

PLATINUM AND GLASS

Sustained strong growth in platinum demand from glass industry capacity expansion in 2021

The latest full year forecast for 2021 anticipates 69 per cent growth in demand for platinum from the glass industry, rising to 658 koz from 391 koz in the previous year. As a proportion of overall industrial demand for platinum, glass is set to contribute 9 per cent in 2021, compared to 6 per cent in 2020.

The forecast is supported by two quarters of data that show strong year-on-year gains already this year.

While some of this is attributable to the sector playing post-pandemic 'catch-up', with some capacity build-out planned for 2020 falling into 2021, there are clearly signs that this year's stellar growth is reflective of an industry that is itself experiencing strong demand, especially in China.

In fact, in 2020 many plans to increase liquid crystal display (LCD) furnace capacity and glass fibre production lines remained in place, in spite of the COVID-19 pandemic. Indeed, if anything, the crisis has created supply shortages which have in turn boosted prices of certain glass-related end-products, all of which has encouraged manufacturers to add to capacity.

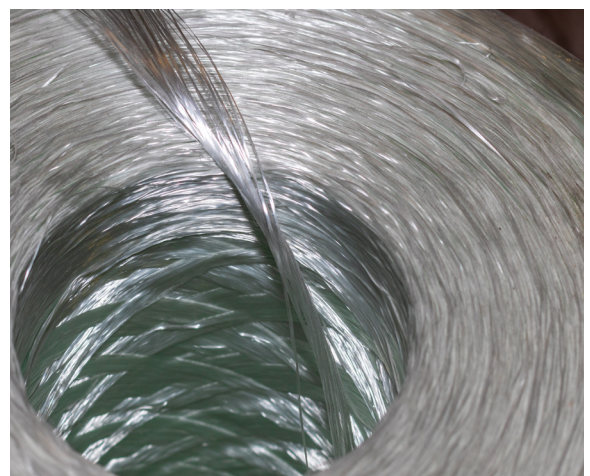
China, in particular, is expected to see a substantial increase in its LCD substrate and fibreglass

capacity this year in response to growing demand. LCD substrates are used for screens in electronic products such as televisions, laptop computers, games consoles and smart phones.

Fibreglass composites are needed across a range of industries – for example in the automotive, construction, telecommunications and wind power sectors.

Refractory metal

Platinum is one of the 'refractory' metals – a group of metallic elements that are highly resistant to heat and wear.



Fibreglass fabric composite roll material

It is an essential high-temperature material in the production of glass, due to its high melting point (1769°C) and excellent oxidation resistance, corrosion resistance and chemical stability, meaning that it does not require coating protection when used at high temperatures.

Due to this, it is used in the linings of vessels that contain, channel and form molten glass. It is also used to coat equipment such as ceramic stirrers and bowls that are used to mix the molten glass to ensure a consistent composition, especially when a high-quality end product is required.

The use of platinum alloys – typically platinum and its sister platinum group metal rhodium – brings many benefits to glass manufacturers by enabling increased output, reduced downtime and minimising

impurities in the glass. This latter aspect is crucial for LCD glass, which needs to be of high-quality with minimal defects.

In addition to the expansion of furnace and manufacturing capacity leading to increased platinum demand, Johnson Matthey, the global chemicals and science company, believes that manufacturers have also been taking steps during this year and last to reduce the rhodium content in the alloys used in glass-making equipment, due to its high cost.

According to Johnson Matthey, rhodium consumption by the glass industry declined by 89 per cent in 2020 as manufacturers switched to solutions with a higher platinum content.

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