



COMPLETE METALWORKING SOLUTIONS

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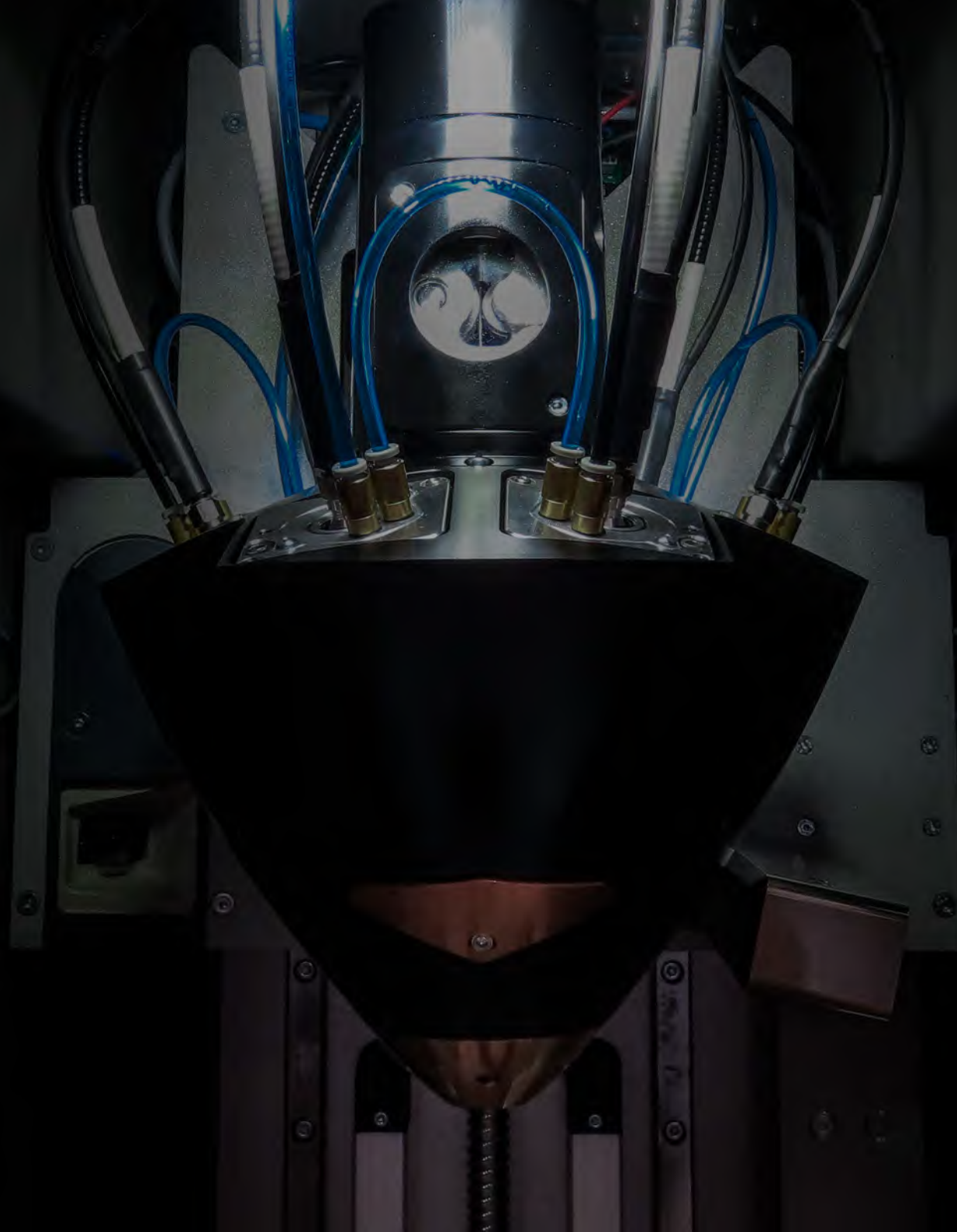
MELTIO

Wire-Laser Metal 3D Printing



Get to know us!

Write your website here



Let's 3D print something great together.

Discover Meltio's state-of-the-art wire-laser metal 3D printing technology - either as a standalone metal 3D printer or integrated into a CNC machine or a robot arm. Our metal additive manufacturing solutions bring unprecedented possibilities to enjoy 3D printing advantages in everyday part production.

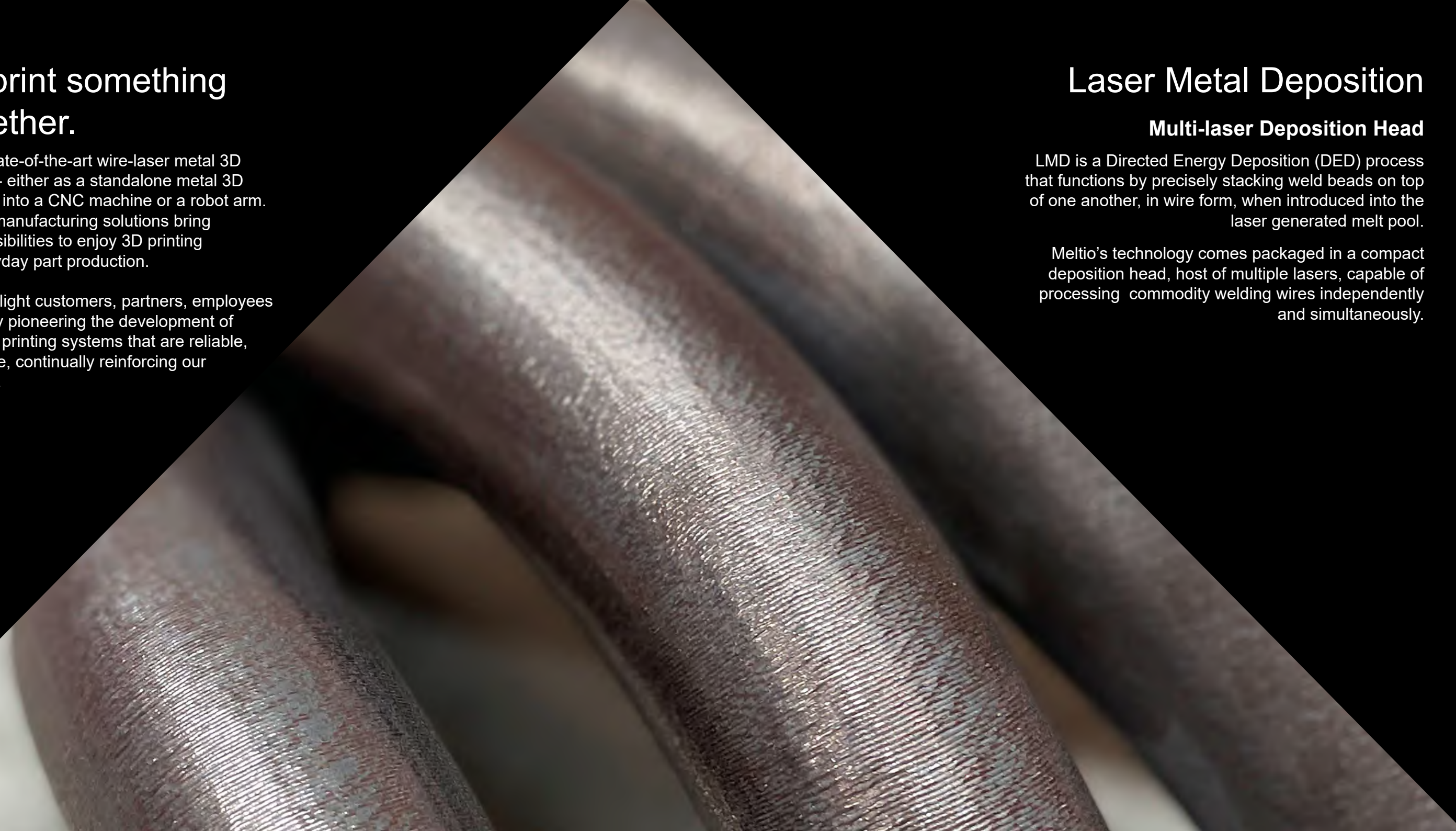
Our mission is to delight customers, partners, employees and shareholders by pioneering the development of affordable metal 3D printing systems that are reliable, safe and easy to use, continually reinforcing our status as disruptors.

Laser Metal Deposition

Multi-laser Deposition Head

LMD is a Directed Energy Deposition (DED) process that functions by precisely stacking weld beads on top of one another, in wire form, when introduced into the laser generated melt pool.

Meltio's technology comes packaged in a compact deposition head, host of multiple lasers, capable of processing commodity welding wires independently and simultaneously.



Meltio M450

Turn-key Metal 3D Printer

Designed for industry without the need for industrial infrastructure; affordable, reliable, safe and easy-to-use metal 3D printer. Ideal for small to medium size part fabrication and multi-metal 3D printing research.

The Meltio M450 allows users to produce metal parts of very high density in a single-step process on a very compact footprint.



- Reliable
- Safe
- Easy-to-use
- Affordable

Technical Specifications

Dimensions (WxDxH):	560 x 600 x 1400 mm	Process Control:	Closed-loop, laser and wire modulation
Print Envelope (WxDxH):	145 x 168 x 390 mm	Enclosure:	Laser-safe, sealed, controlled atmosphere
System Weight:	250 kg	Interface:	USB, ethernet, wireless datalink
Laser Type:	6 x 200W direct diode lasers	Cooling:	Active water-cooled chiller included
Laser Wavelength:	976 nm	Wire Feedstock:	Diameter: 0.8-1.2 mm Spool Type: BS300
Total Laser Power:	1200 W	Accessories:	Laser Alignment System, Hot Wire and Dual Wire
Power Input:	208/230 V single phase or 400 V three phase		
Power Consumption:	2-5 kW peak depending on selected options		

Meltio M450 Applications



Aircraft Bracket

Size:	109.6 x 160.8 x 34.8 mm
Weight:	1.5 kg
Material:	Titanium 64



Dual Material Pipe

Size:	108 x 108 x 150 mm
Weight:	4.554 kg
Material:	Stainless Steel 316L + Nickel 718



Learn more!

Meltio Engine CNC Integration

Hybrid Manufacturing Integration

The most affordable hybrid manufacturing solution, fitting almost any CNC machine on the market. Enable metal 3D printing and machining of complex geometries in a single process step.

The Meltio Engine is the ideal CNC complement for near net shape manufacturing, repair and feature addition.

- Hybrid
- Retrofitting
- Geometry Freedom
- Part Repair



Technical Specifications

Dimensions (WxDxH):	390 x 700 x 1025 mm	Process Control:	Closed-loop, laser and wire modulation
Print Envelope (WxDxH):	Depending on the integration	Cooling:	Active water-cooled chiller included
System Weight:	142 kg	Printhead Retracted Size (WxDxH):	255 x 320 x 872 mm
Laser Type:	6 x 200W direct diode lasers	Printhead Unretracted Size (WxDH):	255 x 320 x 1045 mm
Laser Wavelength:	976 nm	Printhead Weight:	46.5 kg
Total Laser Power:	1200 W	Wire Feedstock:	Diameter: 0.8-1.2 mm Spool Type: BS300 or wire drums
Power Input:	208/230 V single phase or 400 V three phase	Accessories:	Laser Alignment System, and Dual Wire
Power Consumption:	2-5 kW peak depending on selected options		

Meltio Engine CNC Integration Applications



Watch Bezels

Size:	53.37 x 44.59 x 10.85 mm
Weight:	0.245 kg
Material:	Titanium 64



Elbow

Size:	ext. 70 Ø mm - int. 50 Ø mm
Weight:	0.515 kg
Material:	Stainless Steel 316L



Learn more!

Meltio Engine Robot Integration

Large-scale Metal 3D Printing

Turn a robot arm into a metal 3D printing system with no inherent size constraints. The Meltio Engine Robot Integration is the perfect platform for large and complex 3D printing, repair, cladding and feature addition.

The Meltio Engine integrates with any robot arm manufacturer and interface on the market.

- Large-Scale
- Geometry Freedom
- Part Repair
- Cladding



Technical Specifications

Dimensions (WxDxH):	390 x 700 x 1025 mm	Process Control:	Closed-loop, laser and wire modulation
Print Envelope (WxDxH):	Depending on robot reach	Cooling:	Active water-cooled chiller included
System Weight:	142 kg	Printhead Size (WxDxH):	202 x 297 x 784 mm
Laser Type:	6 x 200W direct diode lasers	Printhead Weight:	15.5 kg
Laser Wavelength:	976 nm	Wire Feedstock:	Diameter: 0.8-1.2 mm Spool Type: BS300 or wire drums
Total Laser Power:	1200 W	Accessories:	Laser Alignment System, Hot Wire and Dual Wire
Power Input:	208/230 V single phase or 400 V three phase		
Power Consumption:	2-5 kW peak depending on selected options		

Meltio Engine Robot Integration Applications



Rotary Screw Compressor

Size:	75 x 75 x 230 mm clad
Weight:	2.550 kg
Material:	Stainless Steel 316L



Pipe Manifold

Size:	205 x 360 x 473 mm
Weight:	5.22 kg
Material:	Stainless Steel 316L



Learn more!

Metal 3D Printing Wire

Single Wire and Dual Wire Metal 3D Printing

Meltio's Laser Metal Deposition process achieves exceptional material mechanical properties using single wire and dual wire.

Choose the ideal welding wire for your application: unlimited third-party commodity material or qualified Meltio Wire Materials that secure the user experience.

- Clean
- Safe
- Affordable



Meltio Wire Materials

Meltio Stainless Steel 316L	Qualified	Meltio Tool Steel H11	Qualified	Meltio Nickel 718	Qualified
Meltio Stainless Steel 308L	Qualified	Meltio Invar	Qualified	Meltio Nickel 625	Qualified
Meltio Stainless Steel 17-4PH	Qualified	Meltio Mild Steel ER70S	Qualified	Meltio Titanium 64	Qualified

Metal 3D Printing Software

Meltio provides an open platform for software that meets a variety of industrial application demands as well as proprietary software tailored to the wire-laser metal 3D printing process which is seamlessly integrated with Meltio's hardware and material portfolio.

Meltio Horizon

It's a proprietary toolpath generator software for 3-axis metal 3D printing, tailored specifically to our wire-laser deposition process with the Meltio M450 metal 3D printer.

Meltio Space

It's a toolpath generator software for the Meltio Engine Robot Integration with an easy-to-use interface for planar, non-planar and variable extrusion toolpaths. It also includes 2-axis workpiece positioner interpolation, kinematics simulation, collisions check and cell configuration.



Discover more!