mCreate 3D printer

- Education Application Scenarios
- Positioning
- Main Features
- Other Features
- Specification

Education Application Scenarios

Support for courses such as 3D design

mCreate turns abstract 3 dimensions into visual and tactile objects, facilitating the cultivation of innovation and creativity in primary and secondary schools.

Support for club events, competitions, and maker activities

mCreate allows students to make special parts and models for club events, competitions, and other activities, developing their hands-on skills and problem-solving abilities.

Support for higher vocational college education

mCreate brings creative industrial design from drawing to reality, boosting students' creativity and gearing them up for future careers.

Makeblock mCreate

Smart leveling versatile 3D printer

- ‘Genius’ Smart Leveling
- Patented smart nozzle, Change nozzle in 3s
- 3D Printing and Laser Engraving 2-in-1
- 220*220*295mm Large Build Volume
- Flexible Magnetic Build Plate
- Full-color Touch Screen
- Resume Printing after Power Outage
- Support STEAM Education

mCreate

mCreate is a versatile desktop 3D printer featuring the innovative Genius smart leveling technology for accurate printing. Our patented smart nozzle, flexible magnetic build plate and the ability to resume working even after a power outage, enable mCreate to deliver a remarkable print success rate and quality. By quickly switching to the laser engraving mode, the machine meets the needs of a broader range of applications in STEAM education or other creative projects. Built for materializing creativity, mCreate make ideas tangible.

Main Features

Reliable & High printing success rate

New Technologies Help Enhance Printing Success Rate

3D printing & laser engraving 2-in-1

Laser Engraving Mode Presents Brilliant Designs

Easy to use, Ready to print

User-Friendly Operations for Beginners

STEAM education supported

Combine with mBuild, Laserbox to create more

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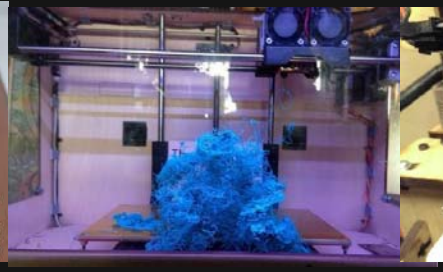
A leveled bed is a prerequisite for an accurate print

98%

Failed print caused by the failure of the first layer printing

87%

of them are due to the improper bed leveling/unleveled



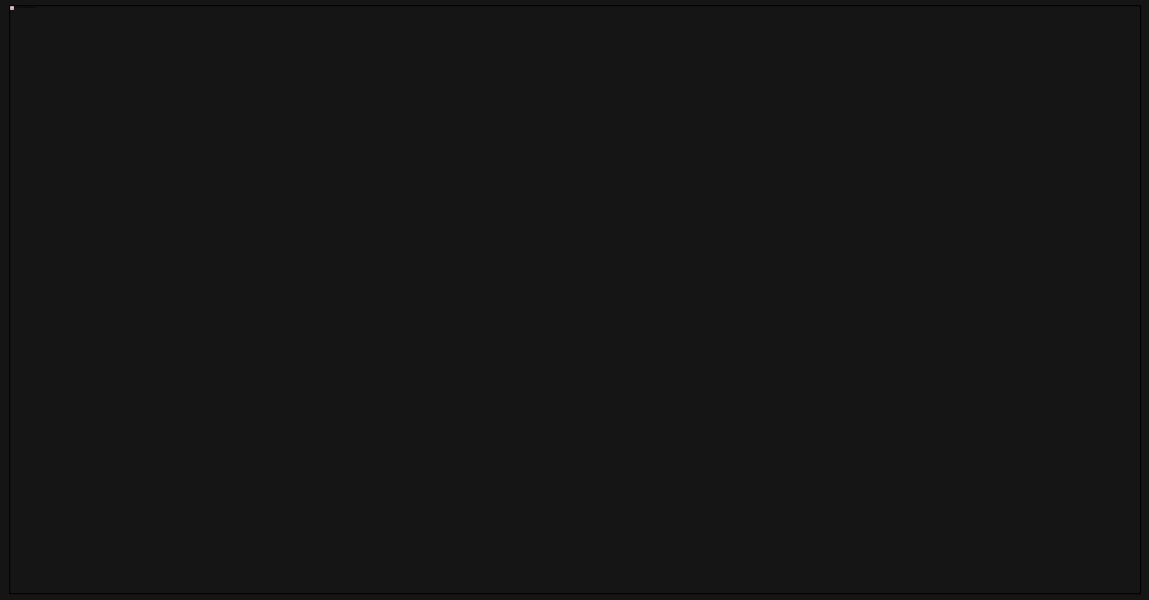

How does other 3D printer do the bed leveling?

Manual Bed leveling

X complicated and frustrating experience

X a risk of human error

X tedious and time-consuming



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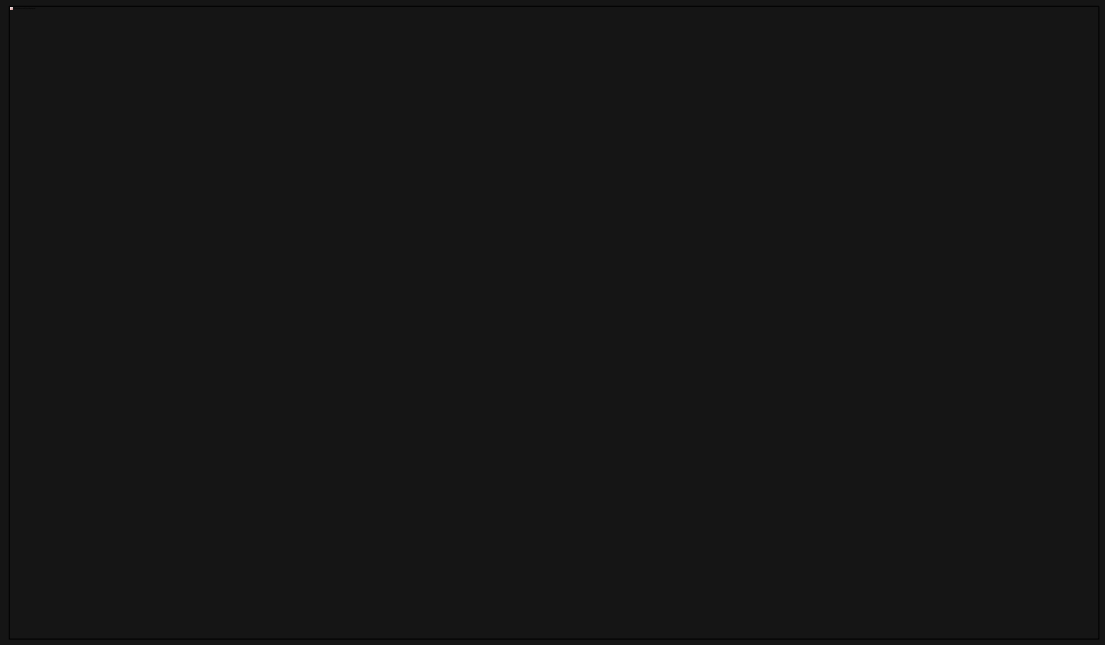
How does other 3D printer do the bed leveling?

Automatic Bed leveling

X indirect measurement

X mechanical errors, influence the measurement accuracy



3D printer with auto-leveling has a switch or proximity sensor near the tip of the print head that “probes” specific points on the platform when the bed leveling process is first initiated.

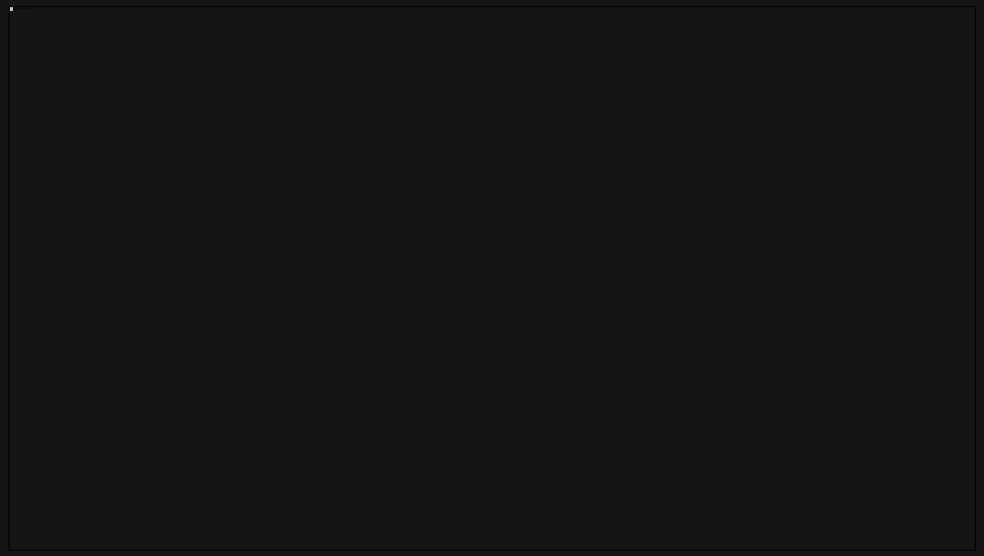
Makeblock mCreate

Genius smart leveling creates accurate prints

| Avoid errors

| Hassle-free

| Truly guarantee the success rate of the first layer printing



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Patented smart nozzle makes printing better and steadier

| AI-enabled sensor, measurement accuracy within 0.01mm

| Integrated extruder, Quick nozzle replacement in 3s

| Ultra-quiet cooling system, a 360-degree circular airflow pattern to enable even cooling for discharge

| Intelligent filament sensor， avoid print failure caused by a material shortage.

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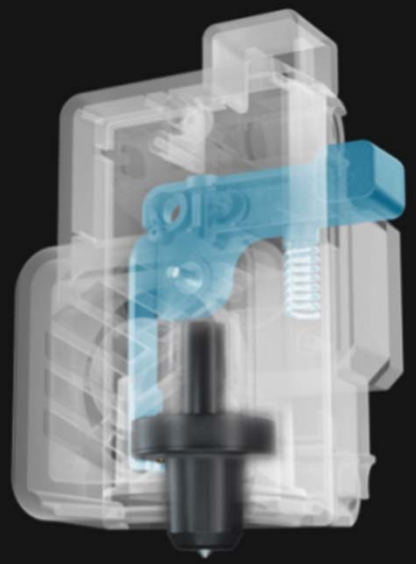

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Magnetic flexible printing platform supports various materials and easy pickup of output

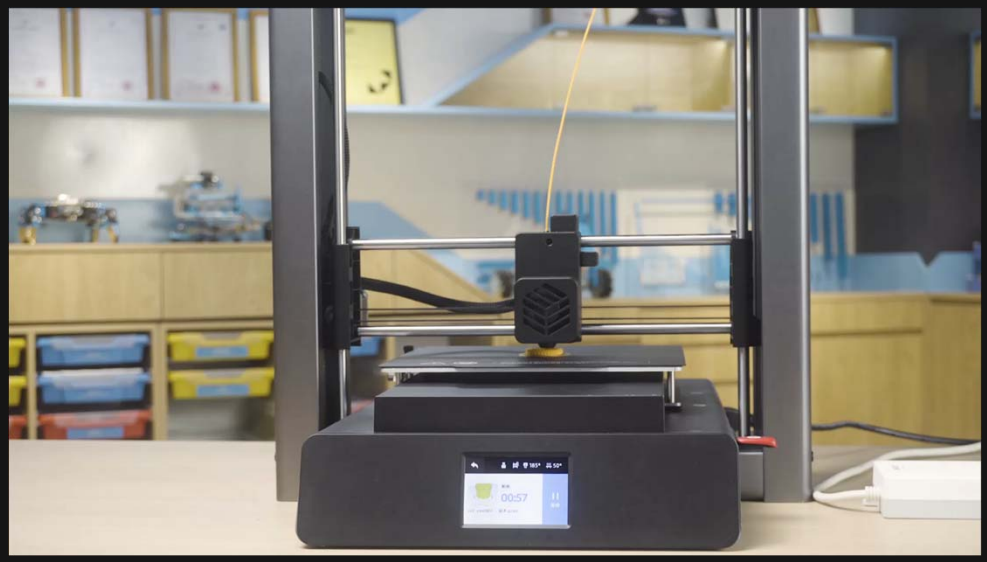
| The magnetic cover is heated evenly which enhanced the adhesion of the 3D print as well as preventing edge warping and curling.

| After printing, you can take off the magnetic cover and easily remove the output without needing a scraper.

Click to watch the video

Resume printing after a power outage

The nozzle will rise instantly during a power outage, protecting the semi-finished print. After the power is back on, the nozzle will return to its initial position to heat up and then continue printing. This feature effectively minimizes print material and time losses due to power interruptions.



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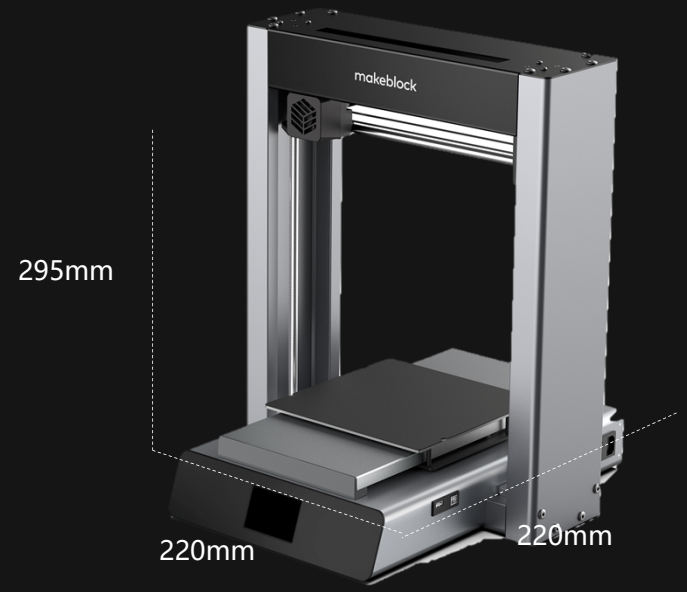
Aircraft-grade aluminum, Improve success rate comprehensively

mCreate has a solid body that minimizes resonance, making printing more stable. The stylish body design is also corrosion-resistant and durable.

Large Build Volume, expands what is possible to create

mCreate provides a super-sized printing volume that allows you to print multiple models in one go and print the works with high height, serving the needs of large classes.



Main Features

Reliable & High printing success rate

New Technologies Help Enhance Printing Success Rate

3D printing & laser engraving 2-in-1

Laser Engraving Mode Presents Brilliant Designs

Easy to use, Ready to print

User-Friendly Operations for Beginners

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Combine with mBuild, Laserbox to create more

Auto-recognition of operating modes

Turn mCreate into a laser engraver by replacing a laser head. The operating interface will automatically switch to laser engraving mode. By inserting a portable USB drive, the machine can directly read the files and process engraving without connecting to the software.

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Autofocus,
Safe and efficient with more detailed engraving

| save time and say goodbye to the frustrated manual focus.

| The laser beam is focused to its smaller possible spot size, precisely achieve optimum image and edge quality.

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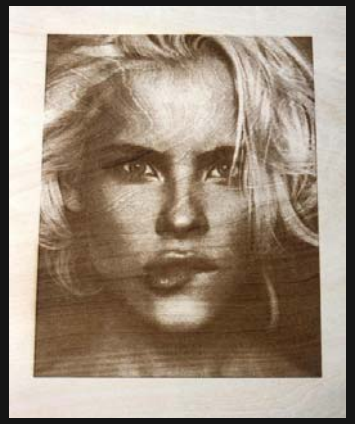
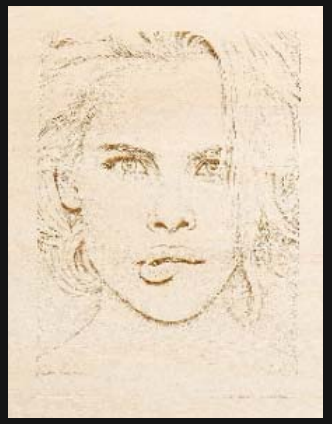
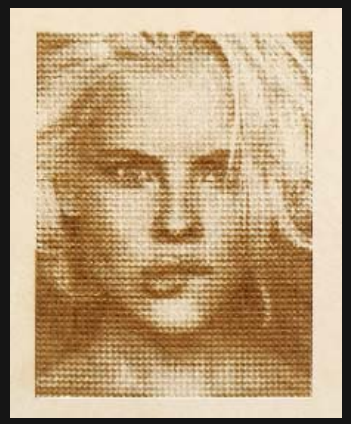
Outstanding engraving performance in user-friendly smart mode



Grayscale engraving

Grayscale engraving mode adds a sense of depth to the design, improves shadow and highlight details to create refined portraits or figures.





Three filters for image-editing

Mesh filter | Black-and-white filter | Sketch filter
Three engraving effects for one photo

Laser engraving on curved surfaces

A large build volume allows mCreate to engrave curved surfaces of solid objects of a certain height. Laser engraving can also be used for creative designs on food like cakes and chocolate.

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Versatile and user-friendly operating tools

3D printing

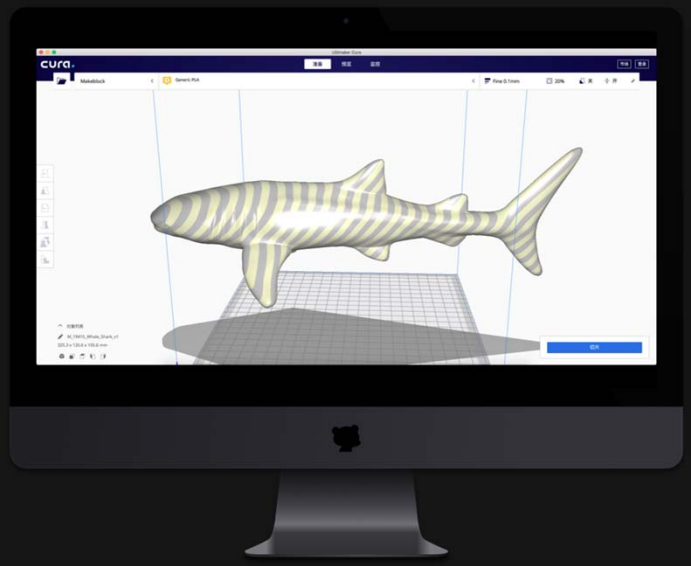
Preset default slicing value

Run the 3D slicing software called Cura, then install the plug-in for mCreate, and select "Makeblock" as the print device; the printing parameters will then be configured automatically. When Cura finishes slicing your model, it is ready for printing.

Laser engraving

Powerful laser engraving software

With the software "Laserbox for mCreate", you can process images, configure the engraving area and parameters, plan the optimal engraving pathway for each project, etc.



Full-color touchscreen for better workflow visualization

- 3.5 inch full-color screen
- Clear and intuitive function icons
- Real-time display of device status and job status
- Direct launch of printing jobs or update of firmware
- Support file search and preview
- Default OS languages are English & Chinese

yet can be set to two other OS languages

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Integration of hardware and software, designed for education

mCreate helps students learn from their practice on idea materialization and thinking training. With mBuild electronic modules, students can use mCreate to program their creative ideas into smart home prototype designs, robot design and building, etc.

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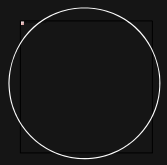
Other Features

Clog detection

Check whether the nozzle is clogged.

Multiple connection modes

Support third-party materials to allow more creative possibilities.



Open filament system

USB connected to mCreate or a file sent through Cura/Laserbox to mCreate.

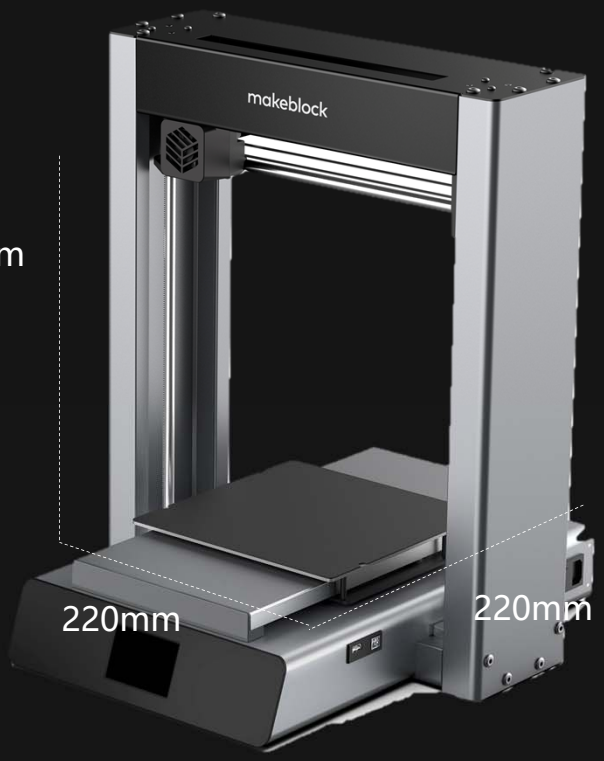
Specification

3D printing

Additive Manufacturing Process	FDM
Build Volume（L × W × D）	220 × 220 × 295 mm
Layer Resolution	50-300μm
Software (Slicing Application)	Cura
Supported File Type(s)	STL, OBJ, X3D, 3MF, JPG, PNG, GIF, BMP, etc.
File Extension	GCODE
Supported Materials	PLA and derivatives、ABS and derivatives, TPU, PC,. Nylon, PET, ASA, HIPS, PP, PVA, etc
Nozzle Temperature	260°C（Max.）
Heated Bed	100°C（Max.）

Laser Engraving

Work Area	225 × 225 mm
Laser Power	500mW
Software (Laser Engraving)	Laserbox for mCreate
File formats	DXF, SVG, JPG, PNG, BMP, CR2, etc.
Supported File Type(s)	STL, OBJ, X3D, 3MF, JPG, PNG, GIF, BMP, etc.
Material capability	Paper, wood, bamboo, rubber, leather, fabric, acrylic, anodized metal, painted metal plastic, etc.



Makeblock mCreate

Smart leveling versatile 3D printer

$899

3D printing & Laser engraving 2-in-1

$799

3D printing only

Thanks