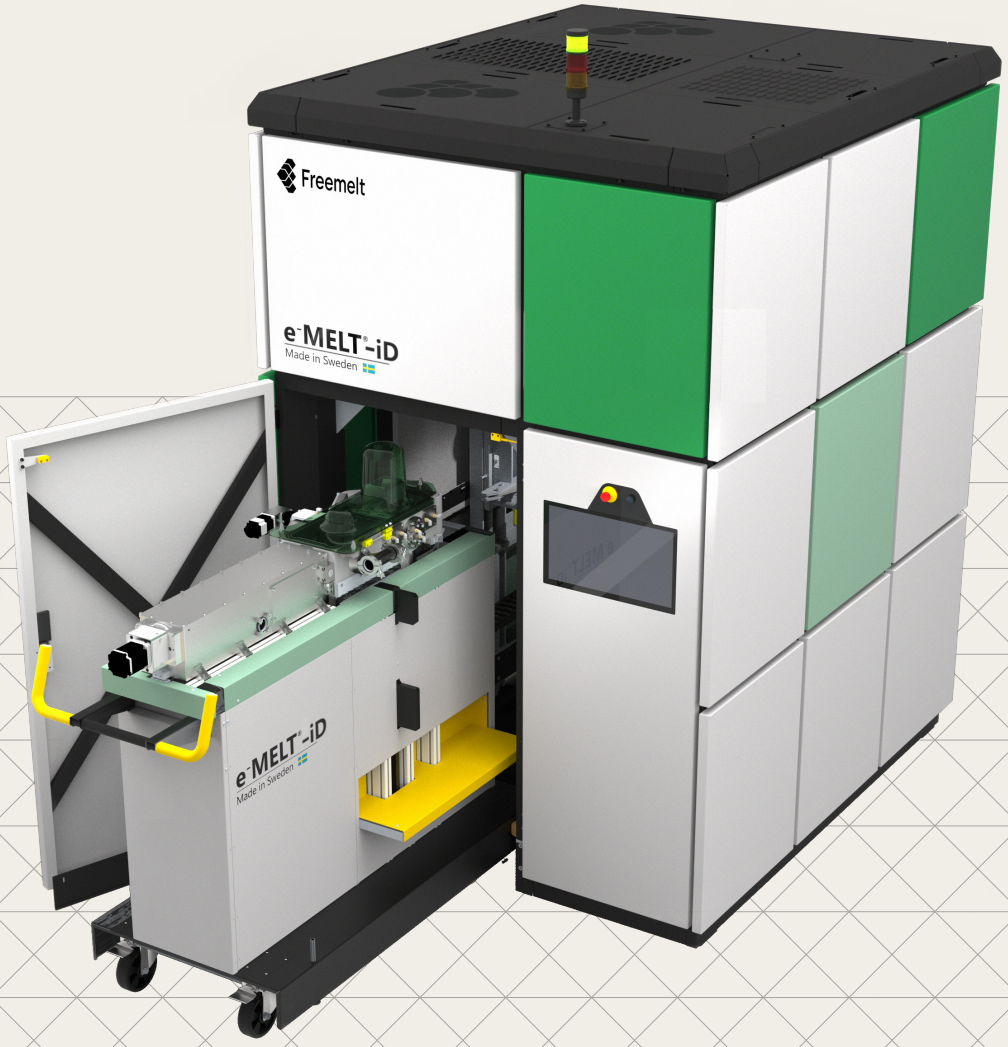
e-MELT®-iD

Freemelt

For efficient product development



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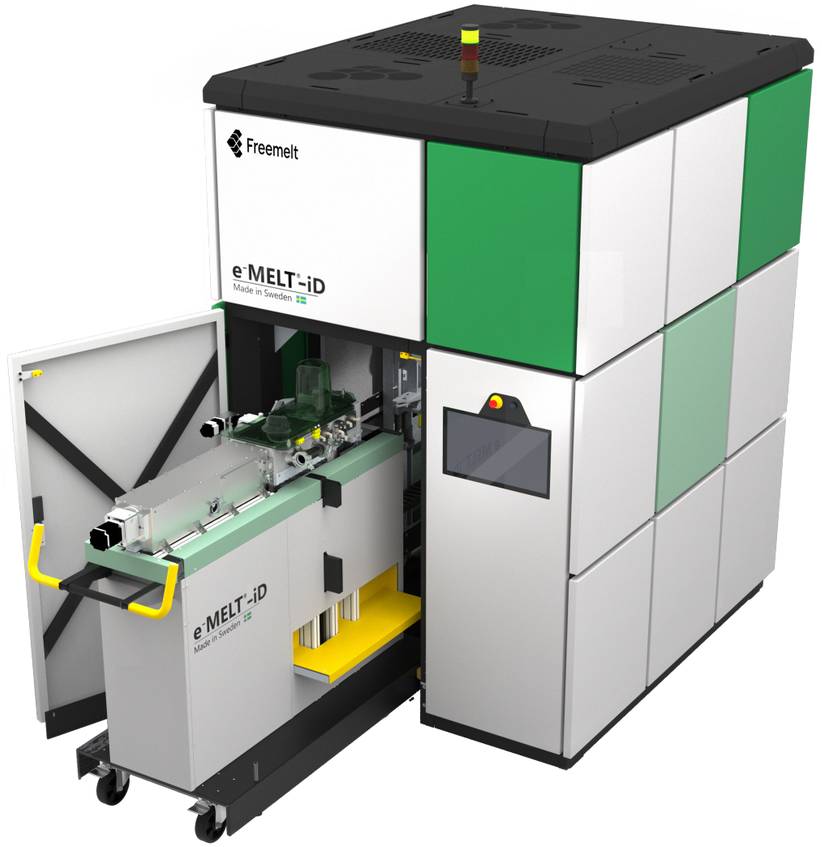
For your development needs

Collaboration – Innovation – Transformation

- e-MELT®-iD is built on Freemelt's proven E-PBF technology, featuring open architecture for complete process control and full data access.
- Designed for application development and pilot production, bridging the gap between R&D and industrial manufacturing.
- Seamless process transfer across the platform, from Freemelt® ONE to e-MELT®-iD to e-MELT®-iM, supporting certification and qualification before scaling up volumes.



Technical data e-MELT® -iD

Beam power	Variable 0-6 kW
Beam acceleration voltage	60 kV
Build envelope	Ø 100 x H 325 mm
Process vacuum level	1x10^{-5} hPa (mbar)
Build sensorics	Backscattered electron detector, NIR camera
Build module docking to beam on	20 minutes
Non gravity powder feed	Push piston
Spot size (min, FWHP)	200 µm
Operating system	Linux
Build file format	Open Build File (OBF)

Features

Open source system

Full control of electron beam parameters
Empowering creation of intellectual property

Superior electron gun

Maintained beam quality across full power range

Outstanding heat management

ProHeat® Preheating
Pixelmelt® Spotmelting
Build tank cooling

Product development and initial production

Unmatched process design freedom
On-line layer-wise build process monitoring
Seamless transfer to e-MELT®-iM

Read more about Freemelt's services

Freemelt

Freemelt is your partner through the full AM journey!

About Freemelt

A Swedish company founded 2017 with extensive knowledge, experience, and patents within Electron Beam Powder Bed Fusion (E-PBF).

Freemelt offers a complete product and service offering, supporting customers from early material process development through application and product development followed by a seamless transition to industrial serial production. We serve customers in the defense, energy, and MedTech sectors across Europe, U.S., and Asia, helping them drive innovation and enhance production efficiency.

Book a demo or request more information: