

# JAM-5200EBM

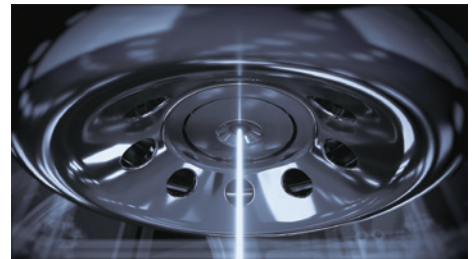
## Electron Beam Metal AM Machine



Using electron beam control technology of the world's highest level performance electron microscope and electron beam lithography system for semiconductor manufacturing, JEOL has developed an "Electron Beam Metal AM Machine" with high power, high speed and high density manufacturing. Enables mass production with high quality and high reproducibility.

### Long-life Cathode

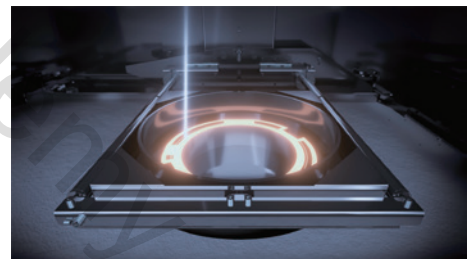
The Long-life Cathode which lasts over 1,500 hours, can greatly reduce downtime for cathode replacement.



### Helium-Free and powder dispersal prevention system "e-Shield"

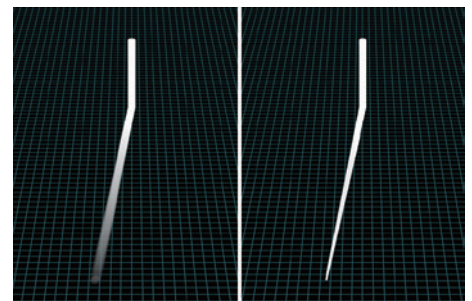
No helium gas is required to prevent scattering of powder. In addition, JEOL's unique powder dispersal prevention system avoids the scattering phenomenon.

Thanks to the helium-free environment, not only can parts be manufactured in a clean space at a low cost, but "the surface of the cathode is also less susceptible to damage, allowing the electron beam to remain stable." As a result, the manufacturing quality can be maintained until the end of the cathode's lifetime.



### Automatic Electron Beam Correction

The focus and spot shape of the electron beam are automatically corrected according to the irradiation position by the technology developed in our electron beam lithography system for semiconductor manufacturing.



Uncorrected

Corrected (JEOL)

### Remote Monitoring System

The manufacturing status and the machine conditions can be checked from a remote location at any time.

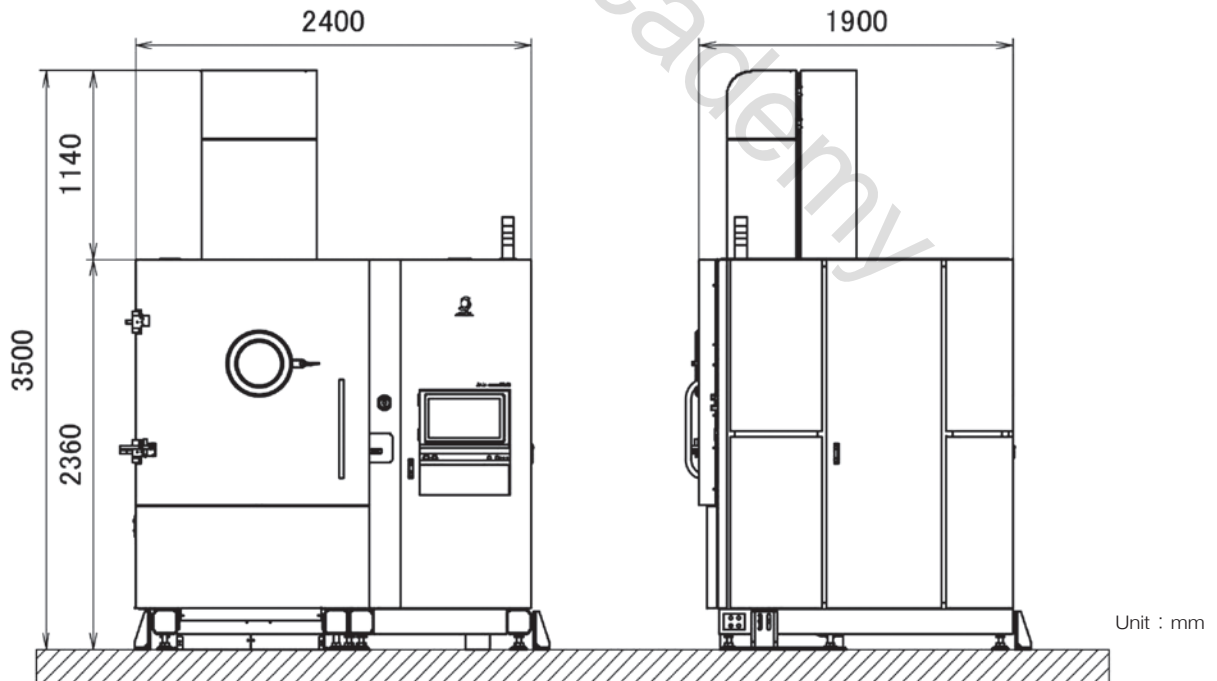
An alarm notification function is also available.



## ■ Main Specifications

Manufacturing method	Powder bed fusion
Manufacturing dimensions	Maximum 250 mm (Dia.) × 400 mm (H)
Electron beam output	Maximum 6 kW
Lifetime of cathode	1500 h or longer
Chamber pressure(during melting)	0.01 Pa or lower
Inert gas(for charging prevention)	Not required
Manufactured product cooling system	Equipped
Powder dispersal prevention system	e-Shield
Beam correction	Automatic (Focus, Astigmatism, Distortion)
Power supply	3-phase, 200 V (±10%), 35 kVA
Weight	4900 kg
Data format	STL

## ■ Dimensions



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