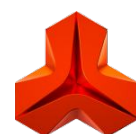


CASE STUDY: TENNESSEE VALLEY AUTHORITY

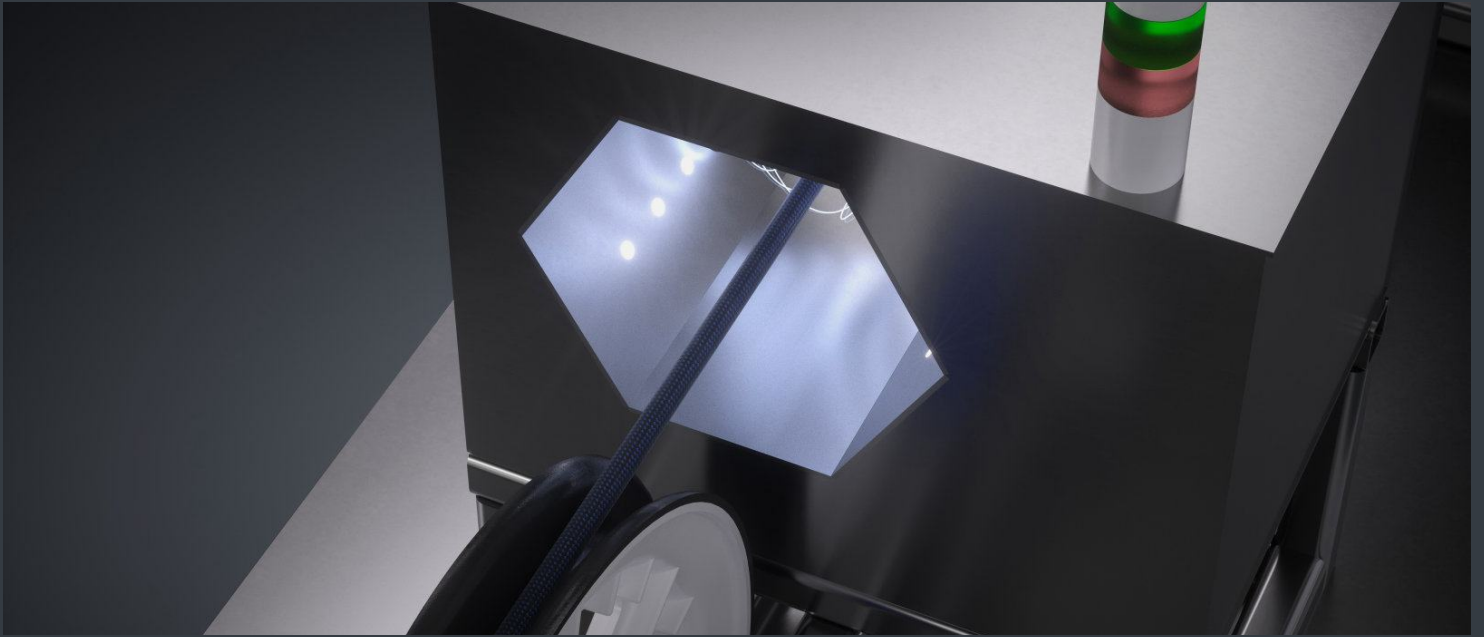
Scope Computer Vision Technologies for Safer, More Efficient Utility Line Inspections

● VISIONBYScope.COM

Make every pull a safe pull™



scope



Contents

About The Tennessee
Valley Authority

The The Job To Be Done

TVA + Technology =
Human In the Loop
Solution

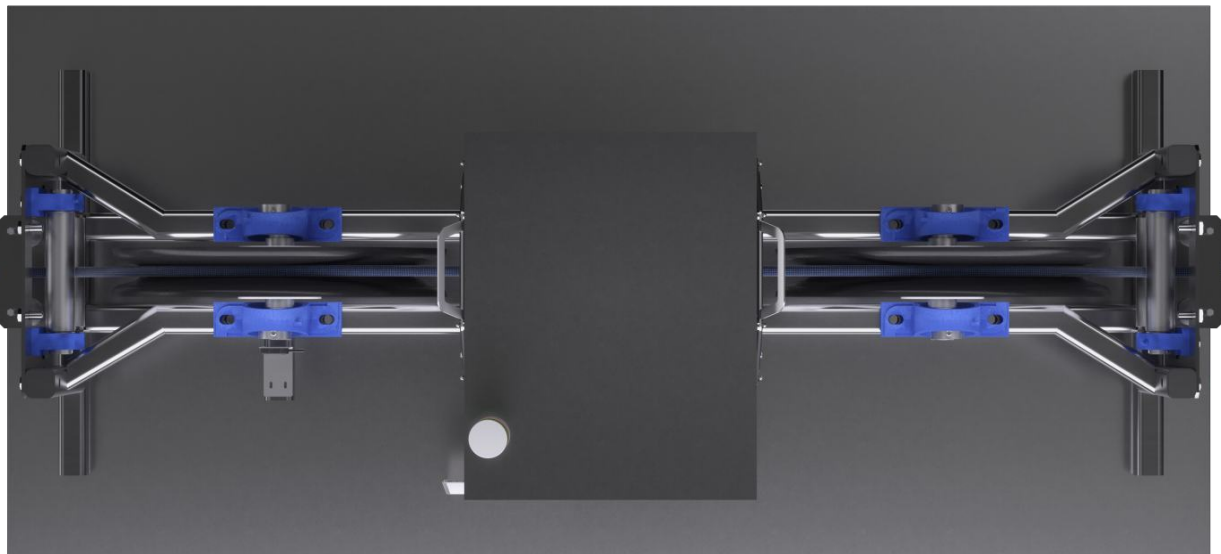
The Tennessee Valley Authority (TVA) is a federally owned electric utility that serves over 10 million people in 7 southeastern U.S. states.

TVA is responsible for maintaining a vast network of power lines and equipment, which requires rigorous inspection to ensure reliable electricity delivery and safe operations. With aging infrastructure and the ongoing demand for upgrades and new builds, TVA needed a solution that would streamline their inspection process, reduce human error, and provide actionable insights for maintenance and repair.

The Job To Be Done

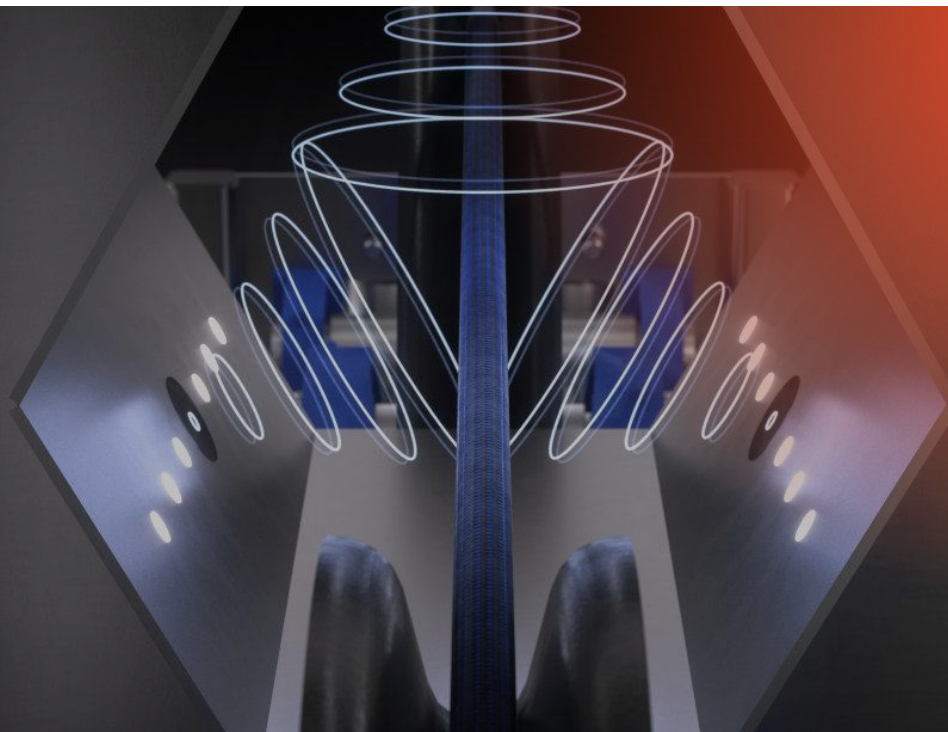
Historically, TVA's utility line inspection process was manual, labor-intensive, and susceptible to inaccuracies. Technicians would spend hours inspecting jacketed and 12 strand stringing lines to identify potential damage, wear, or other hazards that could disrupt service. This method was not only time-consuming but also created safety risks for personnel who had to navigate hazardous environments and energized corridors. Furthermore, human error often led to missed issues, resulting in costly downtime, unscheduled repairs, and safety concerns for TVA employees and the public.

TVA recognized the need for a more precise, technology-driven solution that would not only enhance the safety and efficiency of their inspections but also provide valuable data on the condition of stringing lines across their transmission and distribution networks. TVA turned to Scope Computer Vision Technologies to provide an innovative and effective approach to utility line inspections.



TVA + Technology = Human In the Loop Solution

Scope Computer Vision Technologies deployed an advanced computer vision system that leverages artificial intelligence to automate and improve the accuracy of utility line inspections. Scope's technology utilizes high-resolution imagery and machine learning algorithms to assess TVA's stringing lines, which are used in both transmission and distribution projects. This system will exceed 100 million feet of stringing lines inspected by the end of 2024.



“Scope’s technology is being utilized by North America’s largest utility players. When we onboarded the technology, we immediately partnered with the Scope team to develop models for specific rope types TVA desired to continue leveraging. The ongoing support and constant improvement in the technology helps support our safety mission of augmenting humans where applicable. At TVA we are on an innovation mission to leverage technology to positively impact our grid transformation and Scope’s technology was a great fit.”

Cody Young

Supervisor - Transmission Lines & Helicopter Support



Ready to experience the difference?

Get in touch with our sales and support teams for demos, onboarding support, product inquiries or general questions.

Scope Cutting-edge Solutions for Rope Safety

Schedule a Call

Speak to our sales team about specific needs, plans and pricing, or request a demo.

[View Availability](#)

Help & Support

Reach out if you'd like to learn more about our offerings, join our team, or partner with us.

support@visionbyscope.com

General Communication

For other queries, please get in touch with us via email.

contact@visionbyscope.com

scope