



# User Guide

## ProBench™ Infiltration Workstation



# Symbols



The following symbols are used on the ProBench and in this manual.

**General Caution:** User should use care to avoid possible damage to equipment.

## 1 Introduction

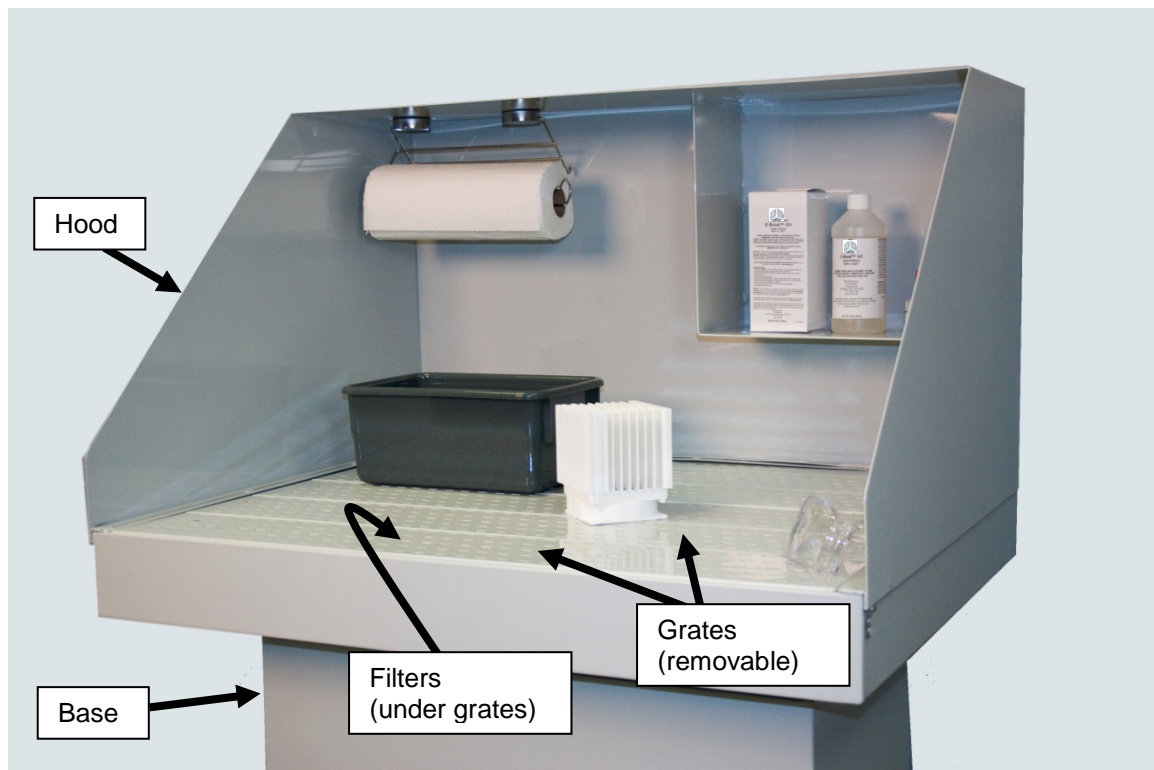
The ProBench™ Infiltration Station provides a convenient space to infiltrate parts printed on ProJet® x60 series 3D printers. This bench provides not only a large work surface, but also fume and odor control using downdraft airflow and 2 stages of filtration. It is intended to be used only with 3D Systems ColorBond™ or StrengthMax™ infiltrants.



### CAUTION

**ProBench™ is for use with ColorBond or StrengthMax only; do not use with any other Infiltrants; do not use with spray paint of any kind or with any flammable sprays.**

**ATTENTION ProBench™ est à utiliser avec le ColorBond ou StrengthMax seulement. Ne pas utiliser avec n'importe quel autre infiltrants. Ne pas utiliser avec de la peinture à vaporiser de toute nature, ou avec n'importe quel spray inflammables.**



## 1.1 Preparation

Before using the ProBench for infiltrating parts, do the following:

- Collect your safety equipment
  - Safety glasses
  - Gloves
  - Coat or other protective clothing
- Put down protective paper
  - Cover a section of the grate with non-stick paper or plastic. Be sure to leave plenty of open area for airflow.
- Gather your infiltration supplies
  - ColorBond or StrengthMax Infiltrant
  - Plenty of paper towels

## 1.2 Infiltration

1. Plug in ProBench and turn on power (power switch is located on the right side of the Base).
2. Infiltrate your parts following the directions in the User Guide for your Infiltrant
  - StrengthMax™ User Guide located in [3dscentral.3dsystems.com](http://3dscentral.3dsystems.com)
  - ColorBond™ User Guide located in [3dscentral.3dsystems.com](http://3dscentral.3dsystems.com)
3. If any Infiltrant drips onto exposed areas of ProBench, wipe up immediately with paper towels. If Infiltrant has spilled and dripped down through the grates, remove the grates and clean up with paper towels before the Infiltrant cures.
4. Leave parts and soiled paper towels and gloves inside the ProBench.
5. Allow the ProBench to continue running until the parts have fully cured:
  - ColorBond: about one hour after the parts have been infiltrated.
  - StrengthMax: about 2 hours after the parts have been infiltrated.

## 1.3 Clean Up

Once the Infiltrant has cured, any gloves, paper towels or other soiled items can be disposed of in the trash.

# 2 Maintenance

Your ProBench requires no regular mechanical maintenance other than cleaning, and replacing the two disposable air filters. The air filters are located underneath the removable grates.

## 2.1 Cleaning

As needed, wipe your ProBench with a damp cloth to remove dust and other debris.

## 2.2 Replacing the Filters

The filters should be replaced on the following schedule:

- Pre-filter (PN: 22-17157): Approximately every 3 months or when airflow noticeably decreases.
- Carbon filter (PN: 22-17158): Approximately every 3 months, or when odors near the unit noticeably increase.

Filters are available from your authorized local reseller.

To replace the filters:

1. Turn ProBench OFF.
2. Remove the grates.
3. Remove the old filters and discard.
4. Install the new filters in the Base.
5. Replace the grates.

## 3 Specifications

Dimensions	36" wide x 28" deep x 54" high (91.4 cm wide x 71.1 cm deep x 137.2 cm high)
Weight	125 lbs. (56.8 kg)
Operating Environment	
Temperature	<ul style="list-style-type: none"> <li>• Maximum Temp. Range: 50-80° F (10 – 26.6° C)</li> <li>• Recommended Temp. Range: 55-75° F (12.7 – 23.9°C)</li> </ul>
Relative Humidity	<ul style="list-style-type: none"> <li>• Maximum RH Range: 15 – 60%, non-condensing</li> <li>• Recommended RH Range: 20 – 55%, non-condensing</li> </ul>
Noise Level	68 – 72 dB at operator work zone
Power Requirements	100V, ~50-60 Hz, 7.3 Amp. 115V, ~50-60 Hz, 7.3 Amp. 230V, ~50-60 Hz, 3.7 Amp. Note: Operation at 100V requires transformer (included)
Air Flow	1200 CFM (34 m <sup>3</sup> /min) nominal
Filtration	Pre-filter: 24"x12"x2" (61 cm x 30.5 cm x 5.1 cm) pleated, 40% efficient to 0.7 microns  Carbon Filter: 24"x12"x2" (61 cm x 30.5 cm x 5.1 cm) activated carbon, 50/50 potassium permanganate
Country of Origin	Manufactured and assembled in USA.

## 4 Initial Installation

The ProBench is shipped partly assembled. Open the carton carefully and remove the components. Remove any packing material around the components.

### 4.1 What's Included

The ProBench has two main components: the Base and the Hood. Included in your ProBench shipment are the following:

- Base
- Hood
- Filters (1 pre-filter, 1 carbon filter)
- Grates
- Paper towel holder (magnetic)
- Power cord
- (100V model only) 100-115V transformer

### 4.2 Assembly

Assembling your new ProBench is quick and easy. Just follow these steps:

1. Place Base right side up on the floor.



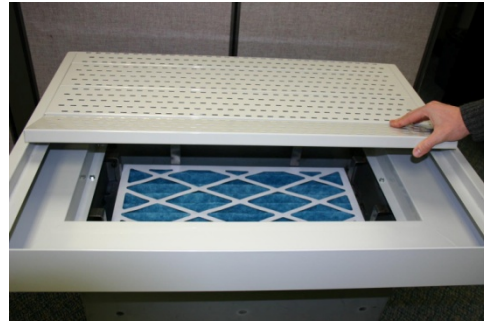
2. Install both filters into the holders in the Base.

Install the carbon filter first, and then the pre-filter.

It is important that the pre-filter be above the carbon filter when they are installed.

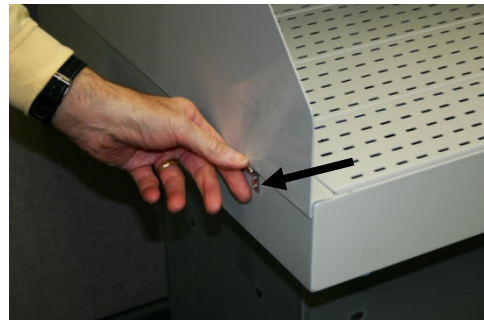


3. Put the grates in place.



4. Place the Hood on top of the Base.

Be sure the Hood fits into the mounting clips on the Base.



5. Attach the paper towel dispenser as shown or in any convenient location.



6. Attach the power cord.

## 5 Support

If you have any questions about **using** your ProBench, contact your local reseller or you may contact 3D Systems support team directly:

### **United States (Corporate Headquarters)**

#### **3D Systems, Inc.**

333 Three D Systems Circle  
Rock Hill, SC 29730 USA  
Telephone (803) 326-4080  
Toll Free (800) 889-2964  
E-mail: [Support-us@3DSystems.com](mailto:Support-us@3DSystems.com)

### **Americas**

+1 877-889-2677  
+1 978-494-8240

[Support-us@3DSystems.com](mailto:Support-us@3DSystems.com)

### **Asia Pacific**

+852 8191 2453

FAX: +852 2948 2244

E-Mail: [Support-apac@3DSystems.com](mailto:Support-apac@3DSystems.com)

### **Europe/Middle East/Africa**

+49 6151 357245

[Support-emea@3DSystems](mailto:Support-emea@3DSystems)

## 6 Service

If you have a **problem** with your ProBench and require **service**, please contact the manufacturer directly:

#### **DualDraw**

5900 E 58<sup>th</sup> Avenue – Unit A  
Commerce City, CO 80022  
Telephone: +1 303 853-4083  
FAX: +1 303 853-4086  
Email: [service@dualdraw.com](mailto:service@dualdraw.com)



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3D Systems, Inc. | 333 Three D Systems Circle | Rock Hill, SC | 29730  
[www.3dsystems.com](http://www.3dsystems.com)

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