ACCURIS

# Case Study:

## Global oilfield services leader minimizes risks and costs by proactively maintaining inventory of electronic components

# Part obsolescence, delays, and compliance

One of the world's largest oilfield services providers reduced uncertainty about parts obsolescence and replacement availability by providing its employees with real-time access to data for 25,000+ parts and eliminating delays to part change notices. The company also ensured compliance with latest REACH, RoHS and Export regulations.

**The Problem:**

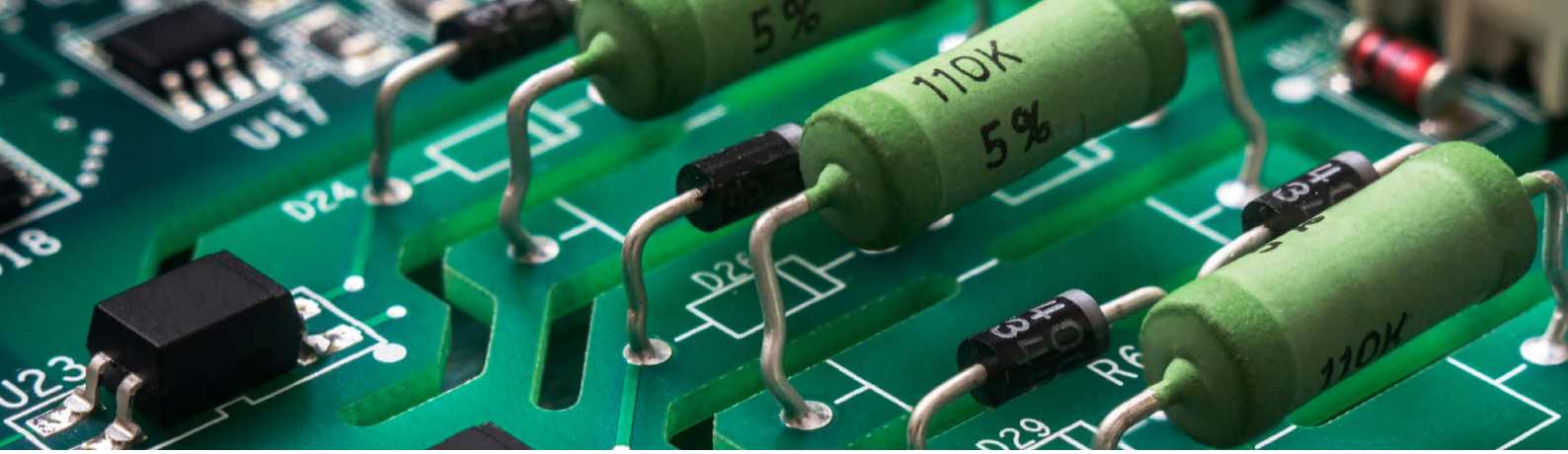
- Reduce uncertainty when manufacturers are going to end-of-life (EOL) a computer component
- Minimize risks and costs from changes to parts by taking precautions to ensure supply of spares
- Determine if they want to leverage updated components in new computer designs

**The Solution:**

- PCN Intelligence and BOM Intelligence

**The Results:**

- Provided real time access to detailed data and documents on 25,000+ parts
- Eliminated previous delays to EOL and PCN notices for computer components
- Achieved cost savings by proactively managing component part obsolescence issues
- Received EOL notifications regarding 800+ components which resulted in last-time buys for 500 of those components
- Advised design engineers on part discontinuance, predicted component lifecycle and part alternatives
- Ensured compliance with the latest REACH, RoHS and Export component regulations




# Maintaining electronic parts inventory

One of the world's largest oilfield services providers is renowned for its ability to deliver a full range of innovative technical solutions and capabilities – including seismic surveys, formation evaluation, drilling technologies and equipment, cementing, well construction and completion, and project management. For decades, this company has supported oil industry leaders with a broad array of reservoir evaluation, development, and management services, and it continues to develop new technologies for reservoir optimization.

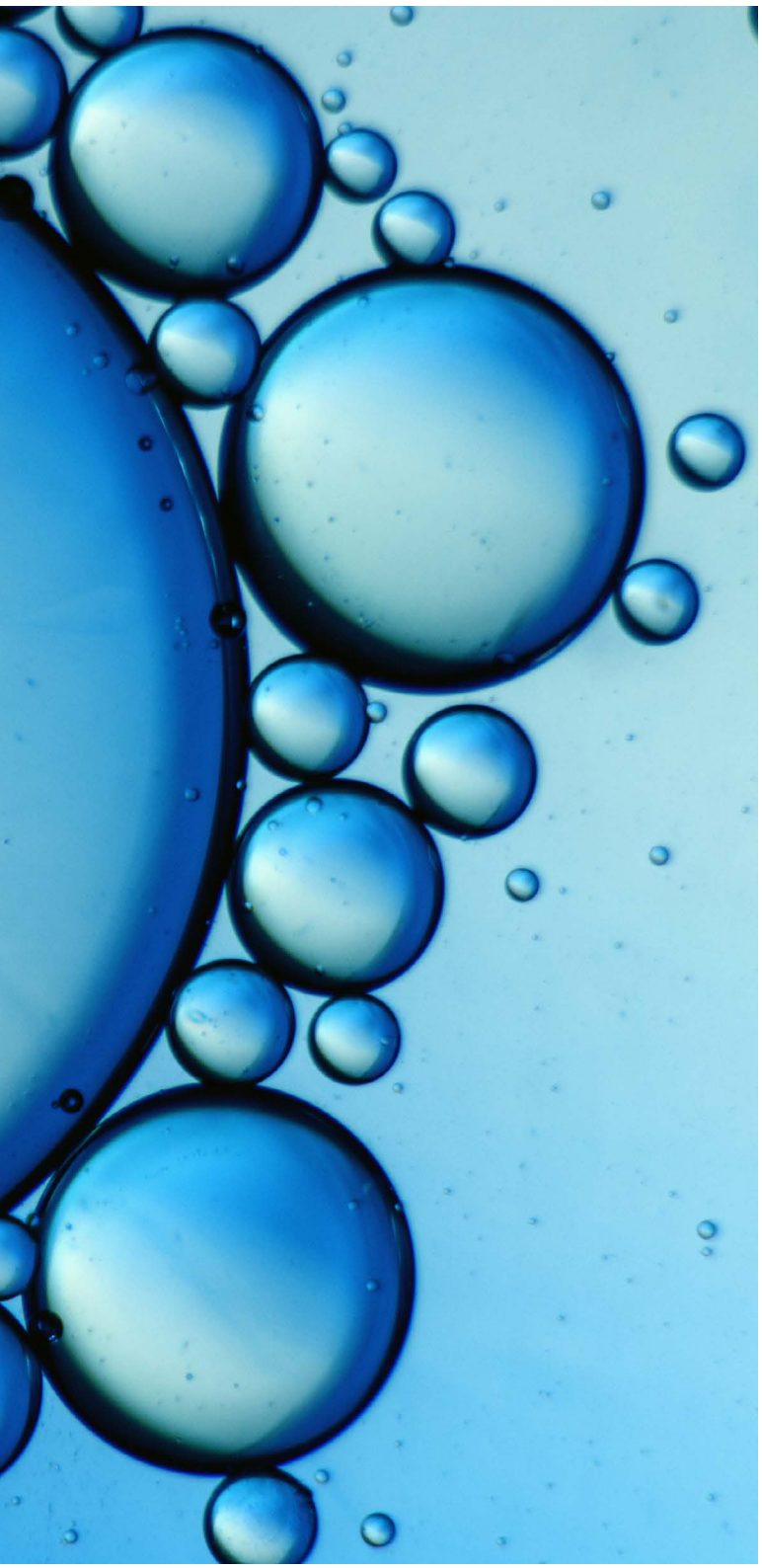
To support its global operations, the company custom builds computers that are inserted into drill pipes and lowered two to three miles underground. The computers monitor the environment underground and provide critical information back to the company operators. The company designed these computers with more stringent requirements than could be tolerated by standard commercial computers due to the high pressure, high heat and high vibrations in the underground environment. Despite the taxing environment that the computers are subjected to, some of these computers are expected to be out in the field for 20 years.

Therefore, when it finds computer components that are able to withstand this harsh environment, the company is very reluctant to make any component changes. The majority of these products are custom made for insertion into the drill holes. Hundreds of products are tested. Testing takes six months to two years to certify that a specific component can continue to perform properly under such difficult conditions. The company also utilizes a number of surface computers. However the primary concern for obsolescence is for the computers that are in the drill holes.

Parts obsolescence is a significant burden for custom equipment that is two to three miles underground. It is critical that the company understands when a manufacturer is going to end-of-life (EOL) one of its computer components in the custom computers. Changes related to component parts – known as product change notices (PCNs) – are vital issues for the company and the ramifications must be completely understood so precautions can be taken to ensure the company has sufficient spares or can determine if it wants to leverage the updated components in a new computer design.

"Today, this oilfield services leader uses PCN Intelligence to monitor an inventory of more than 25,000 parts. Its employees can actively track product change notices issued by more than 1,000 component suppliers and match their AVL parts to identify obsolescence, compliance, end-of-life and counterfeit risks."

# Proactively managing to reduce risks and costs



This oilfield services company uses PCN Intelligence from Accuris to monitor the Approved Vendor List (AVL) or bill of materials (BOMs) for its electronic equipment. The company leverages contract manufacturers (CMs) to build much of the equipment. In the past, it relied on the CMs to monitor component EOLs, but it found that the CMs did not advise the company in a timely fashion on new EOL and PCN notices. This delay caused the company to work in a reactive environment and increased the expense of managing component part obsolescence.

Today, this oilfield services leader uses PCN Intelligence to monitor an inventory of more than 25,000 parts. Its employees can actively track product change notices issued by more than 1,000 component suppliers and match their AVL parts to identify obsolescence, compliance, end-of-life and counterfeit risks. With these timely updates, the company is able to make a last-time buy decision and purchase sufficient quantities of the EOL component prior to the date the component is no longer produced by the component manufacturer.

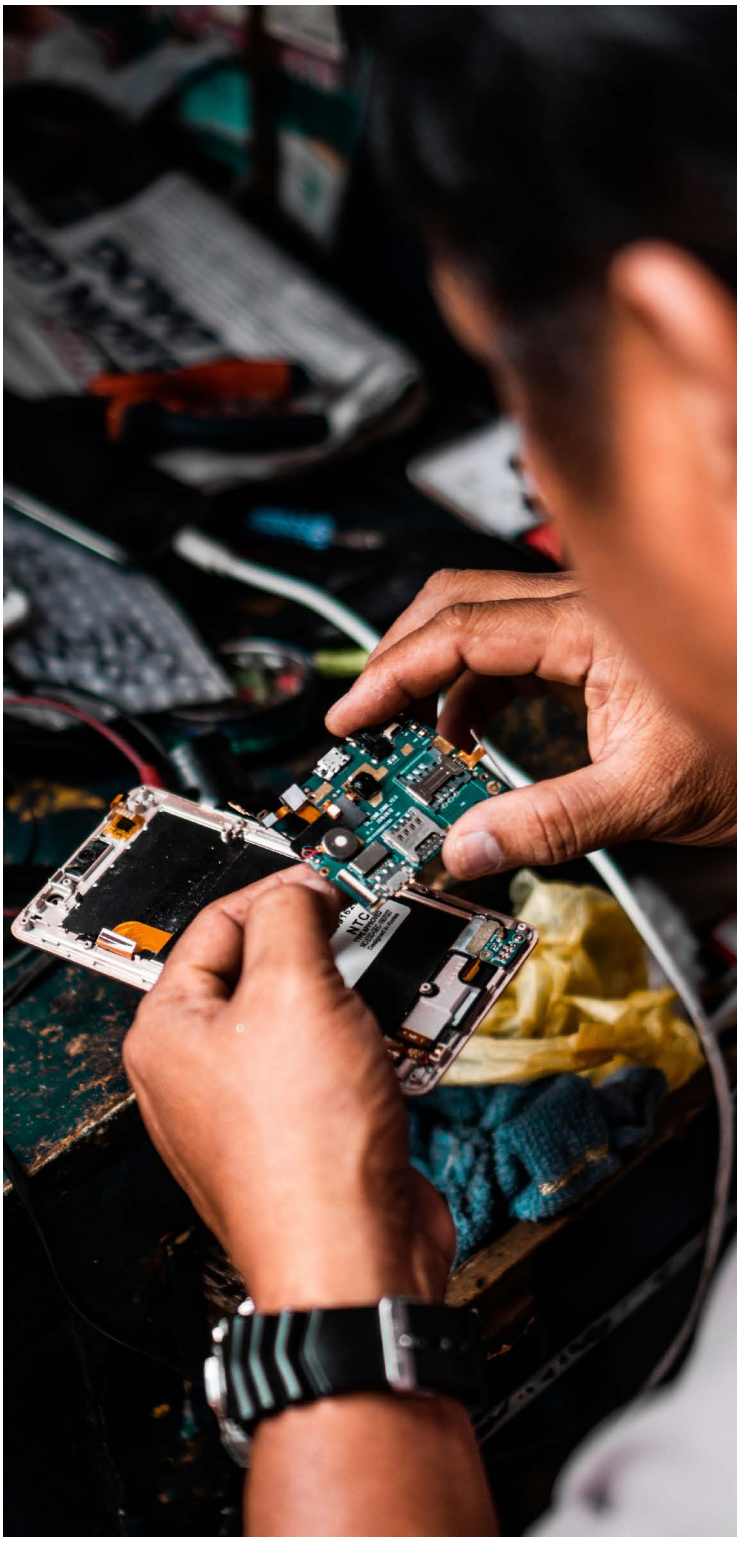
To date, this company has seen more than 800 of its components reach their EOL. Yet it has been able to proactively manage and mitigate the potential risks to its customers' operations by making the necessary advance purchases and holding inventory on more than 500 of these EOL components.

# Designing for performance and compliance

Engineers at the company are also effectively leveraging another tool, the BOM Intelligence from Accuris, for new product designs by loading in a bill of material (BOM) for a new computer design. During this design and testing phase, it is critical for the design engineers to understand if any of the parts are going to be discontinued or if the predicted life cycle of a component has changed. In addition, the company's engineers can utilize the parts alternative capability within BOM Intelligence.

Finally, this global oil services leader makes effective use of Accuris solutions to ensure compliance with key industry standards and government regulations. For example, since its computer equipment is widely deployed across Europe and other countries that are subject to Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Restriction of Hazardous Substances Directive (RoHS) regulations, the company leverages the regulation details in BOM Intelligence to ensure it stays in compliance with the latest REACH and RoHS component regulations updates. The company also needs to ensure that they do not ship any ITAR restricted components overseas, so they rely on Accuris Content Services for Export Compliance Services.

In all of these ways and more, this well-known oilfield services company is working with Accuris solutions to achieve its business goals for today and tomorrow.



# Manage your BOM with confidence and accuracy.

Demo BOM Intelligence

## ABOUT ACCURIS

Accuris is an engineering-focused technology company that drives $500MM in annual recurring revenue through AI-powered data and workflow solutions. For over 60 years, engineers have relied on our data and technology to innovate and solve problems, reducing their ideation time by 70% and eliminating product and process failures by up to 5 times.

We work with over 6,000 global customers and 650,000 engineering end users in over 100 countries and dozens of industries – including aerospace and defense, energy, sustainability, construction, architecture and more.

Accuris partners with 400+ Standards Development Organizations to support their non-profit mission, streamlining your access to 2.3 million engineering standards for innovation and progress across the globe. Accuris brings you technology with the knowledge built in – so you can build a better world.

For more information, visit:
**www.accuristech.com**