

E2W firms begin test rides for light rare earth magnets

To use these on their existing models

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New Delhi, 12 June

Leading electric two-wheeler (e2W) companies in India have started testing the use of light rare earth magnets on their existing models to get over the immediate supply squeeze imposed by China through an export control order from April 1, which could lead to production closure. These companies currently use medium and heavy rare earth magnets, which they used to import from China, on their vehicles.

Many of these e2W companies are hopeful of rolling out their vehicles powered by light rare earth magnets in the next three-four months.

The China export order has put seven medium and heavy earth materials — samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium (some of which are used in electric vehicles, or EVs) — under the control list. China fears these elements are being consumed for “dual usage”. But light rare earth materials are not part of the export order and they also include elements like neodymium, which are commonly used in vehicles.

A top executive of a leading 2W company said: “We are already experimenting with light rare earth magnets on our electric scooter SKUs (stock keeping units), and we have seen no impact on the efficiency of the models at all in

Trying to seek early resolution to China’s restrictions : MEA

The Ministry of External Affairs (MEA) on Thursday said that the Centre was in touch with China and trying to seek an early resolution to its April 4 export restrictions on rare earth magnets.

At its weekly media briefing in New Delhi, MEA spokesperson Randhir Jaiswal said: “We remain in touch with the Chinese side, in Beijing as well as in Delhi, to bring predictability in the supply chain for trade consistent with international practices.” This comes amid a shortage of these critical minerals in India.

Sources said that for China the export of rare earth magnets, which are used in the manufacture of cars and drones, is central to its trade negotiations with the United States. India has suffered collateral damage in these negotiations. Government sources were hopeful of an early resolution.

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terms of range, speed, battery life, and rideability. We expect that the government would be able to give regulatory clearances for the motors powered by the new magnets in the next three-to-four months. Since we have stocks till July, there can be disruption for one-two months at the most.”

Company executives also say that for testing, Chinese companies have already put their light rare earth-based magnets on the motor sub-assembly sent by Indian companies to China, and exported back to India. Some companies have ordered larger volumes of these light rare earth

magnets on their Chinese vendors through importers but they are awaiting Customs clearance, which could take a while as Chinese government rules want to ensure there is no trace of any heavy rare earth in these consignments before they are cleared.

Electric scooter makers point out that the other advantage is that for light rare earth, the source is much more diversified. It is available in India, the US, Australia, Myanmar, and Vietnam, though China still accounts for 60 per cent of the supplies of this element.

In India, heavy rare earth materials are not available in extractable quantities.

