

News Release

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JM expands fuel cell component manufacturing operations into China to power next wave of zero emission vehicles

- JM's state of the art, £7.5 million fuel cell component facility in Shanghai complete and commissioning now in progress.
- Fuel cells are a clean, zero emission alternative to internal combustion engines for mobility, especially heavy duty vehicles.
- JM is a world leader in catalysts, catalyst coated membranes (CCM) and membrane electrode assemblies (MEA) – the high technology components that drive performance of a fuel cell.
- The new JM facility will be fully operational by January 2021 and will have capacity to make 4 million MEA components per year, enough to power more than 10,000 buses and commercial vehicles.
- It is the first in a series of investments planned in China to support customer growth. On-road fuel cell CCM market for trucks expected to grow to more than £1 billion p.a. in 2030, with around 40% of global demand in China¹. The market is expected to accelerate significantly post 2030.

Johnson Matthey, a leader in sustainable technologies, is expanding its fuel cell operations into China with a £7.5 million state of the art facility to manufacture critical components for customers in the region. The facility is now complete, with commissioning now in progress. JM expects the new site to be fully operational and serving its growing customers in China and beyond by January 2021.

Fuel cells are an attractive solution as societies take action to decarbonise emissions from transportation – one of the most significant contributors to greenhouse gas emissions globally. They use clean or low carbon fuels, such as hydrogen, to generate power and produce no harmful emissions, with water as the only by product. Fuel cells have proved ideal in heavy duty or high usage applications, such as trucks and buses, because of their longer range, low relative weight and fast refuelling times compared to battery alternatives. As such, 5% of trucks globally are expected to be fuel cell powered by 2030, rising to a third in 2040¹.

Through many years of collaborating with fuel cell suppliers in China, Johnson Matthey's fuel cell technology is already powering more than 700 fuel cell buses and commercial vehicles on China's roads today and have clocked up more than 6.5 million kilometres of zero emission travel - equivalent to 350 round trips from JM's UK site in Swindon to the new facility in Shanghai.

¹ Based on LMC, KGP, Johnson Matthey, McKinsey and OEM assumptions

JM's new facility sees the company expand its fuel cell component production outside of the UK for the first time and will initially create more than 25 new jobs. At capacity, the new plant will produce around four million MEA components, a vital part of the fuel cell stack, per annum – enough to power more than 10,000 commercial vehicles and buses, avoiding 125,000 tonnes of CO₂ emissions from China's roads every year. This facility, together with investments to expand JM's facility in the UK, will increase the company's total annual capacity to more than six million MEAs by early 2021.

The handover of the new facility to JM from its construction contractor is well timed, coinciding with a Chinese government announcement that put in place new policies to support the development of fuel cell technologies. The measures include potential subsidies for companies like JM who are developing core fuel cell technology, with the aim to boost China's competitive advantage in producing hydrogen powered vehicles.

Robert MacLeod, Chief Executive of Johnson Matthey said: "It's a really exciting time for fuel cells with the market predicted to grow from the low £100 millions today to low £1 billions in 2030. JM has been deeply involved in technology development over many years – in fact we supplied the fuel cell components in the Apollo space missions back in 1969. But now the technology and JM's long term commitment are really coming to fruition. I'm delighted that we have reached this important milestone at our brand new, state of the art facility in China, which will allow us to serve our customer base there even more closely with our leading technology. It's great, too, to see the Chinese government's support for fuel cell technologies as a key enabling technology for a cleaner, healthier world."

Ends

Johnson Matthey is a global leader in science that enables a cleaner and healthier world. With over 200 years of sustained commitment to innovation and technological breakthroughs, we improve the performance, function and safety of our customers' products and in 2020 we received the London Stock Exchange's Green Economy Mark, given to companies that derive more than 50% of revenues from environmental solutions. Our science has a global impact in areas such as low emission transport, pharmaceuticals, chemical processing and making the most efficient use of the planet's natural resources. Today more than 15,000 Johnson Matthey professionals collaborate with our network of customers and partners to make a real difference to the world around us.

Fuel cells

JM's fuel cell technology has moved the industry forward for over two decades. We provide solutions to problems for some of the world's most established fuel cell players and automotive OEMs, expanding our reach globally and investing in research and development along the way. Ensuring exceptional performance and durability, we are continually developing the next generation of the technologies that are key to driving the performance of a fuel cell, including membrane electrode assemblies, catalyst coated membranes and fuel cell catalysts.

For more information, visit www.matthey.com.

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