Inspection tool name	**360º High-Definition CCTV**
Inspection tool description	Standalone high resolution CCTV attachment that can be mounted on either the NFT tool or RFT tool. The unit is completely self-contained for battery power, storage, and lighting, but does rely on the host tool's odometers for distance tracking.
Dimensions of inserted inspection tool	The unit measures 8 inched in diameter and is 9 inches long. It mounts on the front of the NFT tool or RFT tool (see above).
Technical Constraints	
Pipe Material	PCCP, concrete cylinder (bar-wrapped steel), reinforced concrete steel cylinder, steel, ductile iron, cast iron
Pipe Diameter (inches)	12-inch to 120-inch
Pipe slope (%)	100% during tethered operation
Flow requirements (feet per sec)	N/A – only works in dewatered pipe (otherwise poor image quality).
Pressure (psi)	N/A
Maximum inspection distance per access location (feet)	Tethered: 6,000 feet, or a total of 360° in combined bends, whichever comes first
Types of anomalies detected	Liner damage (including cracking), internal deposits/build-up, material changes, past repairs, etc.
Resolution of detected anomalies	Localized Lining Cracks in 78-inch pipe
Anomaly detection limitations (pipe barrel thickness, joints, pipe thickness, valves)	Will only document pipe that is dry. If pipe has some standing water left in a belly: the CCTV won't see past belly.
Pipe entry access requirements (flange dia., manhole diameter/height, etc.)	Same as tool it is mounted on: Minimum 18-inch diameter manhole access
Typical analysis time required	6 to 8 weeks
Typical rate of inspection (e.g., miles/day)	Inspection speed = 15-20 feet/minute Inspection coverage = 1 mile/day
Other applicable restrictions/limitations	See NFT/RFT tool for restrictions on Butterfly valves.