## **Professional Grade for Industry and Education**

## Not your average 3D Printer! www.fablicator.com



## Solid, Accurate, and Ready to Create

The Fablicator is a brand new 3D printer design, unlike any other FDM printer on the market. It is an extremely accurate, solid, and versatile rapid prototype machine!

We have designed the Fablicator to be a professional desktop 3D printer which meets the needs of designers, engineers and inventors alike. Our printers are shipped fully assembled and calibrated. Also, all the necessary interface software is preloaded, so it can start printing right out of the box.

Since the Fablicator includes a complete Windows PC, install your preferred CAD program and it is possible to design, edit, and print your creations all from one place - making it a truly a complete turn-key 3D prototype solution for your office, laboratory, or factory.

Built for the professional world at a price a startup or entrepreneurial tinkerer can afford. Ideal for educational engineering programs. Lower material costs with multiple build materials in one 3D printer!



Designed & Manufactured by K&L Services Group Inc.

Offices@ 215 N. 8th Street Allentown, PA 18102 PH: 610-349-1358 sales@fablicator.com

# FABLICATOR Product Features

• Fused Filament Fabrication (FFF) - The Fablicator uses FFF Technology (sometimes also called Fused Deposited Material or Modeling) to make parts which are strong, durable, and dimensionally accurate. No messy resins or powders mean it is an ideal process for office environments.

• **Designed**, **Manufactured**, and **Tested in the USA** - Each Fablicator is built and tested by our staff to meet rigorous standards of function and quality before shipping.

• No Assembly Required, or Software to Install - The Fablicator arrives to you with a fully integrated Windows operating computer with all of the software pre-installed and settings established to begin printing right away. All you need to start making parts is to plug in a mouse, keyboard, monitor and have a 3D model of what you wish to make.

• **Design System Capable** - Since the Fablicator has a fully functional PC operating on Windows, most standard CAD packages are a simple install on the printer, allowing the design, editing and printing of a part to take place all on one machine.

• **Complex Parts** – Being able to use same material support and layer heights down to 100 microns allows the Fablicator to create intricate designs not possible with most traditional manufacturing methods.

• **Rigid Extruded Aluminum Frame** - You can literally stand on it, and it will not warp with changing humidity. The Fablicator is built for reliability, and is at home on the factory floor as well as in the office.

• Precise filament deposition - Carefully engineered mechanics allow the Fablicator to print parts quickly and with excellent surface finish, exceeding that of 3D printers costing much more.

• A Large 7"x7"x7" Build Area - The Fablicator's build area is perfectly sized to fit the needs of most users.

• **Reusable Build Surface** - The Fablicator uses a unique chemically treated glass build surface, which allows parts to stick firmly when printing and release with ease once the platform has cooled. Parts are printed directly on the build surface and do not have any "rafts" to be removed.

• Material Versatility - The Fablicator was designed for ABS, HIPS, PETG and PLA. PVA, Nylon, and others have also been successfully printed by some users.

• **Static Dissipative Materials** – When using static compliant materials, the Fablicator is ideal for making jigs and prototypes used with delicate electronics.

• Large Selection of Printable Material Available For Use - We do not force our users to purchase expensive proprietary filament. The Fablicator uses high quality 1.65-1.85mm filament, which can be purchased from a variety of additional sources.

#### Great for Building Tough Functional Prototypes and / or Molds.

#### **Technical Specs**

#### General Hardware:

- Print Area: 7 x 7 x 7in (17.78 x 17.78 x 17.78cm)
- Print Volume: 343in<sup>3</sup>, (5.6Liter)
- Flow Rate: Up to 1.25in<sup>3</sup> (20cm<sup>3</sup>) per hour
- Overall Dimensions: 18 x 20.5 x 17.5in (45.7 x 52.1 x 44.5cm)
- Weight: 44lbs (20 Kg)
- Power Requirements: 100-240V, 50/60Hz, 3A
- Filament Size: 1.75mm
- Nozzle Diameter: .35mm
- High Quality 3D Printed Parts
- Maximum Travel Speed 250mm/s
- Maximum Print Speed: 80mm/s
- Filament type:s ABS, PLA, HIPS, PVA, Nylon, PETG, and more
- Standard Layer Height: 0.1mm-0.3mm
- Heated Bed: adjustable for different print materials
- Maximum recommended extruder temperature: 300 C
- Maximum temperature for heated build platform: 125 C
- Support material: Automatically generated break away (same material) support
- Linear ball bearings
- 4 Axis, 1/16th Micro Stepping motors with 3400g\*cm of Torque
- Precision ground 12 mm shafts

#### Computer Hardware:

- Processor: 3.8GHz AMD A4-7300 APU
- 500GB HDD
- RAM: 4GB DDR3
- Front 2X USB, Card Reader, DVD-RW, Back 6X USB

#### Wired and Wireless Network Ready

#### Software:

- Operating System: Microsoft Windows
- 3D printing software: KISSlicer, Pronterface



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#### **The Fablicator SX Series Additive Manufacturing Workstation** is a brand new 3D printer design unlike any other FDM printer on the market. It is an extremely accurate, solid, and versa-

and printer design unlike any other FDM printer on the market. It is an extremely accurate, solid, and versatile rapid prototype machine.

## Solid, Accurate, and Ready to Create

We have designed the Fablicator to be a professional desktop 3D printer workstation able to meet the needs of designers, engineers, teachers and inventors alike. Our printers are shipped fully assembled and calibrated. Also, all the necessary interface software is pre-loaded, so it can start printing right out of the box.

Since the Fablicator includes a built in Windows computer, install your preferred CAD program and it is possible to design, edit, and print your creations all from one place - making it a truly a complete turn-key 3D prototype solution for your office, laboratory, classroom or factory.

Built for the professional world at a price a startup or entrepreneurial tinkerer can afford. Ideal for educational engineering



## Proudly Designed & Manufactured in USA by K&L Services Group Inc.

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# **Fablicator SX Product Features**

• Fused Filament Fabrication (FFF) - The Fablicator SX uses FFF Technology (sometimes also called Fused Deposited Material or Modeling) to make parts which are strong, durable, and dimensionally accurate. No messy resins or powders mean it is an ideal process for office environments.

• **Designed**, **Manufactured**, and **Tested in the USA** - Each Fablicator is built and tested by our staff to meet rigorous standards of function and quality before shipping.

• No Assembly Required, or Software to Install - The Fablicator arrives to you with a fully integrated Windows operating computer with all of the software pre-installed and settings established to begin printing right away. All you need to start making parts is to plug in a mouse, keyboard, monitor and have a 3D model of what you wish to make.

• **Design System Capable** - Since the Fablicator has a fully functional PC operating on Windows, most standard CAD packages are a simple install on the printer, allowing the design, editing and printing of a part to take place all on one machine.

• Print Complex Parts – Being able to use same material support and layer heights down to (and below) 100 microns allows the Fablicator to create intricate designs not possible with most traditional manufacturing methods.

• Rigid Extruded Aluminum Frame - You can literally stand on it, and it will not warp with changing humidity. The Fablicator is built for reliability, and is at home on the factory floor as well as in the office.

• Precise filament deposition - Carefully engineered mechanics allow the Fablicator to print parts quickly and with excellent surface finish, exceeding that of 3D printers costing much more.

• A Large 8.5" x 8.5" x 9.5" Build Area - The Fablicator's build area is perfectly sized to fit the needs of most users.

• **Reusable Build Surface** - The Fablicator uses a unique chemically treated glass build surface, which allows parts to stick firmly when printing and release with ease once the platform has cooled. Parts are printed directly on the build surface and do not have any "rafts" to be removed.

• Material Versatility - The Fablicator was designed for ABS, HIPS, PETG and PLA. PVA, Nylon, and others have also been successfully printed by some users.

• **Static Dissipative Materials** – When using static compliant materials, the Fablicator is ideal for making jigs and prototypes used with delicate electronics.

• Large Selection of Printable Material Available For Use - We do not force our users to purchase expensive proprietary filament. The Fablicator uses high quality 1.65-1.85mm filament, which can be purchased from a variety of additional sources.

#### Great for Building Tough Functional Prototypes and / or Molds.

#### **Technical Specs**

#### General Hardware:

- Print Area: 8.5 x 8.5 x 9.5in (17.78 x 17.78 x 17.78cm)
- Print Volume: 686in<sup>3</sup>, (11.2 Liter)
- Flow Rate: Up to 1.25in<sup>3</sup> (20cm<sup>3</sup>) per hour
- Overall Dimensions: 16.25 x 18 x 22in (41.3, 45.7, 55.8cm) (W,D,H)
- Weight: 44lbs (20 Kg)
- Power Requirements: 100-240V, 50/60Hz, 3A
- Filament Size: 1.75mm
- Nozzle Diameter: .35mm
- High Quality 3D Printed Parts
- Maximum Travel Speed 250mm/s
- Maximum Print Speed: 80mm/s
- Filament type:s ABS, PLA, HIPS, PVA, PETG, and more
- Standard Layer Height: 0.1mm-0.3mm
- Heated Bed: adjustable for different print materials
- Maximum recommended extruder temperature: 300 C
- Maximum temperature for heated build platform: 125 C
  Support material: Automatically generated break away (same material) support
- Linear ball bearings
- 1/16th Micro Stepping motors with 3400g\*cm of Torque
- Precision ground 12 mm shafts

#### Computer Hardware:

- Processor: Intel G4500 with HD530
- 256 GB SSD
- RAM: 8GB DDR3
- Front 2X USB, 4X Rear USB

#### Wired and Wireless Network Ready

#### Software:

- Operating System: Windows 10 Pro 64
- 3D printing software: KISSlicer64, Fablicator Interface

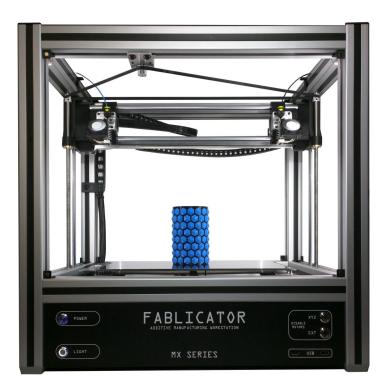


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## **Professional Grade for Industry and Education**

# FABLICATOR

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## Solid, Accurate, and Ready to Create!

## The Fablicator MX Series Additive Manufacturing WorkStation is unlike any other 3D Printer on the market.

Built with an integrated Windows computer, it is a complete 3D Printing workstation, capable of designing (when CAD is installed), slicing, editing and printing 3D models without needing a separate computer. It is a complete printing solution for schools, offices, laboratories, and factories alike.

The MX ships completely assembled, tested, and calibrated. It is ready to make fast, accurate parts right out of the box.

The Fablicator MX features a unique dual extruder system, capable of making parts using different materials or support materials, while maintaining exceptional part quality.



## Proudly Designed & Manufactured in the USA, by K&L Services Group

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# FABLICATOR MX Product Features

• **Dual Independent Print Heads** - The Fablicator MX parks one print head while the other is working, allowing precise dual material prints without the second head dragging through the print. Both heads can also work simultaneously to create 2 copies of the same single material part

• "Easy Peel" Support Material - A specially formulated support material easily peels away from parts, allowing support material to be quickly and easily removed without the use of chemical solvents.

•Designed, Manufactured, and Tested in the USA - Each Fablicator is built and tested by our staff to meet rigorous standards of function and quality before shipping.

• No Assembly Required, or Software to Install - The Fablicator arrives to you with a fully integrated wired and wireless network ready Windows operating computer with all of the software pre-installed and settings established to begin printing right away. All you need to start making parts is to plug in a mouse, keyboard, monitor and have a 3D model of what you wish to make.

• **Design System Capable** - Since the Fablicator has a fully functional PC operating on Windows, most standard CAD packages are a simple install on the printer, allowing the design, editing and printing of a part to take place all on one machine.

• Complex Parts – Easy peel support and layer heights down to 60 microns allows the Fablicator MX to create intricate designs not possible with most traditional manufacturing methods.

• Rigid Extruded Aluminum Frame - You can literally stand on it, and it will not warp with changing humidity. The Fablicator is built for reliability, and is at home on the factory floor as well as in the office.

• Precise Filament Deposition - Carefully engineered mechanics allow the Fablicator to print parts quickly and with excellent surface finish, exceeding that of 3D printers costing much more.

• Large Print Area ~ 13.5 x 8.5 X 9.5 - Larger than a sheet of standard paper, the Fablicator MX has a build area suited to the needs of serious users.

• Reusable Build Surface - The Fablicator uses a unique chemically treated glass build surface, which allows parts to stick firmly when printing and release with ease once the platform has cooled. Parts can be printed directly on the build surface and do not have any "rafts" to be removed.

• Material Versatility - The Fablicator was designed for ABS, PLA, HIPS, PETG and TPU's (Ninjaflex). Additionally, PVA, Nylon, and others have also been successfully printed by users.

• Static Dissipative Materials – When using static compliant materials, the Fablicator is ideal for making jigs and prototypes used with delicate electronics.

#### **Technical Specs**

- Dual Extruders
  - Print Area: ~ 13.5 x 8.5 x 9.5 in (343 x 216 x 242 mm)
  - Print Volume: 1010in<sup>3</sup>, (16.5liter)
  - Flow Rate: Up to 1.25in<sup>3</sup> (20cm<sup>3</sup>) per hour
  - Overall Dimensions: 24 x18 x 22in (610 x 460 x 560mm)
  - Weight: 53 lbs (20 Kg)
  - Power Requirements: 100-240V, 50/60Hz, 5.5A
  - Filament Size: 1.75mm
  - Nozzle Diameter: .35mm
  - High Quality 3D Printed Parts
  - Maximum Travel Speed: 250mm/s
  - Maximum Print Speed: 80mm/s
  - Filament types: ABS, PLA, HIPS, PVA, Nylon, PETG, and more
  - Standard Default Layer Height: 0.1mm-0.3mm
  - Heated Bed: adjustable temperature for different print materials
  - Maximum recommended extruder temperature: 400 C
  - Maximum temperature for heated build platform: 125 C
  - Support material: Automatically generated: "Easy Peel" (when dedicating an
  - extruder to support) or same material break away w/ running two print colors.
  - Linear ball bearing & Precision ground 12 mm shafts

#### Computer Hardware:

-3.2GHz Core i5 - 6500 -256gb SSD -8gb Ram -2x front usb, 4x rear usb -VHA, HDMI -Wired and Wireless Network Ready -Intel 550 Graphics

#### Software:

-Operating System: Microsoft Windows 10 Pro -3D printing software: KISSlicer, Pronterface

-Input file type: STL, gcode

-Fusion 360, Inventor, and Solidworks capable.

| Part Number           |            |                  |
|-----------------------|------------|------------------|
| Fablicator 3D Printer | Partno.    | 24V Stop / Start |
| HEPA Filter<br>System | L5444-0002 | A2001            |

| Replacement Filters          |           |                 |  |
|------------------------------|-----------|-----------------|--|
| Model                        | Prefilter | Combined Filter |  |
| Fablicator 3D Printer Filter | A1030102  | A1030099        |  |

#### **Technical Specifications**

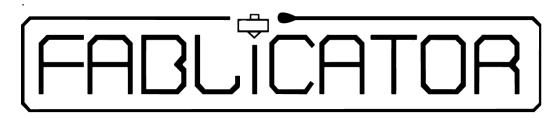
|                      | EU  | US  |
|----------------------|---|---|
| Dimensions (HxWxD)   | 338 x 283 x 256 mm                            | 13.3 x 11.1 x 10"                           |
| Cabinet Construction | Powder coated mild steel                      |   |
| Airflow / Pressure   | 45m <sup>3</sup> /hr                          | 26.5cfm                                     |
| Electrical Data      | 230v1ph50/60Hz<br>Full load current: 0.1 amps | 115v 60/50Hz<br>Full load current: 0.2 amps |
| Noise Level          | < 49dBA*                                      |   |
| Weight               | 7.8kgs  | 17lbs                                       |
| Approvals            | CE  | CE  |

\* At typical operating speed.

| Pre-filter Specifications |                      | Combined                   |  |
|---------------------------|----------------------|----------------------------|--|
| filter Media              | glass fibre          | Filter                     |  |
| filter Media Construction | Pad                  | HEPA filter Media          |  |
| filter Efficiency         | F7 (96% @ 2 microns) | HEPA Media<br>Construction |  |
|                           |                      | gas filter                 |  |
|                           |                      |                            |  |

| Combined HEPA / GAS<br>Filter |   |  |
|-------------------------------|---|--|
| HEPA filter Media             | glass fibre                                     |  |
| HEPA Media<br>Construction    | Maxi Pleat Construction with<br>Webbing Spacers |  |
| gas filter                    | Treated Activated Carbon                        |  |
| filter Housing                | Zintec Mild steel                               |  |
| filter Efficiency             | 99.997% @ 0.3 microns                           |  |

Hose Kit - Fablicator 3D Printer w/ Scoop Connector



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