



Vertical Crawler



Vertical Pipe and Duct Inspection System

Originally designed for the US Department of Energy, the Vertical Crawler is capable of horizontal and vertical travel in pipes of 8 to 12 inches (I.D.) in diameter at a maximum speed of 30 feet per minute. The joystick based control system provides steering capability which allows the vehicle to negotiate pipe bends and joints. Force and angle feedback information is displayed on the control system which indicates pipe diameter.

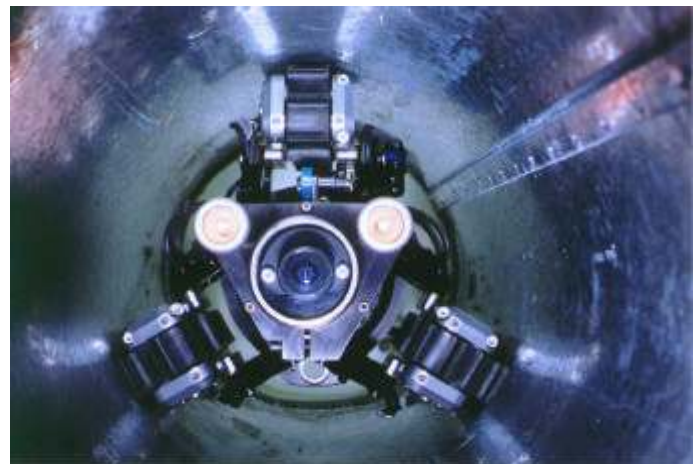


Incorporating three Microtracs in a tripod formation, the Vertical Crawler is ideally suited for a variety of internal pipe applications. By design the system can house either a forward viewing ISL colour camera or the VIT Rovver rotate & Tilt colour camera system. With some additional hardware, the Vertical Crawler can be rearranged to operate as a Microinspector pipe inspection system for horizontal runs in a wider variety of pipe sizes.



By combining two tripod mechanisms in series, the vehicle can transition different pipe sizes and horizontal to vertical pipe through a T-joint. This configuration allows the system to travel distances in excess of 500 feet (150 meters).

For more information on advanced pipe inspection systems contact Hydropulsion today.





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TECHNICAL SPECIFICATIONS

Depth Rating: Dry applications only

Speed: 0– 30+ ft. / 9+ m. per minute*

Transporter: ISL Microtracs

Camera:
 Forward Viewing
 ¼" CCD
 320 TV Lines
 Auto-Iris
 Remote Focus

Tether Cable: 300 ft. / 90 m
 Multiconductor, abrasion resistant

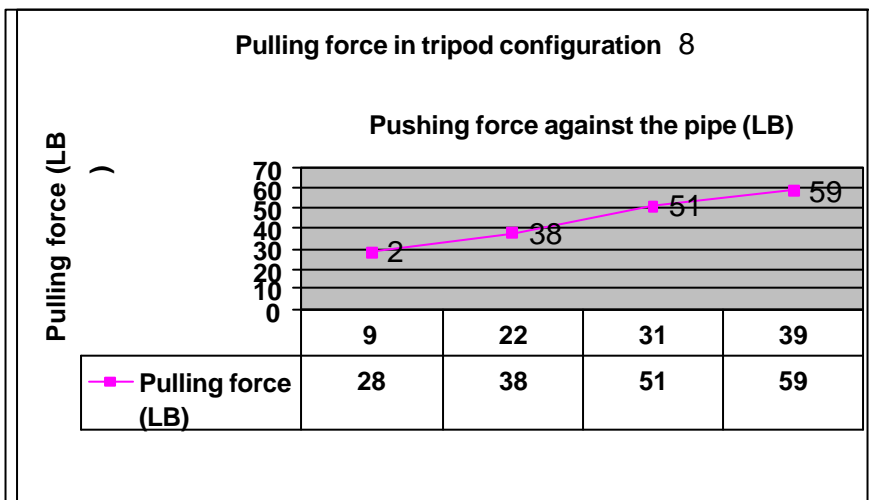
Operational Size:
 8" to 12" I.D. pipe and round ductwork
 (200 mm to 300 mm I.D.)

Lighting: 2 X 20 W (40W Total)

Operating Temp: 32°- 122° F / 0°- 50° C

System Voltage: 110 or 220 VAC

* Depending on load



The graph on the right shows the results of a Vertical Crawler pull test

The vehicle was operated inside of round aluminium duct and each Microtrac was outfitted with a deep lug track belt.