Global automotive manufacturing industry needs automated solutions to meet unprecedented challenges

In a new ABB Robotics survey, produced in partnership with Automotive Manufacturing Solutions, supply chain disruption, rising material costs, labor shortages and unrealistic EV adoption targets are forcing the global automotive industry to re-evaluate manufacturing processes.



What are the challenges facing automotive manufacturers?



of manufacturing industry leaders predict sustainability is achievable



cite ongoing supply chain shortages as their biggest concern



believe that the timetable for full EV production is unrealistic



are most concerned about increasing material/ component prices

list specific labor skills shortages as the key challenge impacting manufacturing

4%

How can ABB Robotics help solve these manufacturing concerns?

- Autonomous Mobile Robots (AMRs)
 Using smart navigation and software intelligence, ABB's new range of Flexley™ mobile robots can tow, lift and transport racks, containers and pallets, reducing the delivery time of parts to the assembly line.
- Robots specializing in EV powertrain assembly
 ABB's new IRB 5710 and 5720 help reduce build times, simplify the production process and drive down production costs.
- Flexible manufacturing

 ABB is helping automotive manufacturers and component suppliers rapidly introduce modular production areas, away from the line. These can be scaled up or down depending on vehicle demand.
- Training, upskilling and education

 ABB works with schools and universities around the world to teach students automation skills.
- RobotStudio™

 ABB's offline programming software, RobotStudio™, allows users to build, test and refine the robot installation in a virtual environment, speeding up commissioning time and productivity.

Why have these challenges come into effect?

External factors such as Covid-19 pandemic, labor shortages and rising inflation

Mandatory shift to electrification

Zero emissions target over next 10 years