

# BELDEN



Belden solutions connect all parts of your warehouse—including the machines, people, processes, robots and more—to securely collect, synthesize and analyze your critical performance data and turn it into actionable insights.

### The Building Blocks for a Solution



### **Network Resilience**

Build a modern network foundation that delivers on current speed and quality expectations - and can scale for future growth ambitions.



### **Edge Computing**

Empower people to access, analyze, and act on information near the source to solve issues faster and to reduce the amount of data transferred to the cloud.



#### **Data Interoperability**

Seamlessly convert and bring together data from various sources, formats, protocols and sites to power applications and analytics, so you can make better business decisions.

## **Explore How Belden Can Improve Customer Outcomes**



#### Problem:

- Operational disruptions
- Lack of real-time insights

#### **Predictive Maintenance**

#### Solution:

- Normalize and contextualize data from various sources, formats, protocols and sites
- Access, analyze and act on information near the data source



### **Tracking and Tracing of Packages**

#### Problem:

- Lack of traceability
- Islands of automation

#### Solution:

- Collect data from critical assets like conveyors, sorters, inline scanners, printing and labeling stations
- Connect critical machines and assets to the network to eliminate blind spots and ensure committed bandwidth

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# Belden Addresses Material Handling Challenges

- Recovers lost productive equipment time due to cybersecurity attacks, network traffic surges and other interruptions.
- Faster data transfer, minimizes data processing costs and enables real-time analytics.
- Eliminates data silos due to legacy equipment and assets locked in proprietary protocols.

### The Pathway to Digitization

For maximum efficiency and value, Belden has mapped out four major steps that are crucial to your warehouse's digital transformation.

### **Step 1: Digitize Assets**

Add sensors to your warehouse assets to collect critical data such as vibration, encoders, temperature, level, etc.



### Step 2: Build a Resilient Data Pipeline

Establish a secure and reliable IT/OT network to connect islands of automation and ingest real-time production data from all areas in the warehouse.



### **Step 3: Implement Data Operations**

Translate previously incompatible machine data into one common language to enable warehouse wide visibility.



#### **Step 4: Generate Insights**

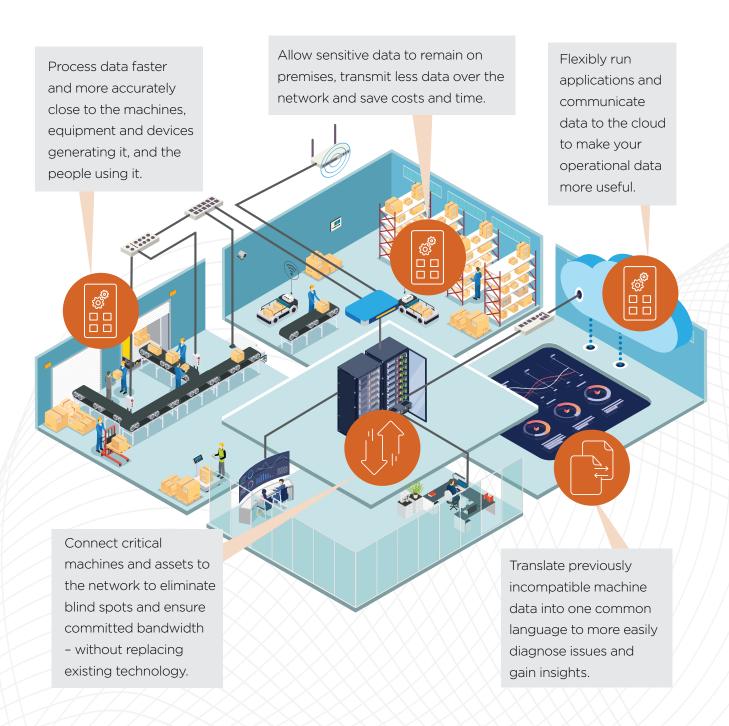
Run applications at the edge or in the cloud to visualize and showcase data to improve business operations.

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### **How Belden Can Help**

Today, the devices on your network are generating large amounts of data. Belden's capabilities provide a robust and scalable network solution that ensures your data is transmitted securely and seamlessly, regardless of the protocols or vendors you work with.

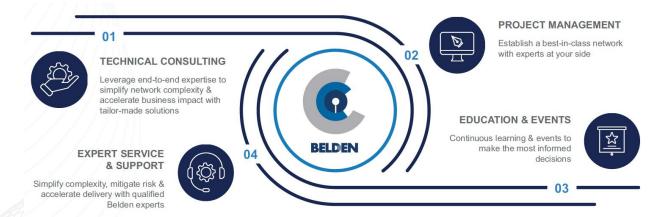
Get in touch with Belden's experts at <u>belden.com/ias-capabilities</u> to make Warehouse 4.0 a reality at your facility.



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#### **Global Customer Innovation Centers**

Belden's Customer Innovation Centers (CICs) serve your needs throughout the solution development lifecycle. These hubs — strategically located to serve regions throughout the world — offer access to best-in-class capabilities, including the opportunity to run proof of concepts (PoCs) in our validation lab.



### **Experts at Your Side**

Designing the right solution for your business needs is not an easy task, so Belden provides direct access to our experts.

### **Solution Architect**



# **Digital Automation Consultant**



- Deep technical knowledge of network architectures
- Develop, design, and validate best solutions tailored to the complexity of each customer's unique business challenge
- Industry expertise with deep networking know-
- Lead process, workflows, and data assessments to identify digital transformation opportunities and calculate potential value of network solutions for the customer

# **Solution Consultant**



## **Service Engineer**



- Deep technical knowledge of applications and industries
- Guide the customer in their digital transformation journey, conducting industrial network audits and positioning the ideal solutions
- Deep technical knowledge of products and technologies
- Conduct trainings, test and commission networks
- Lead network assessments and deliver high quality presales and post-sales technical support

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# **About Belden**

Belden Inc. delivers the infrastructure that makes the digital journey simpler, smarter and secure. We're moving beyond connectivity, from what we make to what we make possible through a performance-driven portfolio, forward-thinking expertise and purpose-built solutions. With a legacy of quality and reliability spanning 120-plus years, we have a strong foundation to continue building the future. We are headquartered in St. Louis and have manufacturing capabilities in North America, Europe, Asia, and Africa.. For more information, visit us at <a href="https://www.belden.com">www.belden.com</a> follow us on <a href="mailto:Facebook">Facebook</a>, <a href="mailto:LinkedIn">LinkedIn</a> and <a href="mailto:X/Twitter">X/Twitter</a>.

## **Learn More**

Visit <u>belden.com/ias-capabilities</u> for additional information on Belden solutions and to contact our experts.



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