstations are just some of the many options available.

Selection, superior craftsmanship and attention to detail – what to expect when you choose a custom-built inspection vehicle solution from Pearpoint.



## P599 CABLE DRUM

Pearpoint inspection vehicles feature the P599 Cable Drum.

This synchronised electric, automatic cable drum maintains cable tension and matches tractor speed (forward and reverse) automatically.

- Built of rugged cast aluminum with protective covering for operator safety
- Optional P378 remote control
- Built-in electronic footage counter with accuracy of +/- 1%
- Emergency shut-off
- Capable of running in manual and free-wheel modes



## AVAILABLE CONFIGURATIONS\*

### Hi-Cube Van

12', 14' and 16' Boxes

### Step Van

16', 18' and 20' Bodies

### Utility Van

Economy, Standard and Extended

### Freightliner Sprinter

Compact walk-through van by Mercedes-Benz

### All Terrain Vehicles (ATVs)

Trailers

### Retrofits

Previously outfitted vehicles can be equipped with Pearpoint systems

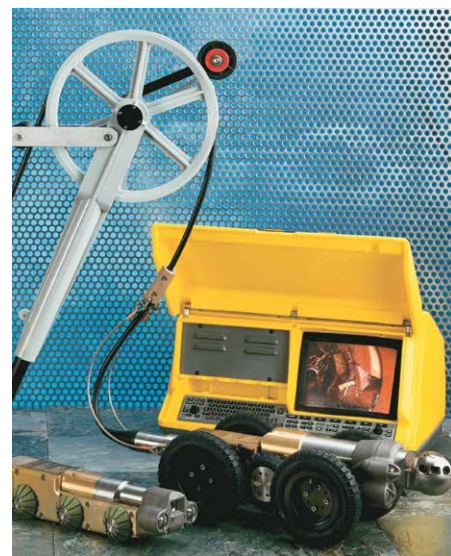
\*Vehicle Models, Configurations and Conversion Services vary by Pearpoint office location. Please contact your local representative for details and availability.

## Modular Mainline Systems

Pearpoint offers a complete line of portable mini-mainline inspection solutions and peripherals. These systems are upgradeable and expandable – built for functionality, durability and flexibility, able to grow with your inspection requirements as needed.

Features include: interchangeable cameras, drums and powered forward and reverse tractors; digital video processing with better than 1 lux sensitivity; compact design for easy transport into easements and difficult or limited access locations; ability to be upgraded to a vehicle mounted system.

The downhole equipment in these systems are approved, labelled and listed by a nationally recognized testing laboratory (NRTL) for use in Class I, Div 1, Gas Groups C & D, T3 environments.



### COMPONENTS

**Cable Drum** – manual with a capacity of up to 1000' (305m) of cable.

**P415 Straight View Camera** – auto-uprighting, can be used on a push-rod or tractor based system.

**Or**

**P494 Pan & Tilt Camera** – Standard or Zoom head.

**P420 Tractor** – 6-Wheel drive tractor for pipes 6" to 30" (150mm-750mm) in diameter.

### PLUS

**P320 Universal Controller** – portable, all-inclusive unit with monitor

- Compatible with a range of Pearpoint cameras, crawlers, lightheads and cable drums. Check with your Pearpoint representative.
- Operates with both pushrod and crawler systems
- Rugged HDPE and cast aluminum construction
- Portable or truck mounted
- Single "qwerty" keyboard controls equipment
- Built-in joysticks for pan/tilt and crawler control
- Built-in sunshield, storage compartment
- Built-in diagnostics for easy fault-finding
- 8.4" TFT monitor
- CE and FCC compliant
- SVHS & BNC video outputs



# Large Pushrod Systems

Pearpoint's P571 Pushrod and Flexicoiler™ are fully integrated, stand-alone units ideal for applications such as sewer lines, water pipes, pest control, chimneys, search and rescue, drains, conduits, wells and industrial inspections.

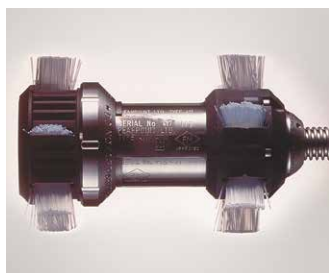
The downhole equipment in these systems are approved, labelled and listed by a nationally recognised testing laboratory (NRTL) for use in Class I, Div 1, Gas Groups C & D, T3 environments.



## P415

Straight view, auto-upright color camera designed for the inspection of pipes 4" to 24" (100mm-600mm) in diameter with 1 lux sensitivity, 450 TVL resolution, remote electronic iris and auto focus. Negotiates 4" (100mm) 90° bends. A variety of peripherals such as lightheads and skids are available.

The P415 Camera has no in-built lighting and may require a suitable Lighthead



## P455 TWIN VIEW

An extraordinarily robust and flexible camera, offering pan and tilt like features on a pushrod system for inspection of 3" to 18" (75mm-450mm) pipes. Negotiates 4" (100mm) 90° bends.

The dual view facility with its 360° radial 90° view camera provides outstanding survey capabilities for mainlines, laterals, welding points, water wells and boreholes.



P455 Large Lighthead

- Available with P415 auto-upright straight view camera or P455 TwinView camera.
- Versatile coiler running 500' (150m) of push-rod (3/8"/10mm diameter) with built-in accurate high resolution footage counter.
- Built-in sonde (8.125 kHz).
- Waterproof to 11 Bar (150 PSI).
- Composite video input/output for any external recording system.
- Modular system upgradeable to a tractor based system.



# 'Intrinsically-Safe' Systems

This fully integrated unit features a versatile coiler running 200' (60m) of pushrod, rod counter, built-in connector for VCR or video printer and a QWERTY keyboard built into the monitor.

The P374 IS downhole equipment is approved, labelled and listed and listed as intrinsically safe for inspection and entry to Zone 0 (Class I, Division 1, Gas Group A), T6 environments. Designed for applications in pipes 1" to 4" (25mm-100mm). Constructed of rugged, rust-proof cast/welded aluminum. With a camera diameter of 0.95" (24mm), this is recommended for pipes with a minimum of 1.5" (38mm) diameter clearance along the entire length of the survey. Debris, pipe offsets, joint, bends and other factors may reduce pipe diameter.

Ideal for applications such as hazardous locations, process piping, pipelines and compressor stations, drainage systems, weld inspections, remote visual construction and commissioning inspections, structural elements, foreign object and debris removal, flare stacks, towers and chimneys, manufacturing (extruders, hydraulic systems, pumps, event monitoring), remote visual support for life assessment, forensics, turbines and compressors.

- Intrinsically safe system certified to EE x ia IIC T6 for Zone 0 Hazardous environments
- True portability, weighs only 21 kg (46lbs) and operates from a 12V DC external supply
- Composite video output/input allowing connection to a video recorder or external monitor
- 6.4" Color LCD, retractable sun visor built in – reducing the effects of sunlight on the screen
- QWERTY Keyboard for text annotation on site, with 9 pages of user defined text available, 9 programmable user defined fields enabling faster text generation
- A waterproof system for operation in most weather conditions, protected to Environmental spec IP55
- Digital camera technology allowing increased operating time through low power consumption
- Maintenance free, white LED's for increased performance and reliability
- Integral electronic cable counter that displays distance on screen in 0.1ft or 0.1m increments, the cable counter is mechanically accurate to +/- 1%.





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solutions

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- GLOBAL SOLUTIONS



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Radiodetection is a leading global developer and supplier of test equipment used by utility companies to help install, protect and maintain their infrastructure networks. Radiodetection is a unit of SPX (NYSE: SPW), a global Fortune 500 multi-industry manufacturing company. With headquarters in Charlotte, N.C., SPX has 15,000 employees in more than 35 countries worldwide. Visit [www.spx.com](http://www.spx.com).

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