

Turn-Key solution

1. Fast setup time

Reduce integration risk, product standardization and streamline technology adoption for clients seeking seamless robotic integration and its associated benefits.

3. Affordable solution

Accessible with a lower entry cost and a standardized pricing model.

5. Best-in-class components

A self-supporting platform featuring a robot and positioner within a laser-safe enclosure, integrated with the Meltio Engine, Meltio Space, and all necessary accessories.

7. Focus on Printing

One week of on-site training designed to empower end users to achieve successful printing and swiftly develop applications. This training is complemented by our tailor-made 3D printing slicing software, Meltio Space, ensuring a seamless transition to advanced printing capabilities.

2. Easy to install. All components included

Engineered for rapid deployment, this turn-key solution provides customers with a ready-to-use product for robotic metal 3D printing, significantly reducing setup time and maximizing productivity from day one.

4. Plug and Play Installation

This solution provides customers with a ready-to-use Robot Cell for metal 3D printing, simplifying the lengthy integration process and significantly reducing long assembly lead times for faster operation.

6. Safe, Tested and Certified

Compliant with European CE and laser safety regulations, this system incorporates multiple quality controls integrated directly from the factory, to ensure the highest standards of safety and reliability for maximum performance.

8. Meltio Space slicing software for Robot

An exceptional software solution tailored for the Meltio Engine, offering optimized print profiles and advanced printing strategies to enhance performance and ensure outstanding print quality.



Get to know us!

www.meltio3d.com

An affordable turn-key solution for the Meltio Engine Robot Integration. It is designed to provide industries with a secure and efficient solution for manufacturing metal 3D printed parts.

The Meltio Engine Robot Cell is the most versatile & capable solution for 3D printing, repair, cladding and feature addition.



Meltio Robot Cell

Advanced Additive Manufacturing Robotic System

MELTIO

Technical Details

Dimensions (WxDxH): 4.050 x 2.350 x 3.000 mm
Indoor use only

Print Envelope: 1 meter diameter printing volume with continuous positioner axes interpolation. Actively Cooled 300x400 mm build platform

System Weight: 4.000 kg

Laser Type: Meltio Engine Robot Integrated and Tested

Movement System: 6- Axis Robot Arm & 2-Axis Workpiece Positioner

Platform: Structural Steel with Laser-safe Class 1 enclosure with CE certification. All equipment anchored to the platform

Integration: Unified Control Panel, 4k WebCam monitoring & Live Timeline of sensors and 3D model based on reading TCP positions from robot

Slicing software: Meltio Space one year subscription included. Pre-defined Print profiles and slicing strategies. Focused on ease of use

Power Input: 385-415V 50/60Hz (3W+N+PE) 20kw peak 7kw avg. upon request: 230V 50/60Hz (3W)

Required Inputs: Inert Argon Gas supply between 2 to 5 bar. (Meltio offers an optional Gas Regulator) & Internet Lan cable connection

Accessories: Inert Bubble for full Print envelope with Independent Atmospheric Control O2 and Humidity and Temperature Monitoring

- Indoor use only.
- Three phase 440V 60Hz 5 poles (3W + N + PE) // Three phase 230V 60Hz 3 poles (3W), 24kw peak power.
- Inert Argon Gas supply between 30 to 75 PSI.
- Internet Lan cable connection.
- Minimum factory floor (LxWxH) 6.045 x 2.540 x 2.997 mm, including 1 extra meter to the right and left of the cell.
- The front of the cell must remain clear to ensure easy access, while the back can be positioned against a wall.
- The cell is designed to be loaded and unloaded using a forklift (with a minimum capacity of 4,535 kg.).
- Load moving skates can be used for relocating the cell on-site (note that these are not included).

Applications



Conveyor Belt

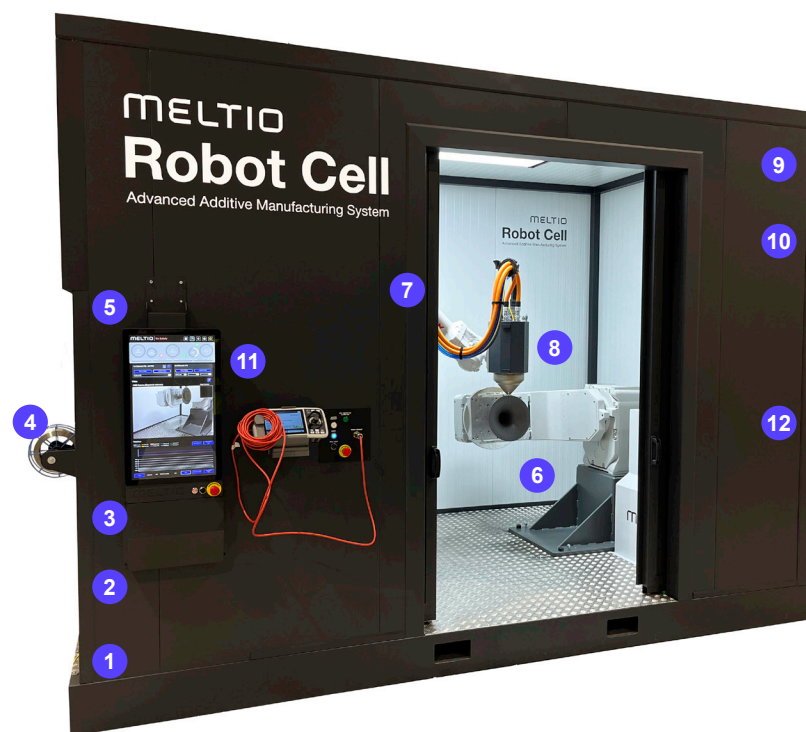
Size: 130 x 903 x 855 mm
Weight: 4.99 kg
Material: Stainless Steel 316L



High Performance Exhaust Header

Size: 160 x 326 x 190 mm
Weight: 5.95 kg
Material: Stainless Steel 316L

Meltio Robot Cell Configuration



1. Structural Steel Platform with Laser-safe Class 1

3. Unified Control Panel

5. Standard Warranty

7. 6- Axis Robot Arm & 2-Axis Workpiece Positioner

9. External Dimensions (LxWxH)
4.050 x 2.350 x 3.000 mm

11. 4k WebCam Camera

2. Meltio Space Slicer Software included

4. Dual Wire for increased productivity

6. Build Volume with positioner interpolation:
1000 mm (diameter) x 1200 mm

8. Laser System: Meltio Engine Blue

10. Optional Inert Bubble

12. Actively Cooled Build Platform

*The solution is offered by localized, qualified partners. It may differ in external appearance and details from the representative photo.

Meltio Space Slicing Software

Engineered for the Meltio Engine integrated into a Robot.

1. Empower Meltio user

Revolutionizes robotic additive manufacturing by providing an intuitive interface and a comprehensive set of features designed for popular robotic brands.

3. Unlock complex geometries

Delivers a variety of toolpath strategies that overcome limitations, enabling precise movements and the creation of intricate designs.

5. Dynamic innovation

Delivers continuous updates and enhancements, ensuring your technology stays ahead of the curve with the latest slicing strategies and advancements.

7. Best value for money

Combines affordability, advanced capabilities, and an user-friendly interface to maximize both investment and project outcomes.

2. Maximize Meltio Engine

Enhances Meltio Engine functionalities by offering optimized print profiles tailored for various materials and applications.

4. Reduce programming time

Offers a range of toolpath strategies that overcome limitations, enabling precise movements for intricate designs while significantly reducing programming time.

6. Reliable support

Comprehensive support, training programs, and resource platforms empower users to fully leverage and optimize Meltio technology.



Powered by Meltio

Turn-key Meltio Engine solutions by our partners.

“Powered by Meltio” represents a transformative market segment that adapts to various industries while upholding the quality and reliability of the Meltio brand.



Accufacture
Robot Cell (USA)