

A worker in a yellow and blue high-visibility uniform is adjusting a large, complex industrial furnace. The furnace is a tall, cylindrical structure with various pipes, valves, and a robotic arm. The worker is wearing safety glasses and is focused on the task. The background is dark, highlighting the machine and the worker.

The World's First Portable Furnace is just USD \$450,000

Pyrometallurgical test work that used to take months using an external provider with a specialist furnace can now be done by you – in a day – on location.

ISASMELT™

The ISASMELT™ F600 is the world's first portable furnace. It comes pre-built and pre-commissioned.



Just connect fuel, air, oxygen and the off-gas hygiene system, then plug it in and use it. Because it uses the unique top-submerged lance technology (TSL) as a full scale ISASMELT™, the F600 is flexible. So it'll perform any duty you need.

The ISASMELT™ F600 can also be used in your real world plant. For instance, you can oxidise impurities out of feeds with precious metals. The F600 arrives in a shipping container and once assembled is just three metres at its highest point. So you can install it anywhere.

Available now for just USD \$450,000.

Hire options also available.

The F600 at a glance

- The F600 is easy to run yet highly flexible
- It's pre-commissioned so there are no surprises – safe plug-and-play at any location
- It's a miniaturised working ISASMELT™ furnace, so it's easily scalable, and comes with all the benefits of the advanced ISASMELT™ technology
- It's customisable so it'll perform R&D test work on any process
- As an owner-operator, you can replicate your existing smelter and test sustainable operation with new feed materials, reducing risk and keeping all the know-how



For more:

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How does the F600 work?

The F600 is simple:

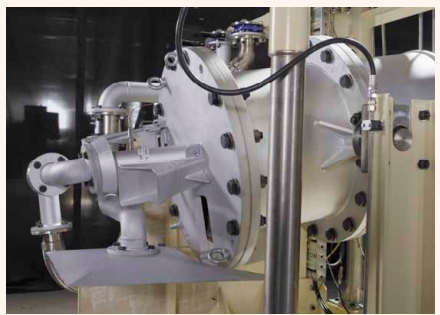
- The lance is brought in through the top of the furnace and its tip is submerged into a molten slag bath. The prepared feed is added at the required rate.
- Oxygen enriched air from the lance produces a turbulent bath in which the feed is reacted.
- When required, the lance is removed and the furnace tilted to remove the product through the front spout.
- Off-gas from the vessel and any fume from the tapped product is drawn away using the bespoke off-gas system.



How easy is it to install?

Installation is very straight forward:

- Your new F600 will have been tested and then partially disassembled for ease of handling during transportation. It will be packed into five crates which will be loaded into a shipping container.
- Just remove it from the shipping container and assemble it using the installation manual and drawings provided by us.
- Providing the required site services are available, you can complete assembly in a normal work day.



What can you do with your new ISASMELT™ F600?

Create your new flow sheet:

- The F600 directly oxidises your feed, through submerged injection, and does this quicker and more efficiently than other methods.

Replicate your existing smelter facility:

- If you don't have an R&D department or you want to modernise yours, use the fully customisable F600.
- The F600 is a great training tool for site metallurgists and new operators.
- Try new concentrates that the marketing team recommend.

Test new ore bodies and feeds:

- The F600 gives you the opportunity to minimise technical risks associated with different feeds.
- You could request a sample of feed be sent to site and quickly analyse it using the F600.
- Test new ore bodies and or feed sources like reprocessed tailings and slags.

Enhance your university's capabilities:

- Instead of using the gram scale or 100 kilogram scale, use the F600. It's in between, so it'll offer more accurate results for a relatively cheaper price.

Grow your internal research expertise:

- Create your own test facilities on site.
- Cover the full suite of test work process conditions for your investigations to produce critical metals for the circular economy and renewable energy systems.

Your needs will vary according to your site specific conditions. Talk to us to understand how best to utilise the F600



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Why is the F600 better than what you're already doing?

Three reasons:

1. Allows sites to test new processes and feeds.
2. Provides clarity before and during various stages of a project.
3. It's quick, affordable and easy.

How do you get your F600?

Tell us the feed types you want to explore and we'll prepare the F600 to suit your requirements.

Contact the ISASMELT™ team today to join our F600 production line.

CONTACT

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