



# Belden Cables Help Auto Manufacturers Put It All Together

*"Belden worked*

*with us to make sure*

*we had the right*

*cables for the*

*job. The cost was in*

*line and the quality*

*was very good, so we*

*tried it out, and it's*

*working very well."*

*Mark Read, Controls*

*Engineering Manager*

*ABB Body-in-White*

*THE FUTURE RUNS THROUGH US*

*AR01/01*

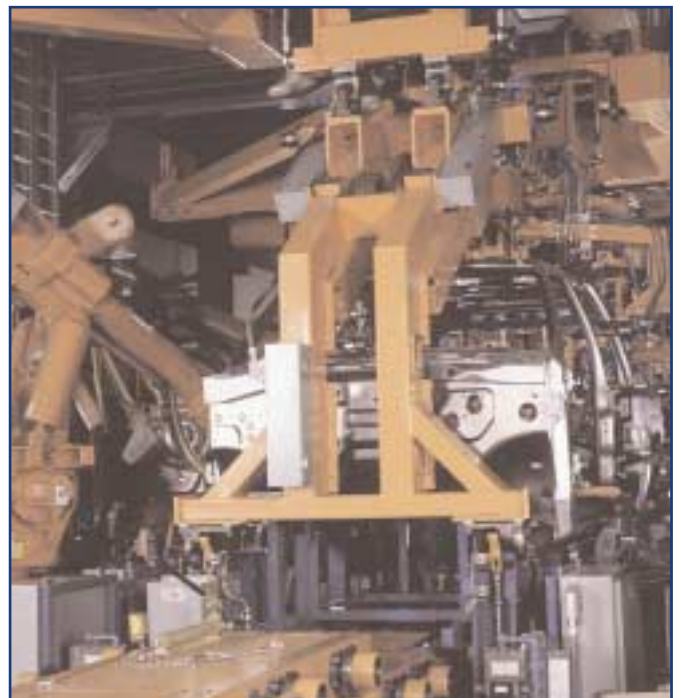
**I**n today's manufacturing environment, productivity is more important than ever. That means automation—more operations being accomplished automatically, with less operator involvement and less supervision.

And in no industry is automation more important than auto manufacturing. As global auto-making operations become more automated, it's more likely than ever that the vehicle you are driving may have been assembled with the help of Belden cables.

ABB Body-in-White, Ltd., a leading provider of manufacturing robotics equipment to the automotive industry, relies on Belden cables to keep their machines operating effectively and productively. Many of the vehicles rolling off the assembly lines at General Motors, Ford, and Chrysler plants have been welded or handled by ABB Body-in-White equipment.

#### Body-in-White

"The term 'Body-in-White' refers to an assembled vehicle body that has not been trimmed and painted," explained Lauri Asikainen, Sales and Marketing Manager at ABB Body-in-White. "At ABB Body-in-White, we produce machines which are used in the entire production of a vehicle – from press automation at the supplier's site to piecing the car together on the assembly line."



*Belden provides a variety of cables to ABB Body-In-White, a leader in robotic manufacturing systems for the automotive industry.*

This division of ABB designs, creates, and installs car and truck body assembly lines. ABB Body-in-White's advanced flexible automation systems can arc-weld, spot-weld, and handle materials. The business unit also manufactures standardized press line automation equipment.

The production of integrated assembly lines takes place at the 300,000-square-foot ABB Body-in-White facility in Brampton, Ontario, Canada. Complete car and truck assembly lines are custom designed and manufac-

ured at the ABB Body-in-White facility. The equipment is thoroughly tested, then taken apart and reassembled at the customer site.

ABB Body-in-White, Ltd. is part of the \$1.7 billion Flexible Automation segment of ABB, which employs 5,500 people worldwide. The division is involved in all facets of automotive production, including press automation, body assembly, paint automation, and powertrain assembly, as well as trim and final assembly.



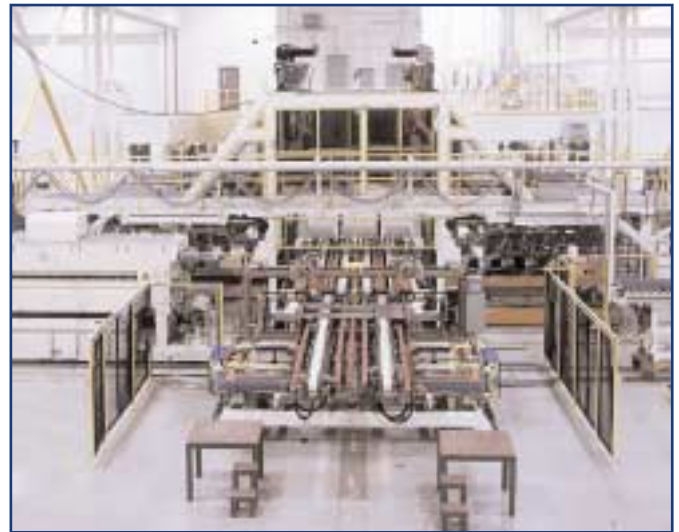
ABB is a \$30 billion engineering and technology company with operations primarily in Europe and North America. The corporation provides engineering and service solutions for automakers, petrochemical companies, pharmaceutical manufacturers, minerals and metals businesses, pulp and paper producers, and utilities.

#### Belden products on the assembly line

A variety of Belden products are incorporated into ABB Body-in-White automation machinery. Belden Infinity flexible automation cables are used for operational control. Belden Variable Frequency Drive Cables connect to the power source. Belden Data Twist 350 data networking cable and Blue Hose information layer cable products provide the data link between the programmable logic controller (PLC) and the remote I/O.

In addition to providing power and operational data, Belden cables facilitate the exact alignment of the equipment for precise geometric assembly of the vehicle.

Robert Harding, Electrical Supervisor for ABB Body-in-White, describes the Belden products as "very good quality." He estimates that the current assembly line being built by ABB Body-in-White utilizes "hundreds



*ABB Body-In-White uses Belden cables for power, operational control, and more.*

of thousands of feet of Blue Hose and at least 50,000 feet of control cable."

#### Meeting manufacturing challenges

Belden's approach to problem solving for ABB Body-in-White is representative of the way the company develops complete solutions to meet the complex and demanding needs of manufacturing environments.

Belden Application Engineer, Tom Rudd, out of Belden's Cobourg, Ontario facility, worked closely with ABB engineers to determine

the best solution for their wire and cable requirements.

According to Frank Koditek, Marketing Manager at Belden, developing the right solutions involves a partnership among Belden, the distributor, and the customer.

"We need to understand exactly what the challenges are for each manufacturing environment. Temperature extremes, the need for flexibility, the use of caustic chemicals or processes involving water or coolant—all of these and many other factors must be taken into account before we can recommend the right solutions."

"In the case of ABB Body-in-White, we've worked closely with their engineers. This process has led to a series of successful installations for ABB Body-in-White – and Belden."



*A typical assembly line job for ABB Body-In White may require hundreds of thousands of feet of Belden cable.*

#### For More Information:

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