

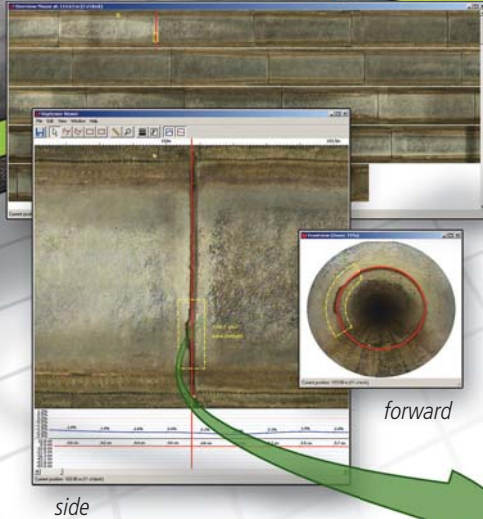
DIGISEWER

Inspect faster, then analyze rapidly and more thoroughly with patented DigiSewer digital flat scanning for ROVER.

Attach the DigiSewer camera to any ROVER, then travel rapidly without stopping to image entire pipelines.



High-res sidewall scans join to form a complete photo mural of the pipe.



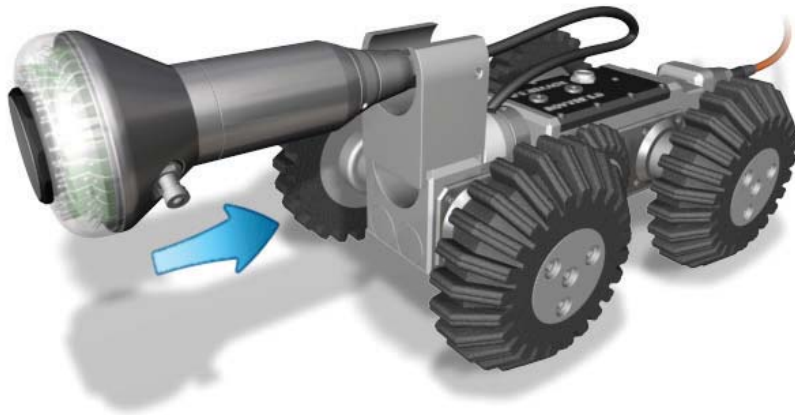
DigiSewer viewer allows real-time side, forward and aggregate views while navigating. It also automatically identifies joints and taps.



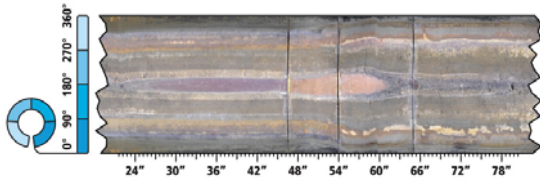
Quickly analyze complete data and assign observations that link to WinCan.

Operators: Focus solely on maneuvering your crawler. No more searching for defects and stopping to pan, tilt and zoom. DigiSewer captures every detail as ROVER travels rapidly without stopping, so you inspect more lines each shift.

Engineers & Infrastructure Specialists: Evaluate inspection data faster and more thoroughly. No more sitting through endless video—simply glance at the scan overview, zoom in on areas of interest, and make annotations directly on the scan. DigiSewer captures more detail than MPEG video, yet consumes far less storage space. DigiSewer data links directly to WinCan™ software, and integrates with mapping and asset management systems.



Designed exclusively for ROVER inspection crawlers, patented DigiSewer enhances the speed and detail of pipeline inspection. In a single day, a DigiSewer-equipped ROVER can scan miles of pipe. When scanning is complete, a



supervisor rapidly analyzes the scans, zooming in on areas of concern to make measurements and annotations.

DigiSewer builds a scan whose length corresponds to pipe length, and whose height corresponds to pipe circumference.

DigiSewer builds a high-resolution sidewall scan. As the crawler advances, the camera grabs a frame of video at regular intervals. From each frame, a ring of pixels representing a fixed-width cross-section of the pipe wall is digitally extracted and unfolded into a tall rectangle. As scanning progresses, DigiSewer joins these rectangles to form a sidewall scan.



The DigiSewer viewer links aggregate, side and forward views, offering multiple perspectives on any pipe feature.

DigiSewer streamlines inspection analysis. Unlike video footage, DigiSewer scans take minutes, not hours, to review. They load directly into DigiSewer viewer software for rapid browsing of scan thumbnails, as well as detailed analysis, annotation and precision measurement of problem areas. The DigiSewer viewer automatically identifies and highlights common pipe features such as joints and taps, and also plots pipe inclination based on crawler data. And because DigiSewer scans require just a fraction the bandwidth of digital video, they are easier to share and archive. In fact, seven miles of scan data fit on a single DVD.

Best of all, DigiSewer leverages a municipality's existing investment in CCTV inspection technology. DigiSewer links directly to WinCan, which means you can assign an observation to a scan that links back to WinCan data.



You can place scan segments, annotations and measurements directly into WinCan reports.

Specifications

Camera

Sensitivity	<1 lux
Focus	auto or manual
Shutter	auto or manual
White Balance	auto
Imager Type	1/2" color CCD (NTSC)
Imager Resolution	768 x 494
Pixel Count	380K
Temperature Tolerance	32–113°

Lens

Focal Length	f=1.6–3.4mm
Angle (vert./hor./diag.)	114.1° / 180° / 180°

Crawler Compatibility

The DigiSewer camera installs on ROVER 125 and 225 crawlers. The crawler used determines what line sizes the DigiSewer camera can scan.

ROVER 125	6"–20"
ROVER 225	12"–32"