

By Fanny-Yi Wan  
Photos ABB

# More cars mean more robots

At Shanghai Volkswagen, a new system for body in white and roller hemming will help the company meet increased demand.

> China has become a powerhouse when it comes to the production of automobiles, and its growth doesn't look to be slowing anytime soon. Already in 2006, according to the *Financial Times*, China overtook the U.S. in production of passenger cars – 5.2 million for China versus 4.4 million for the U.S.

“A customized solution and a competitive price are key to the success...”

Li Gang, Head of ABB Robotics Automotive Industry China

One of the largest modern car manufacturing bases in China, Shanghai Volkswagen Co. Ltd. (SVW) has an annual capacity of 450,000 cars. With two brands – Volkswagen and Skoda, SVW sold some 436,000 cars in 2007. The company produces six different models, including Santana, Santana 3000, Passat, Polo, Touran and the coming Skoda Octavia, with tens of varieties on five platforms.

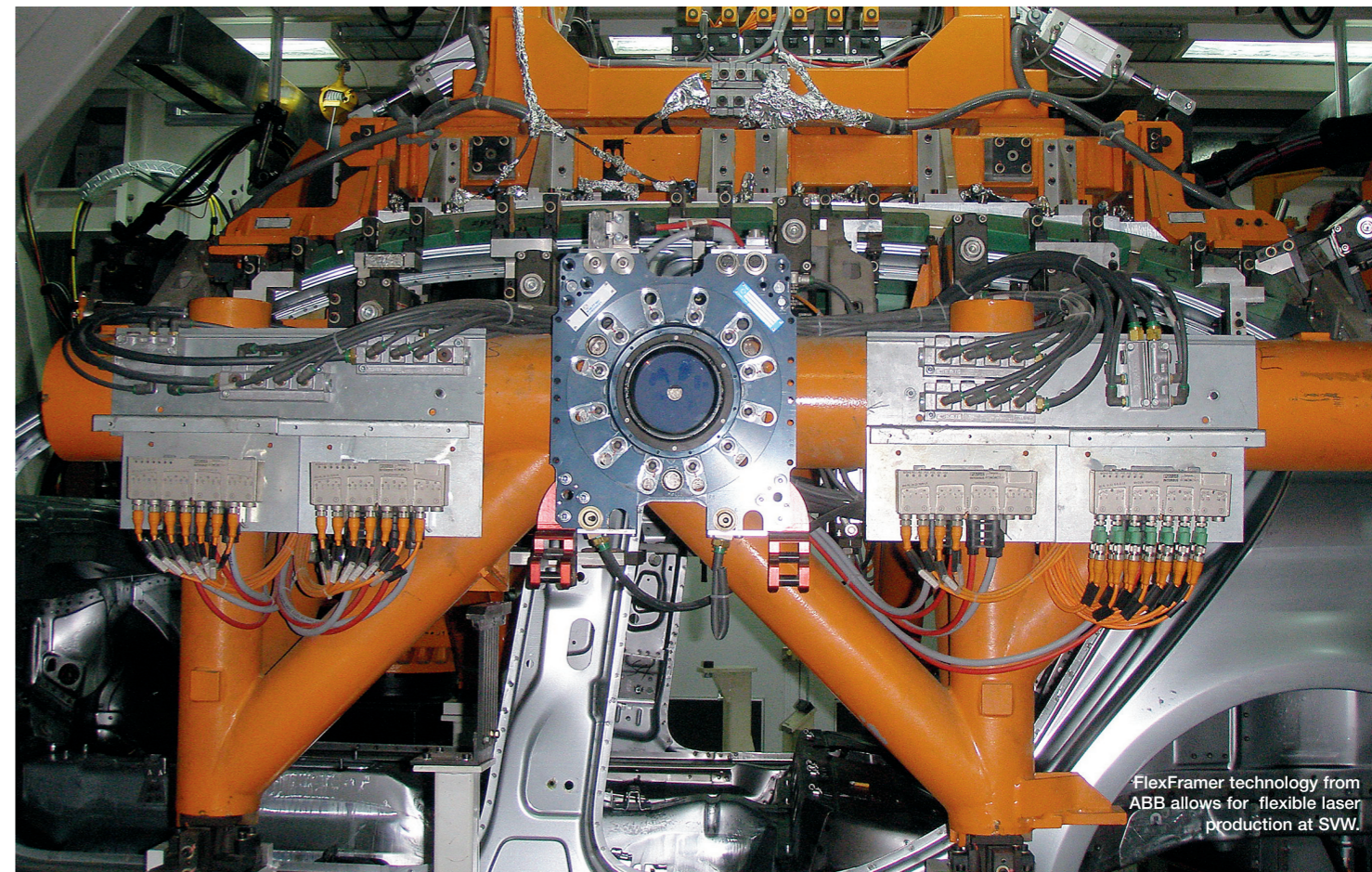
**Naturally, producing** in such volumes requires the best technology and cutting-edge automation. To meet the demand, SVW turned to ABB for its car body general assembly and welding line.

ABB has provided SVW with a complete body-in-white framing welding line and sunroof hemming station for SVW's new production line. The line includes robotic workstations, robotic hemming technology, ABB FlexTrack, Audi flexible drive system for framing, laser welding station, fixtures and service, among other items. The lines were put into service in July 2007 and into production in April 2008, with a capacity of 24 cars per hour and a planned output of 100,000 cars per year.

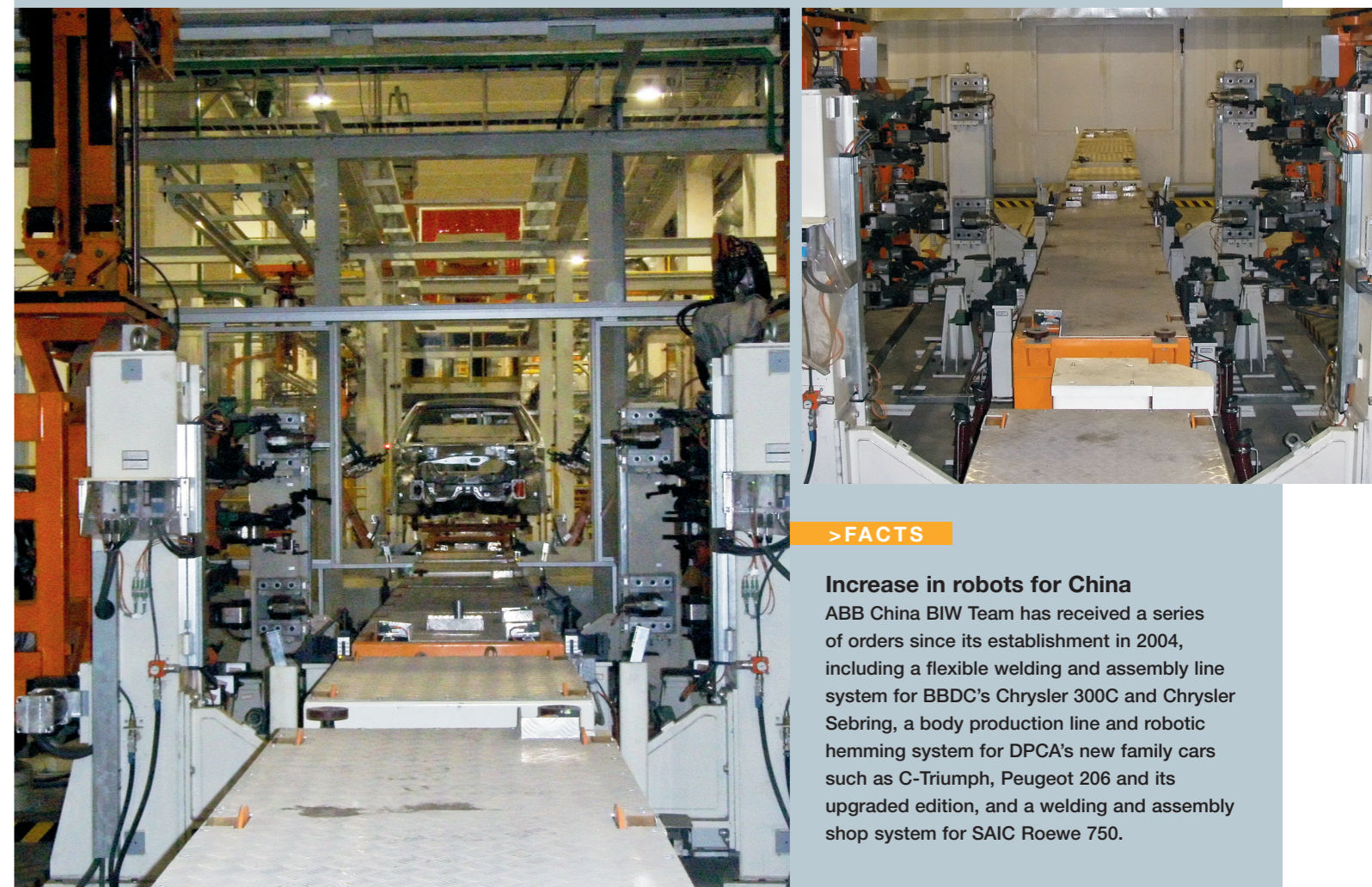
“The Project Team, with great support from the engineering team at our global lead center in France help SVW to overcome the technical challenges on this project,” says Herve Chevalier, head of ABB Robotics AI BIW China. The Audi flexible drive system for framer technology applied in this project is standardized for VW's body production line roof and panel position welding process.

This project is the first time where ABB uses the technology from Audi combined with ABB FlexFramer technology to create unique BIW flexible laser production equipment within VW plants worldwide. The development of the inherent technology broke many technical barriers, says Chevalier, and created a unique technical solution, proven to be fully adaptive to and flexible for SVW's production lines.

Key to the choice of ABB was its “customized solution and competitive price in defeating the competitors and winning this order,” says Li Gang, Head of ABB Robotics Automotive Industry China. ☉



FlexFramer technology from ABB allows for flexible laser production at SVW.



## >FACTS

### Increase in robots for China

ABB China BIW Team has received a series of orders since its establishment in 2004, including a flexible welding and assembly line system for BBDC's Chrysler 300C and Chrysler Sebring, a body production line and robotic hemming system for DPCA's new family cars such as C-Triumph, Peugeot 206 and its upgraded edition, and a welding and assembly shop system for SAIC Roewe 750.