# Western Executives Who Visit China Are Coming Back Terrified

By Matt Oliver, Industry Editor - October, 2025

## Robotics has catapulted Beijing into a dominant position in many industries

"It's the most humbling thing I've ever seen," said Ford's chief executive about his recent trip to China. After visiting a string of factories, Jim Farley was left astonished by the technical innovations being packed into Chinese cars – from self-driving software to facial recognition.

"Their cost and the quality of their vehicles is far superior to what I see in the West," Farley warned in July.

"We are in a global competition with China, <u>and it's not just EVs</u>. And if we lose this, we do not have a future at Ford." The car industry boss is not the only Western executive to have **returned shaken following a visit to the Far East.** 

Andrew Forrest, the Australian billionaire behind mining giant Fortescue – which is investing massively in green energy – says his trips to China convinced him to abandon his company's attempts to manufacture electric vehicle powertrains in-house.

"I can take you to factories [in China] now, where you'll basically be alongside a big conveyor and the machines come out of the floor and begin to assemble parts," he says. "And you're walking alongside this conveyor, and after about 800, 900 metres, a truck drives out. There are no people – everything is robotic."



Other executives describe vast, "dark factories" where robots do so much of the work alone that there is no need to even leave the lights on for humans. "We visited a dark factory producing some astronomical number of mobile phones," recalls Greg Jackson, the boss of British energy supplier Octopus.

"The process was so heavily automated that there were no workers on the manufacturing side, just a small number who were there to ensure the plant was

working. "You get this sense of a change, where China's competitiveness has gone from being about government subsidies and low wages to a tremendous number of highly skilled, educated engineers who are innovating like mad."

#### **High-tech transformation**

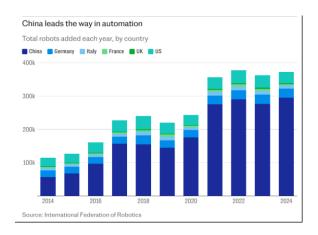
It's also a far cry from the cheap "Made in China" goods that many Westerners have associated with the "workshop of the world" in the past, underscoring how much cash has been poured into upgrading China's industrial processes. Far from being focused on low-quality products, China is now viewed as a leader in rapidly-growing, high-value technologies such as electric vehicles (EVs), batteries, solar panels, wind turbines, drones and advanced robotics.

A big part of that transformation is down to the country's focus on automation – which has been encouraged by the ruling communist government and heavily supported with state subsidies, grants and local government policies.

Figures recently released by the International Federation of Robotics (IFR) show this has led to a dramatic and high-tech transformation of China's industrial base over the past 10 years.

Between 2014 and 2024, the number of industrial robots deployed in the country rocketed from 189,000 to more than two million.

These can typically include everything from robot arms used for welding, assembly and loading, spider robots used for high-speed "pick and place" movements and overhead gantry robots for precision tasks such as 3D printing. The overall number of robots added in China last year was 295,000, compared to 27,000 in Germany, 34,000 in the US and just 2,500 in the UK.



And while it would be easy to put this disparity down to population size alone, China also blows its western rivals out of the water when it comes to robot density. It now boasts 567 robots for every 10,000 manufacturing workers, compared to 449 for Germany, 307 for the US and 104 in the UK.

More automation is seen by many as good for productivity, the all-important measure of how much an economy gets out of what it puts in.

Many analysts also note that China's growing share of worldwide manufacturing gives it increasing leverage over global supply chains – and would make it a formidable opponent in a war.

But alongside Beijing's stated desire to dominate industries of the future, Rian Whitton, an expert at Bismarck Analysis, says increased automation is also an attempt to mitigate the impact of the <u>country's ageing population</u>. "China has quite a notable demographic problem but its manufacturing is, generally, quite labour-intensive," he says. "So in a pre-emptive fashion, they want to automate it as much as possible, not because they expect they'll be able to get higher margins – that is usually the idea in the West – but to compensate for this population decline and to get a competitive advantage."

As part of its so-called Made in China programme, local authorities have offered large tax breaks that reimburse firms for a fifth of their spending on industrial robots. This is under a policy known as "jiqi huanren" – which translates to "replacing humans with machines".

#### Western manufacturers in trouble

But this technology, coupled with the vast output of Chinese manufacturers, spells serious trouble for traditional Western brands. The most visible sign of this upheaval is on our roads, where <a href="Chinese-made electric and hybrid cars">Chinese-made electric and hybrid cars</a> are taking a growing share of sales. In Britain, Shenzhen-based BYD multiplied its September sales by a factor of 10 this year — overtaking far more established brands such as Mini, Renault and Land Rover. But unlike the "tragic" cars once mocked by Jeremy Clarkson and his colleagues on Top Gear, BYD's recent efforts have been praised for both their low prices and their well-appointed interiors.

"The most striking thing about their automotive industry is the pace and the speed with which it operates," says Mike Hawes, the chief executive of the Society of Motor Manufacturers and Traders (SMMT). "They can develop and execute models in probably half of the time most European car makers can."

Sander Tordoir, the chief economist at the Centre for European Reform, a think tank, says Europe and Britain must try to boost their own deployment of robotics if they want to keep up with the pace of innovation in China – while also keeping their manufacturing industries alive.



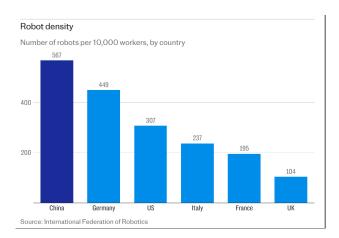
"Robotics, if deployed well, can lift the productivity of your economy greatly. And if China is extremely good at it, then we should try to catch up because, like China, a lot of Europe is ageing," he says.

"The second reason to care is because the robotics sector is high value and has spillovers for the military industrial sector, so the fact that China may be ahead is also significant from a security standpoint. "I think the debate is about how to use industrial policy to build competitive markets, and that will inevitably include some support to offset China's distortions and advantages, which are not all market-driven."

### Britain is falling behind

The risk, however, is that "we don't create the new, or we trap workers in the old instead of trying to leap forward," Tordoir warns, pointing to the tendency of politicians to prevent ageing steel and car factories from closing instead of encouraging the creation of newer, high-tech jobs for workers to move to. But Britain's record on robots is poor and it has struggled to add more than a few thousand per year, despite already having less than half as many as France.

Last year, UK robot additions fell by 35pc.



Whitton, at Bismarck Analysis, argues that Britain, which has lagged other countries in productivity growth, should focus on trying to improve its competitiveness by incentivising the adoption of more robotics as well as machine tools.

He says this would have a bigger impact than past tax-breaks designed to boost research and development spending and plant machinery adoption.

"It doesn't appear that dilly dallying around tax changes is doing a hell of a lot," says Whitton.

"But I see the Government throwing billions of pounds each year at completely speculative rubbish like green hydrogen or to fulfil renewable [energy] obligations contracts and I just think, 'Well, why not five billion a year in grants

for capital equipment? "That would arguably get a bigger bang for our buck than a lot of the energy-related industrial policies we pursue."

Counter-intuitively, Whitton says countries which had more automation during the first "China shock" of the 2000s – which flooded the world with cheap goods – managed to hold on to a greater share of industrial jobs.

"People talk a lot about how automation will lead to job losses," he adds. "But actually, the job losses are going to be disproportionately in the countries that don't automate." In other words, failing to modernise will almost certainly lead to more dark factories in the West. But the kind where no work at all is happening.