India seeks to import two key materials from China

Dysprosium, terbium on wish list for domestic magnet production

PUJA DAS & SHINE JACOB

New Delhi, 11 June

Amid reports that at least 10 applicants are in advanced stages of receiving rare earth licences from China, sources indicate that the industry and the Indian government are pushing for the import of two key materials — dysprosium and terbium — critical for domestic magnet production.

India requires several rare earth elements, especially neodymium, praseodymium, dysprosium, and terbium, primarily for use in permanent magnets. Dysprosium and terbium, two heavy rare earth elements (HREEs) with unique properties, particularly in the realm of magnetism, are not available in extractable quantities in India. While India possesses some rare earth elements (REEs) like lanthanum, cerium, neodymium, and praseodymium, it is heavily dependent on imports for HREEs, including that of dysprosium and terbium. Indian officials are in touch with their counterparts in Beijing to schedule appointments for the Indian delegation, which will not include any government official. At present, nearly 40 applications are reportedly awaiting clearance from China. One source said that the team of industry officials has not yet zeroed in on any negotiating points, as the appointment with the Chinese government is yet to be scheduled.

"Suppliers have to meet end-use clauses based on new norms. If the previous status is not restored, we are looking to push for dysprosium and terbium," said a source.

"Our first negotiating point could be resumption status. We will have to get what we need to manufacture automotive parts. It cannot be replaced by anything else. If they are not convinced, heavy rare earth el-



Auto Inc gears up to visit China

A delegation of auto industry representatives is gearing up for a China visit to expedite the import of rare earth magnets to Indian entities, as per the industry sources. "Around 40-50 executives, representing both auto OEMs and component firms, have received visas and are now awaiting a go-ahead from China's Ministry of Commerce for a meeting," an industry source stated. No approvals have been granted so far, another source added.

ements may be pushed. We will bring raw materials and do it (processing) ourselves without depending on China," a top executive in the automotive industry said.

Neodymium is used in magnets for electric motors, wind turbines, and electric vehicles (EVs); and praseodymium is used in magnets along with neodymium. Dysprosium and terbium, two high-value REEs, are crucial for applications like EV motors, wind turbine generators, and various industrial devices requiring heat resistance and long-term performance.

"If we have to get magnets, apart from China, the US possibly is the other source from where you can get these rare earth elements. But the processing will have to be done either in China, which has 90 per cent of the processing capacity, or by Malaysia and Vietnam, which have another 7-8 per cent of the capacity. Malaysia and Vietnam can also give us processed magnets, but it is difficult to say whether we will be in a position to get supplies from them, because the entire world will be looking at them as an alternative," said Hemal NThakkar, senior practice leader and director, Crisil Intelligence. Around 90 per cent of the refining comes from China, and 7-8 per cent of the rest comes from Vietnam and Malaysia. If REEs or raw materials are taken from China and sent to Malaysia and Vietnam, it may involve higher cost and a longer duration of at least three-four weeks, Thakkar said.

"We are going to ask for every possible thing if China is not ready to approve certification for rare earth magnet exports to India. So, that may involve asking for dysprosium and terbium elements," another senior industry executive said.

"But that is not a sustainable thing to do for India, and more than that, a bigger question is: do Malaysia and Vietnam have spare capacities to take up that magnet for processing," Thakkar added.