

THE OFFICE OF CLEAN ENERGY DEMONSTRATIONS

Industrial Demonstrations Program - Nexcast - Next Generation Aluminum Mini Mill

The Industrial Demonstrations Program, managed by the U.S. Department of Energy (DOE) Office of Clean Energy Demonstrations (OCED), aims to accelerate decarbonization projects in energy-intensive industries and provide American manufacturers a competitive advantage in the race to lead the world in low- and net-zero emissions manufacturing. To advance industrial decarbonization, OCED sought applications for up to \$6 billion in funding to support the demonstration of transformational technologies necessary to reduce greenhouse gas emissions in the U.S. industrial sector. Following negotiations, in November 2024, OCED awarded the Nexcast - Next Generation Aluminum Mini Mill project, located in Fort Lupton, CO, approximately \$22.3 million to conduct engineering, construction, community benefits, employee training and upskilling, and commissioning activities.



Project at a Glance

- » Total OCED Cost Share: Approximately \$22.3 million
- **» Total Project Amount:** \$44,714,384*
- » OCED Award Amount: \$22,343,545**
- » Scope of Work: Engineering, construction, community benefits, employee training and upskilling, and commissioning activities
- » Timeline: 4 years
- » Recipient: Golden Aluminum is an aluminum sheet coil manufacturer
- » Project Location: Fort Lupton, CO
- » Start Date: November 2024
 - *Represents the total project cost for the award.
- **Represents OCED's maximum cost share for the award.

About This Project

The Nextcast - Next Generation Aluminum Mini Mill project, led by Golden Aluminum, plans to upgrade its Colorado facility using the Nexcast process to reduce natural gas consumption, improve process efficiency, and recycle approximately 15% more mixed-grade aluminum scrap. The upgrades would allow the facility to produce high-quality aluminum products for electric vehicles and other clean energy technology applications. This project is also projected to decrease air pollution through use of low-nitrogen oxide (NOx) burners or other burner technologies and demonstrate a reduced carbon intensity of roughly 60% compared to industry average.

Once awarded, Golden Aluminum plans to conduct engineering, construction, community benefits, employee training and upskilling, and commissioning activities, and install and commission the Nexcast caster and conduct other associated upgrades.

OCED will provide oversight of the Nexcast - Next Generation Aluminum Mini Mill project by evaluating the status and quality of implementation of the project. OCED will review and evaluate the project's progress, including with respect to community benefits, in determining whether to continue to provide federal funding and allow the project to progress to the next funding period.

Nexcast - Next Generation Aluminum Mini Mill **Project Fact Sheet**

Project Site

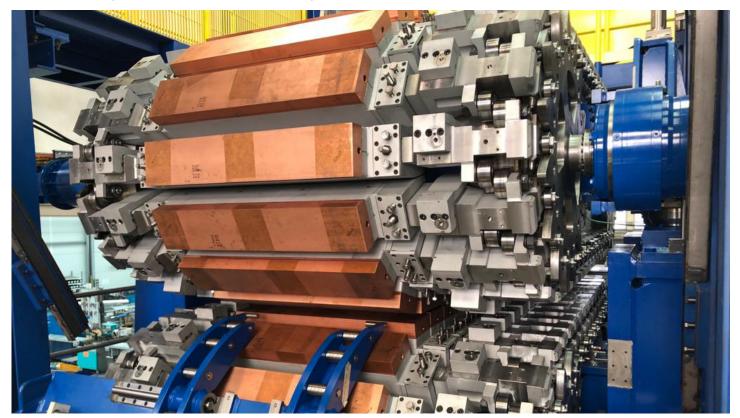
The Nexcast - Next Generation Aluminum Mini Mill project is located in Fort Lupton, in northern Colorado.

Community Benefits Commitments

Community benefits commitments are a key component of the Nexcast - Next Generation Aluminum Mini Mill project. The commitments are informed and developed—in consultation with local communities—to maximize local community benefits and mitigate potential negative impacts. The Nexcast - Next Generation Aluminum Mini Mill project plans to implement these commitments through:

- Training current employees to use this new technology following a training needs assessment and rolling out broader training and workforce development efforts.
- Assessing **local labor needs** among minority, veteran, and women-owned small businesses and determining the current level of subcontracting with these groups to maximize support and partnership.
- Engaging with relevant unions in collaboration with the engineering, procurement, and construction partner regarding the potential for securing Project Labor Agreements.
- Transparently **disclosing environmental impacts** including reduced air pollution and landfill contributions.
- Sharing project data publicly to **enhance transparency** with stakeholders and local community members.

More details on the Nexcast - Next Generation Aluminum Mini Mill's project community benefits commitments can be found in the Community Benefits Commitments Summary.

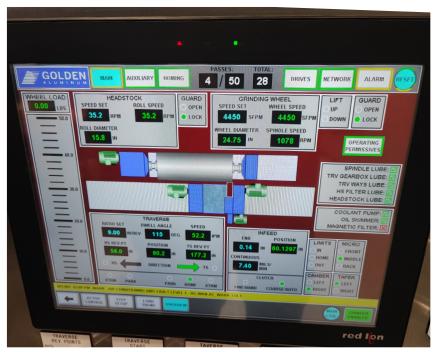


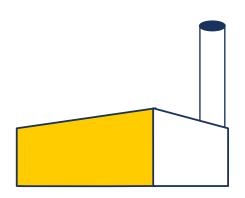
A Nexcast caster

Nexcast - Next Generation Aluminum Mini Mill Project Fact Sheet

Industrial Demonstrations Program Goals

U.S. industry is a backbone of the nation's economy, producing the goods critical to everyday life, employing millions of Americans in high-quality jobs, and providing an economic anchor for thousands of communities. Yet the sector's energy- and carbon-intensity contributes to nearly one third of the nation's carbon dioxide emissions, representing a unique and complex challenge to achieving a carbon-free economy. Decarbonizing the U.S. industrial sector will require equally unique and innovative technological solutions that leverage multiple pathways, including energy efficiency, electrification, and alternative fuels and feedstocks such as clean hydrogen. The Industrial Demonstrations Program includes new, emerging technologies that aim to help produce clean steel, cement, chemicals, and other materials used in our nation's roads, bridges, transmission lines, electric vehicles, solar panels, wind turbines, and everyday lives, which in turn, benefit every American.





A new operator station

Contact

Program Email: engage_industrialdemos@hq.doe.gov

OCED Media Email: oCEDNewsroom@hq.doe.gov

More Resources

Website: energy.gov/oced/IDP

Office of Clean Energy Demonstrations: energy.gov/oced

The U.S. Department of Energy established OCED to help scale the emerging technologies needed to tackle our most pressing climate challenges and achieve net-zero emissions by 2050. OCED's mission is to deliver clean energy demonstration projects at scale in partnership with the private sector to accelerate deployment, market adoption, and the equitable transition to a decarbonized energy system.