



DrossZero™

**Zero-Waste Dross Recycling
Solution**



Hydrova Inc.
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VALORIZATION

Do you produce dross or salt slag? Chances are, you're not capturing as much value as you could be. Hydrova's DrossZero solution recycles 100% of these wastes, leaving no material or value behind for landfill.

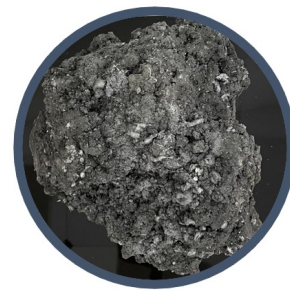
Maximizing Value

DrossZero recovers valuable aluminum, salt flux, hydrogen, and oxide products. Aluminum, salt flux, and hydrogen can all be directly recycled in your furnaces on-site while oxides can be sold to our cement partners.

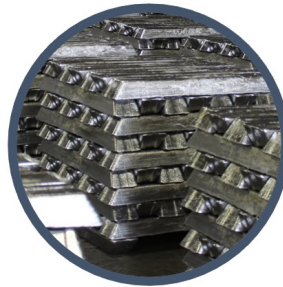
Sustainability & Resilience

DrossZero enables you to achieve a zero-waste footprint while decarbonizing your facility with green hydrogen. This prepares your facility to be resilient in the face of future environmental regulation.

We Turn This



Into This

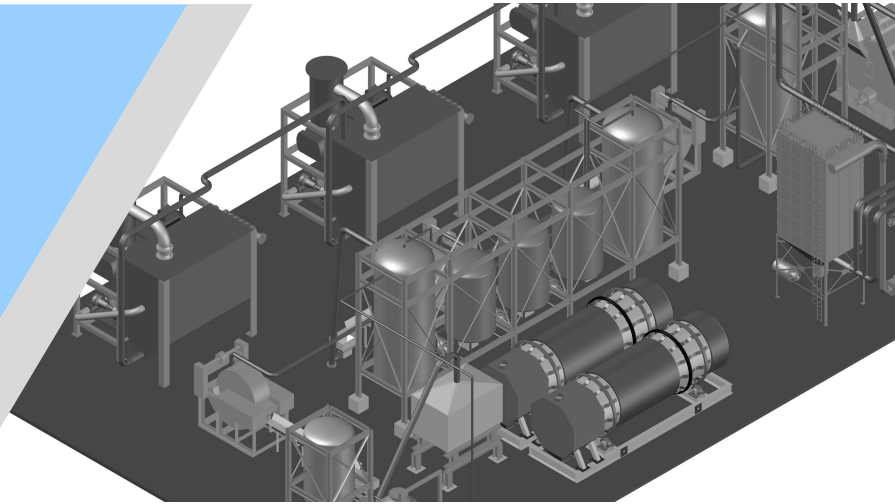


TECHNOLOGY

Hydrova's DrossZero System

DrossZero is pioneering the cutting edge of zero-waste dross recycling. Developed out of MIT and EPA research, DrossZero utilizes Hydrova's patent-pending innovations in dross valorization and hydrogen production technology, while incorporating the latest advancements in materials science and automation.

DrossZero is customizable to meet the scale of your dross/salt slag production. DrossZero is also compact, providing an on-site solution while minimizing footprint.



Factors that affect DrossZero pricing:

- Dross/salt slag throughput
- Dross/salt slag composition
- Facility location

Get in touch below for more information on a DrossZero system that can suit the needs of your facility.

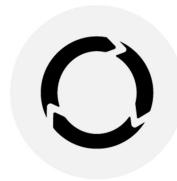
BENEFITS

The Hydrova Advantage

Hydrova helps dross and salt slag producers maximize value while achieving core sustainability objectives of waste reduction and decarbonization.

Circular Economy

Zero waste left behind for landfill, 100% of value captured.



Circular Economy

Green Hydrogen

Producing carbon-free energy from your waste.



Green Hydrogen

Freight Savings

Hydrova's on-site solution avoids the cost of long-distance freight to designated facilities.



Freight Savings

Cost Savings

Why pay a landfill to take your waste? Use DrossZero instead to create new revenue streams and cost savings.



Cost Savings

CASE STUDY

Partnership with TST Inc.

“The process of melting aluminum scrap creates dross and salt cake that is difficult to recycle without having waste end up in a landfill. Hydrova’s technology solves that problem by utilizing 100% of this co-product into valuable products.” -Andrew Stein, CEO of TST Inc.

In Hydrova’s DrossZero pilot with TST Inc., California’s largest aluminum producer, Hydrova is enabling TST to recycle their black dross with zero waste.



Aluminum and salt flux are recovered from the dross for direct reuse in the furnaces from which they came. Oxide products recovered from the dross provide a high-quality source of aluminum oxide, which is salable to innovative cement producers—for example, CTS Cement, the inventors of Rapid Set® cement, with whom Hydrova has built a partnership. Finally, the green hydrogen produced can be used as a clean fuel to help decarbonize TST’s furnaces via natural gas blending or electricity consumption via a fuel cell.

SUSTAINABILITY



A Circular and More Sustainable Approach

Millions of tons of dross and salt slag go to landfill every year. Hydrova's mission is to help customers tap into the unrealized potential of this waste while keeping it out of landfill. By focusing on high-quality, low-carbon products like hydrogen, aluminum alloys, and innovative cement products, Hydrova affords a second life to these waste streams in a way that is profitable to those that produce them.

To achieve net zero by 2050, aluminum producers will need new technologies that can help decarbonize their processes in innovative ways. Hydrogen will continue to be a critical clean fuel for any decarbonization strategy. At Hydrova, we believe that there is an exciting opportunity for decarbonization sitting right under our customers' noses. Hydrova's novel waste-to-hydrogen process creates a valuable decarbonization fuel, helps reduce tolling fees by recycling waste into valuable products, and improves profitability by generating these value streams, creating a win-win-win solution for climate change, waste reduction, and aluminum recyclers.

CONTACT US

For more information, please fill out our inquiry form at
<https://www.hydrovatech.com/inquiry>