stratasys

# Overview

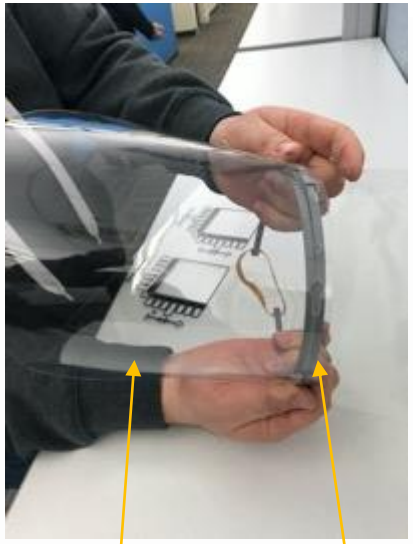
*Stratasys is moving forward with the Face Shields project, which consists of:*

- SSYS having a third party cut plastic sheeting to make a shield component
- SSYS printing a visor portion using a SSYS original design and assembling it with the shield component, and providing it free of charge to certain users that have requested them from us.
- The visor design is also intended to be made available for free public download under a creative commons open source license.
- The face shield is not Personal Protective Equipment (PPE) or a medical device, but rather a simple consumer barrier product, that Stratasys understands to be much needed.


- The “Files and Instructions for 3D-Printed Face Shields” are provided “AS IS”, in an effort to help with the urgent need for this Item. Users of this Item must determine the appropriateness and use of this Item, whether there are any federal or State regulatory requirements for use of this Item, and for informing other users of these responsibilities. If you use, copy or share this Item, you agree: (1) you will not claim ownership of the logo or name of “Stratasys”, which belongs to the Stratasys; (2) STRATASYS, INC., FOR ITSELF AND ON BEHALF OF ITS AFFILIATES, OFFICERS, DIRECTORS AND EMPLOYEES (STRATASYS), DISCLAIMS ALL WARRANTIES RELATED TO THE ITEM OF ANY KIND, EXPRESS AND IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE OR A PARTICULAR PURPOSE; NON-INFRINGEMENT; COMPLIANCE WITH ANY REGULATORY STANDARDS; AND COMPLIANCE WITH ANY OTHER LAWS; and (3) Stratasys retains no and disclaims all liability for any claims of any kind made by person, either as a result of use of or as related to the Item.

# How we are Helping

| Finding Those in Need | Finding Those Willing to Produce | What Stratasys is Currently Printing |
|---|---|---|
| Submit Requests: https://go.stratasys.com/lp-stratasys-helps.html | Submit Requests: https://go.stratasys.com/lp-stratasys-helps.html | 7,000 Face Shields this week |
| We will determine if we can produce (beyond Face Shields) and respond | We will need your printers and committed volume and create a GrabCad Shop to send ‘orders’ and shipping info | Need is 300,000 / mo and looking for partners to produce with us |
| If we can’t produce it we will push it to the GrabCAD Community | 2 Options (so far) for fulfillment | Stratasys is Committed to Delivering 20,000 for free |



Shield + Visor

= Face Shield

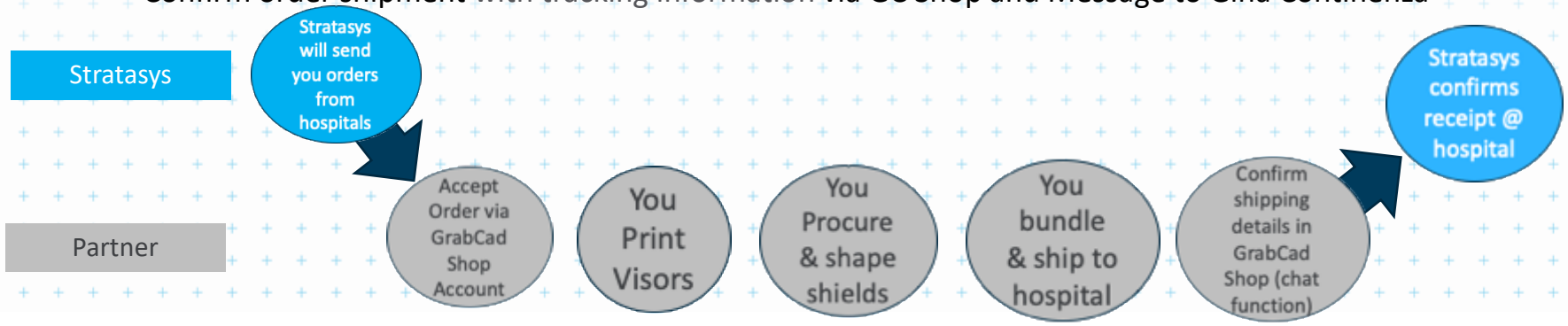
# Models of Supply with Partners

## 1. Do it together

- Partners bundle quantities of 100 Visors and ship to Stratasys Warehouse in MN.
- Hospitals assemble and cleanse
- Once Stratasys 20,000 free supply is exhausted, we ask hospitals for $4 to cover costs for shields and shipping. If you want to help financially and cover the $4/shield, please email Gina.Continenza@Stratasys.com

## 2. Do it yourself

- Partner prints and supplies shields as final Face Shields directly to local hospitals or demand we send via GrabCad Shop (if we have release from the hospital to provide you their Name)
- Confirm order shipment with tracking information via GC Shop and Message to Gina Continenza



# Results over past 36 hours

1. Identified need for 330,000 Face Shields per month
   a. Week 1- ~6,300 face shields to be delivered
   b. Week 2- ~11,500 face shields with orders to be delivered
   c. Week 3- ~16,400 face shields with orders to be delivered
   d. We are trying to distribute orders based on hospitals current inventory and utilization.

   We are only offering partial shipments (numbers are revised to the original request/demand based on COVID-19 coalition capacity).

2. Printing 4,000 visors per day as of Tuesday
   - Procuring the shields is a top priority.

3. 20-30 new partners register via the website every hour – setting up those that can print >100 visors with GC Shop to send demand from hospitals

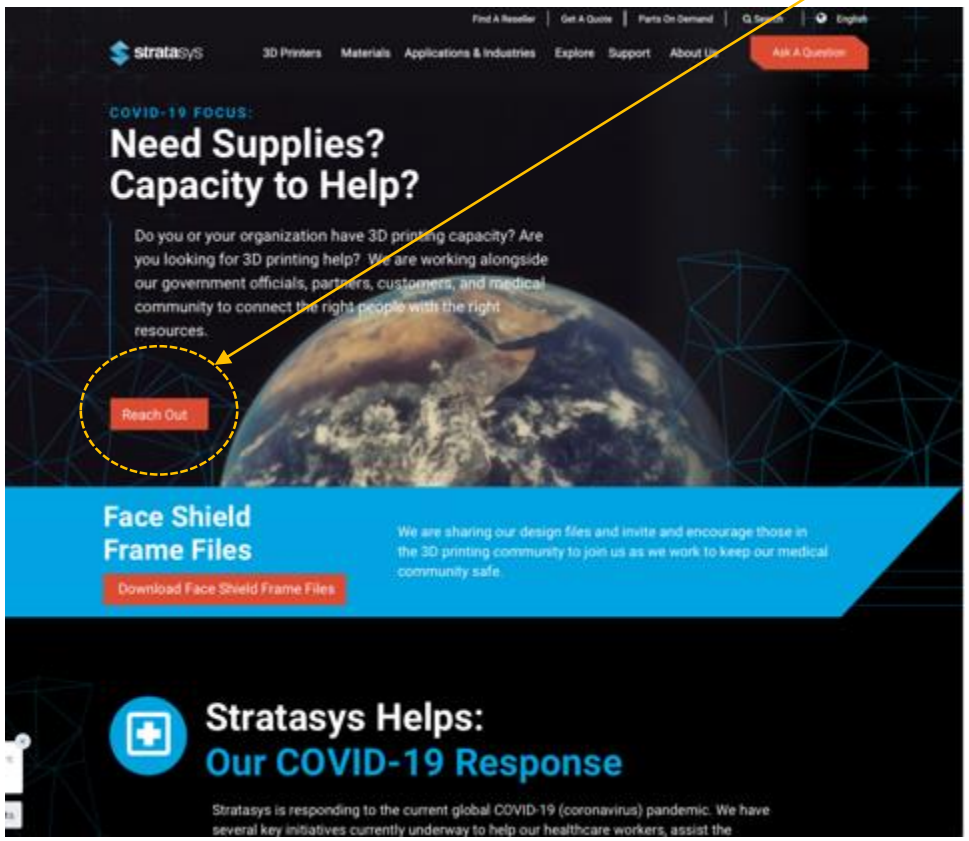
# The Ask

1. Need to understand your volume commitment
   - This will allow us to establish an inventory schedule to coordinate with shipments to healthcare providers.

2. Which model you want to operate
   1. Shared model - you ship to us and we ship with shields
   2. DIY model – you print visors and procure shields directly

3. Need to place additional shield order urgently to confirm supply
   - Please let us know if you can provide financial support in procuring these face shields. We can provide the suppliers so you can order with them directly and drop ship to SSYS.

# Register your participation and volume commitment




## Stratasys Helps: Responding to the COVID-19 Crisis

It's becoming increasingly apparent that additive manufacturing is going to play a role in managing this global pandemic. Stratasys is working on either leading or supporting a few key initiatives where we believe we can make a real impact.

We welcome additional ideas and requests for help from members of our global community. Please fill out this form and we will make sure the offer or the ask gets to the right place.

First Name: *

Last Name: *

Email: *

Organization: *

Country: *

United States

State/Province: *

Select...

What best describes your ask or offer? (Choose all that apply.) *

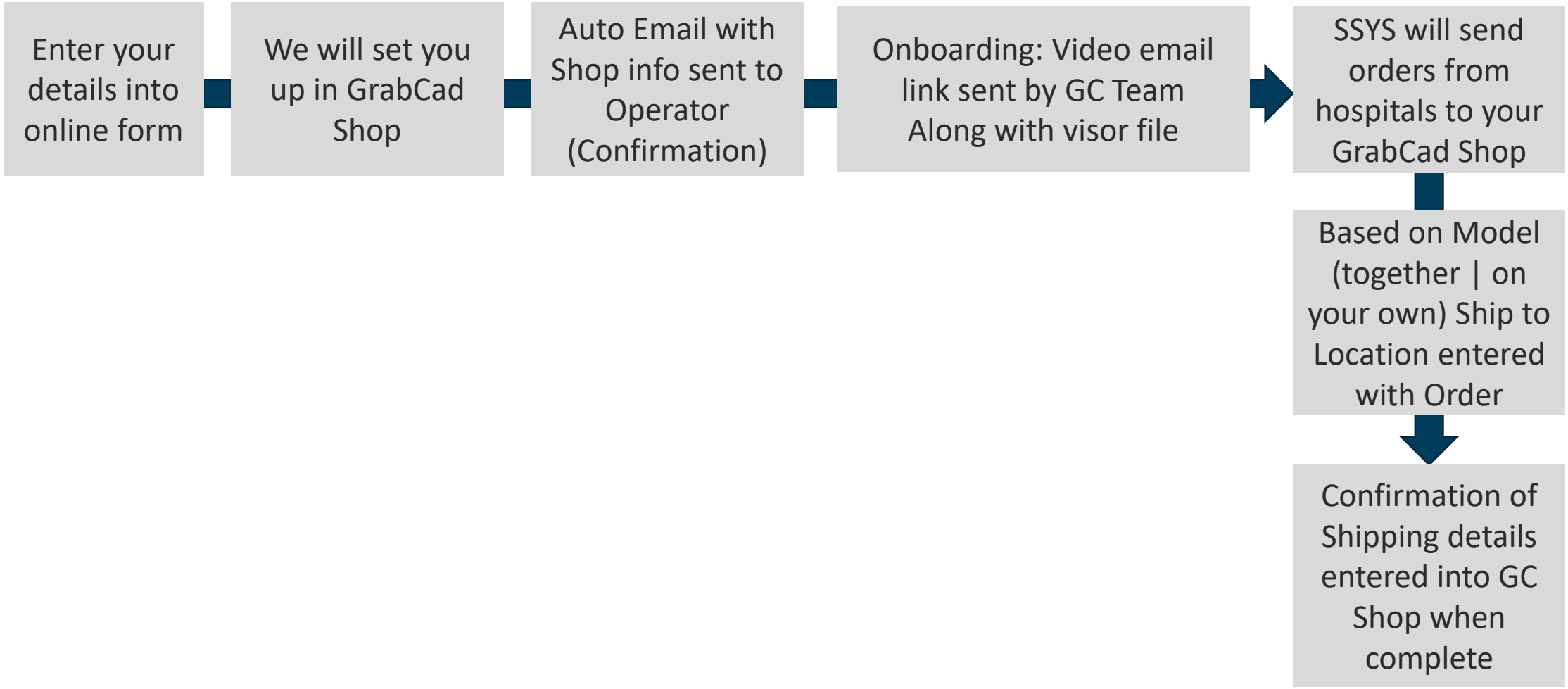
- We Have 3D Printing Capacity (Please specify what types of printers and materials you have below.)
- We Need Protective Shields
- We Need Medical Components 3D Printed
- We Need 3D Printers or Materials
- Other

Comments: *

Please provide additional information.

Submit

# Registering your Capacity and Fulfillment



# Material Matrix for Compatibility

| Technology | Material | Tested* | Not Recommended | Not Yet Explored | Biocompatible |
|---|---|---|---|---|---|
| FDM/FFF | ABS | X | | | |
| | ASA | X | | | |
| | PLA | X | | | |
| | PETG | | | X | |
| | Nylon 12 | X | | | |
| | Nylon 11 | X | | | |
| | Nylon 6 | X | | | |
| | ULTEM1010 | X | | | X |
| | ULTEM9085 | X | | | |
| | PC | X | | | |
| | PC-ABS | X | | | |
| | ABS-M30i | X | | | X |
| | PC-ISO | X | | | X |
| | TPU/TPE/TPC | | X | | |
| | Nylon12CF | | X | | |
| | Antero 800NA | | | X | |
| | | | | | |
| PolyJet | Vero | | X | | |
| | Agilus | | X | | |
| | MED-series | | | X | X |
| | | | | | |
| Laser Sintering | PA 11 | X | | | |
| | PA 12 | X | | | |
| | PA 12 GF | X | | | |
| | | | | | |
| Multi-Jet Fusion | PA 12 | X | | | X |

* Tested indicates that Stratasys, or a Stratasys partner has completed a print with this material that resulted in a successful build

# Sharing the Story of This Project

- We are speaking regularly to national, trade and local media about this initiative, and also keeping the world apprised via social and our website.

- **We would like to be able to acknowledge your efforts.** Please let Gina Continenza (Gina.Continenza@Stratasys.com) know if we can name you in these materials and conversations and include your logo on the project website. We will not do so without your permission via email.

# Other ways Stratasys is prepared to help

Many companies are ramping up production and modifying existing manufacturing lines to supply critical PPE. We are creating some bandwidth within our Applications Engineering team, who has vast experience here, to help coalition partners in several ways:

- No fee consulting on designing for build efficiency
- Designing AM tools for fast production
- Leveraging the COVID Coalition to build tools and aids and reduce the time to volume production

## Examples may include:

- Designing templates for open-source parts to increase the efficiency of operations such as cutting face shields or trimming foam to length
- Consulting on the design of short-run injection molds using PolyJet technology to be used for various components in a bridge tool scenario
- Building and finishing tools and components to decrease lead times

We do have limited bandwidth here but should you want our help or simply to ask questions about this, please let us know by going to our home page (www.stratasys.com), clicking on the “reach out” button, registering and checking the “other” button, and inserting comments. We will get back with you ASAP.