## HYDROMAX USA



# Advanced Field Services and Solutions for Water & Wastewater Utilities

**TRANSFORMING INFRASTRUCTURE DATA INTO ACTIONABLE BUSINESS INTELLIGENCE.** 



## Know. Plan. Protect.

UTILISIGHT FROM HYDROMAX USA IS A COLLABORATIVE INTEGRATION OF FIELD SERVICES, TECHNOLOGIES, AND DATA ANALYTICS THAT EMPOWERS WATER AND WASTEWATER UTILITIES TO ACCELERATE OPERATIONAL EXCELLENCE AND PROMOTE A MORE SUSTAINABLE FUTURE.

## **Field Services**

Know the condition of critical assets and improve water & wastewater quality. Valve Assessment | Hydrant Maintenance | Unidirectional Flushing | GIS CCTV & Lateral Inspection | Pipeline Cleaning |MultiSensor Inspection | SSES Services

### **Pipeline Technologies**

Protect infrastructure investments and the communities you serve. Leak Detection | Gas Pocket Location | Condition Assessment

> Nautilus System



## **Business Intelligence**

everage data and analytics to confidently plan for a more sustainable future. Infrastructure Dashboards | Budget Development | Renewal Planning

understand the present | protect the future

HydromaxUSA.com

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## About Hydromax USA

#### **ADVANCED FIELD SERVICE SOLUTIONS SINCE 2003.**

Hydromax USA is a professional services firm specializing in condition assessment, critical asset data collection, and renewal and replacement services for aging water and wastewater systems across the United States. We offer robust capabilities in the areas of nonintrusive/non-destructive pipeline condition assessment, leak detection, field services for sanitary sewer evaluation surveys and multi-sensor inspections to give clients a full and accurate picture of their transmission, distribution, and conveyance systems.

As an ESRI Silver Partner, our technology center has over 70 full-time GIS professionals specializing in client information management, condition assessment program analytics, and customer reporting. Our proven processes and best practices in the areas of progress reporting, risk management and quality assurance results in project planning and delivery that is on-time and within budget.

Hydromax USA's vast experience, broad array of investigative technologies, and team expertise enpowers our clients to make the best decisions regarding infrastructure investment and to make the most of their limited resources.



## Water Field Services



VALVE & HYDRANT CONDITION ASSESSMENT Driven by real data

Hydromax USA's valve and hydrant services enable utilities to understand the current operational condition of critical distribution system assets, leverage GIS data to optimize performance, and prioritize repair and renewal projects.

#### Additional benefits:

CLIENT SUCCESS

- Utilize limited in-house resources for other system demands
- Enhance budget and investment planning with detailed analytics and dashboards
- Satisfy regulatory requirements and address compliance needs
- Improve system reliability and control

#### Learn more at HydromaxUSA.com/water



**UNIDIRECTONAL FLUSHING** *Improve service delivery, prolong service life* 

UDF is a proactive method for cleaning water distribution pipelines, improving water quality, and restoring system capacity. The program includes an engineered workflow that systematically directs flow to certain hydrants to produce higher velocities to flush biofilms, sediment, debris, and dirty or discolored water from the system.

#### **Program benefits:**

- Improves water quality and significant reduction in customer complaints
- Uses up to 60% less water than conventional flushing programs
- Reduces pumping and chemical costs and prolongs system life
- Leverages hydraulic model and GIS investments

#### HIGH CONFIDENCE VALVE ASSESSMENT PROGRAM IN TEXAS

louston, TX | 140k+ Valves | Drinking Water Distribution System

"The valve maintenance contract we have today with Hydromax USA has helped us tremendously at the City of Houston. When you turn the clocks back over 10+ years, prior to having a valve maintenance contract, 50% of our valves were either in a position we didn't expect or in locations not representative of what was in our GIS mapping systems. Today, 90% of the valves we work on are in the expected position and location."

Drew Molly Director, Drinking Water Operations, City of Houston

## Wastewater Field Services

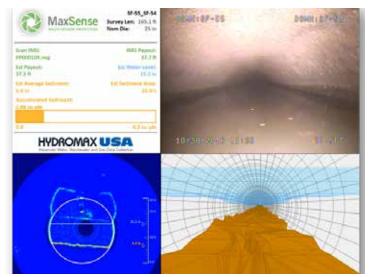


**CCTV & LATERAL INSPECTIONS** Accelerate operational excellence and promote a more sustainable future

With vast experience in mapping, field data collection and back-office data analysis, Hydromax USA offers unparalleled field service solutions. Our "data strong" expertise results in high-quality, precise, and actionable information for engineers and utility owners and includes small diameter pipelines from 6" to large diameter pipes 120" and beyond.

#### Our complete wastewater solutions include:

- Flow Monitoring
- Manhole Inspections
- Smoke Testing
- Pipeline Cleaning



### Actionable Business Intelligence

Hydromax USA is propelling the industry forward incorporating asset data into customizable GIS powered dashboards that empower utilities to visualize and analyze infrastructure performance in approximate real-time.

- Combine and view water and wastewater infrastructure analytics
- Maximize existing budgets through targeted infrastructure investments
- Create a digital road map to a sustainable future



#### **MULTISENSOR/SONAR INSPECTION** Leveraging proprietary algorithms

Hydromax USA is a multi-sensor inspection pioneer, specializing in the integration of digital CCTV and multiple sensors, including LASER and SONAR equipment, and the interpretation and presentation of the raw data. We generate highly accurate profiles, geo-reference above and below water objects, and correlate this information to existing grids or coordinates.

Our proprietary and innovative data collection and analysis is a game changer. Using continuous and simultaneous data collection in open source formats, we present our customers with the most insightful data that is efficient and easily interpreted – accurately and quickly revealing corrosion, sedimentation and structural defects.

Learn more at HydromaxUSA.com/wastewater

understand the present | protect the future

## Water and Wastewater Pipeline Technologies

#### INLINE LEAK AND GAS POCKET DETECTION IN LARGE DIAMETER PRESSURE PIPELINES

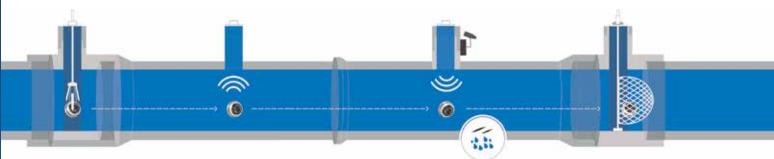
Originally developed in Spain in 2015 by Aganova, the Nautilus System has recently been introduced to the US market by Hydromax USA. The system consists of a small, neatrally buoyant sphere that is inserted into the network where it travels freely, driven by the flow of water in the pipe. Sounds generated by a leak, gas pocket or anomaly have unique characteristics. The device captures the sound of these from inside the pipeline. Once the device is extracted, software processes the compiled information using a mathematical algorithm to determine the location of leaks, gas pockets and anomalies ecountered.



### Nemo Platform



- Collect leak and gas pocket data on pipelines of various sizes and lengths in one inspection without distruption of service.
- Neutral bouyancy enables operation at lower flows and easier navigation of potential obstacles vs other technologies.
- Detects leak as small as 0.15 GPM for all types of pipes at any depth.
- Cost effectiveness enables utilities to assess more of their systems and stay within budget.



### CASE STUDY

NAUTILUS SOLVES LARGE DIAMETER WATER LOSS CHALLENGE IN COLORADO

Longmont, CO | 20-inch & 22-inch Pipelines | 4 Miles | Steel

With measured water loss exceeding 80k gallons per day and an annual revenue loss of approximately \$100k, the City of Longmont had a significant problem that needed to be addressed quickly. Faced with a non-surfacing leak on two pieces of critical infrastructure, the City enlisted the support of Dewberry Engineers to research and identify appropriate solutions to assess the parallel pipelines. While initially slated for a competing technology, Dewberry and the City decided to utilize Hydromax USA and the Nautilus System based on its unmatched value, ease of deployment and proven results. Read the full case study and learn how Nautilus pinpointed the leak within three feet saving the City an expensive repair: www.hydromaxusa.com/technologies/nautilus-system

"A non-intrusive and cost-effective method for leak detection on large diameter pipelines."

Alexander Doksa *Civil Engineer, City of Longmont* 



#### NON-INVASIVE, NON-DESTRUCTIVE LONG-DISTANCE PIPELINE ASSESSMENT

p-CAT<sup>™</sup> is a non-invasive, non-destructive, reliable, safe, and cost-effective solution for performing condition assessment on metallic, concrete, and asbestos cement pipe while the system remains in operation. p-CAT<sup>™</sup> enables water and wastewater utilities to analyze long distances of pipeline to identify wall loss, changes in material and diameter, blockages and sediment, and the location of gas pockets.

#### p-CAT<sup>™</sup> benefits:

- Suitable for all pressurized water, wastewater, and raw water lines.
- Assess up to 5 miles of pipeline per day with minimal access points.
- Utilities can quickly and accurately evaluate their system and focus repair and replacement dollars where they are needed most.





*Learn more at HydromaxUSA.com/technologies* 

### CLIENT SUCCESS

#### p-CAT™ ACCURATELY ASSESSES AGING PIPELINE CONDITION WITH THIRD PARTY VERIFICATION

ouisville, CO | 16-inch Tar Lined Steel Pipe Installed in 1955 | 1 Mile

"The biggest advantages to p-CAT were its ability to test long distances relatively quickly and to keep the pipeline essentially live during the assessment."

"Prior to the assessment, the biggest challenge was not understanding what condition the pipe was in. With this project, we were able to get a sense of the pipe's condition and push off the larger capital project that included the possibility of replacing whole sections of the pipeline."

Cory Peterson, PE Deputy Director of Utilities, City of Louisville, CO

"The wall thickness that Hydromax USA's p-CAT reported was spot on with the eddy current wall thickness results."

"p-CAT is a really nice assessment tool that can be used everywhere without having to excavate and expose large sections of the pipe. It's a relatively inexpensive assessment tool and assesses long reaches of pipeline rapidly."

Carl R. Bundschuh, PE Senior Associate, Dewberry Engineers Inc.

HYDROMAX USA



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