

## Press Release Note

**For Immediate Release: January 17, 2024**

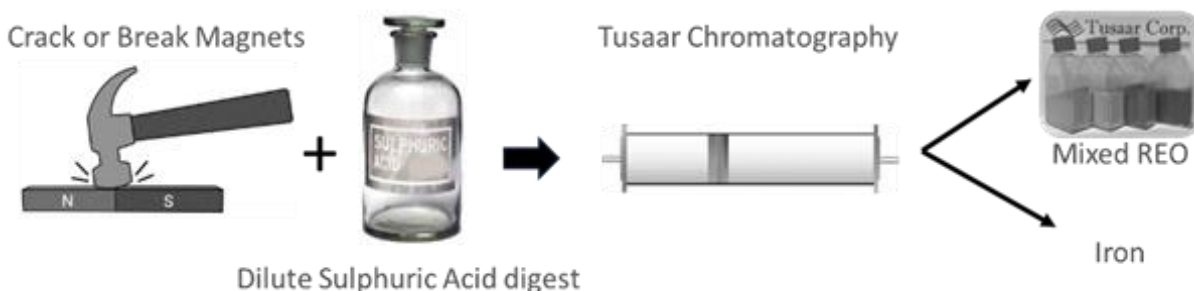
### **Tusaar Unveils Plans for \$17M Rare Earth Magnet Recycling Plant in the United States**

*Tusaar*, an innovator in rare earth element extraction, proudly announces the commencement of a groundbreaking initiative to establish a state-of-the-art \$17 million rare earth magnet recycling facility in the United States. The location and operational specifics will be determined in collaboration with the consortium involved in this project.

Drawing on the success of operating a pilot plant in Broomfield, CO, funded by the US Defense Logistics Agency, Tusaar has demonstrated proficiency in extracting rare earth elements from unconventional US-based sources. The pilot plant focused on materials such as mine tailings and virgin ores, achieving the extraction of marketable mixed rare earth salts. The reliability and efficiency of the Tusaar chromatography process has garnered interest from several mining entities exploring its application for their production requirements.

Motivated by the encouraging outcomes in separating iron and rare earth elements from partner supplied recycled magnets, Tusaar is swiftly pursuing an initial facility capable of processing 4,000 kg of magnets daily. The anticipated daily production of 1.5 tons of magnetic rare earth oxides represents approximately 5% of the current US demand for these magnet rare earths.

Tusaar's chromatography process, developed with support from the US Department of Defense (DoD) and the US Dept. of Energy (DoE), boasts simplicity and cost-effectiveness with an extraction efficiency greater than 95%. Employing readily available low-cost inorganic chemicals, ambient temperature, and low-pressure operation, the process achieves low costs enabling REE pricing commensurate with international markets, thus ensuring the long-term viability and widespread adoption of this innovative technology.



While the initial 4-ton per day capacity is deemed sufficient for current demands, Tusaar anticipates growth in magnet recycling from sectors such as automobiles, wind turbines, medical equipment, disk drives and defense applications. The plant's modular design allows for seamless capacity expansion to meet growing market needs.

The final product mix, dependent on the magnets in the recycling loop, includes mixed Nd/Pr/Dy, mixed Nd/Pr/Dy/Sm, and/or Sm/Pr/Hf, as well as Cobalt salts. Tusaar's partners will further process these materials into individual rare earths or directly into magnets.

Tusaar's innovative system demonstrates versatility by facilitating the recovery of critical materials beyond rare earths. The plant is poised to contribute to the recycling of lithium-ion battery elements, in addition to gallium and germanium, showcasing Tusaar's commitment to sustainable solutions.

The project anticipates funding from a combination of federal support and private placement, reflecting Tusaar's commitment to leveraging both public and private resources for sustainable innovation.

Tusaar actively seeks additional partnerships with suppliers of expended magnets, entities interested in off-taking mixed Rare Earth Oxides (REO), and strategic or financial investors. Collaborators joining this venture will play a pivotal role in advancing sustainable practices and addressing the growing demand for critical materials.

*About Tusaar:*

Tusaar is at the forefront of the green economy to achieve sustainable solutions by pioneering innovative technologies for the extraction and recycling of critical materials. With a commitment to environmental responsibility and technological excellence, Tusaar aims to reshape domestic manufacturing and contribute to a more sustainable future.

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