The Spanish network 3d printers farm experience. The COVID19 group Alcoy

The group began on the las mars 20th using telegram social network. Today we are 98 home makers working.

The work:

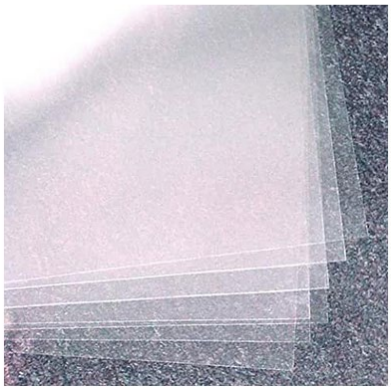
At the moment we are supplying face shields.

The support of the face shield it's the printed part

The file will be downloaded at:

http://elblogdelplastico.blogs.upv.es/files/2020/01/faceshield.rar

the other materials could be:



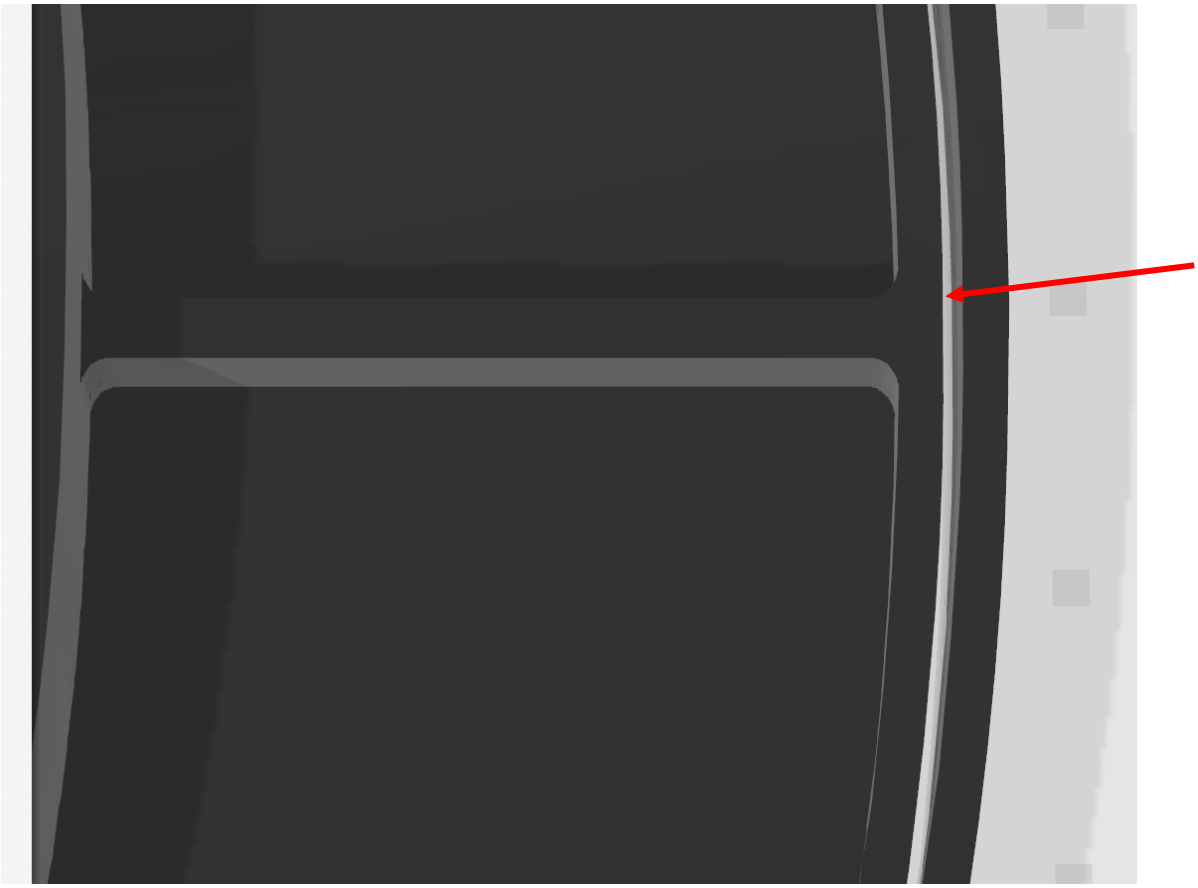
Plastic Suppliers 4 Mil Clear Acetate Sheets 16 Inch x 24 Inch, Pack of 10

More Buying Choices
$16.23 (1 new offer)

The web link on amazon is:

https://www.amazon.com/s?crid=FXEYHM9OENEA&i=aps&k=acetate%20sheets&ref=nb_sb_ss_i_1_7&sprefix=acetate%2Caps%2C294&url=search-alias%3Daps

The part have the following important characteristic:



The sheet guide

See the following video to understand how it works:

http://elblogdelplastico.blogs.upv.es/files/2020/01/WhatsApp-Video-2020-03-21-at-19.07.24.mp4

https://www.thingiverse.com/thing:4233193

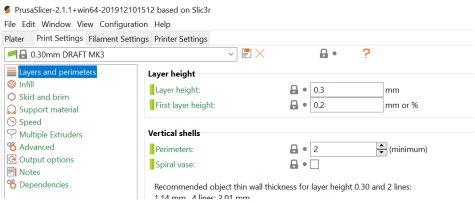
Finally you will use elastic rubber or headband to adapt the face shield. If it slips during its placement, it can be applied cloth plaster on the polymer contact part on the face.

The materials used for the printed part:

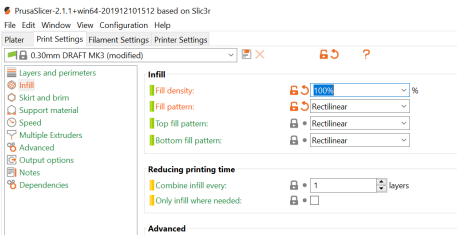
All people use PLA filament, but you could use PETG, or ABS.

The parameters to print the part are:

Layer height 0,3 mm

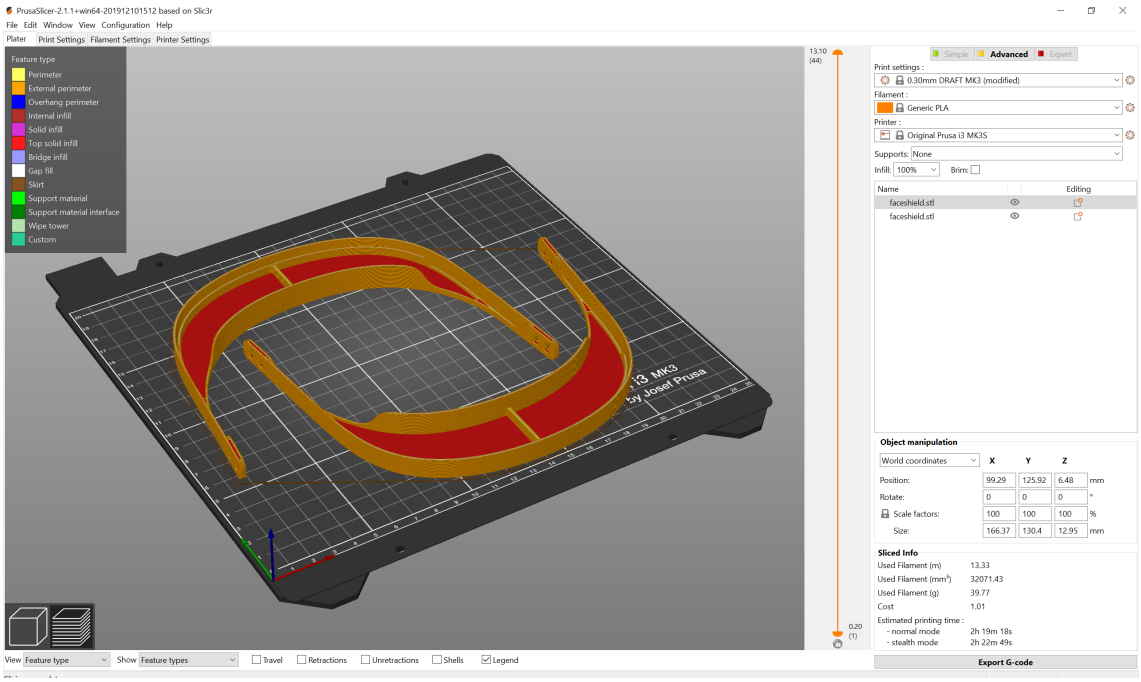


Infill density 95-100%



Built time:

1 part 1,5 hours, two parts 2,15 hrs



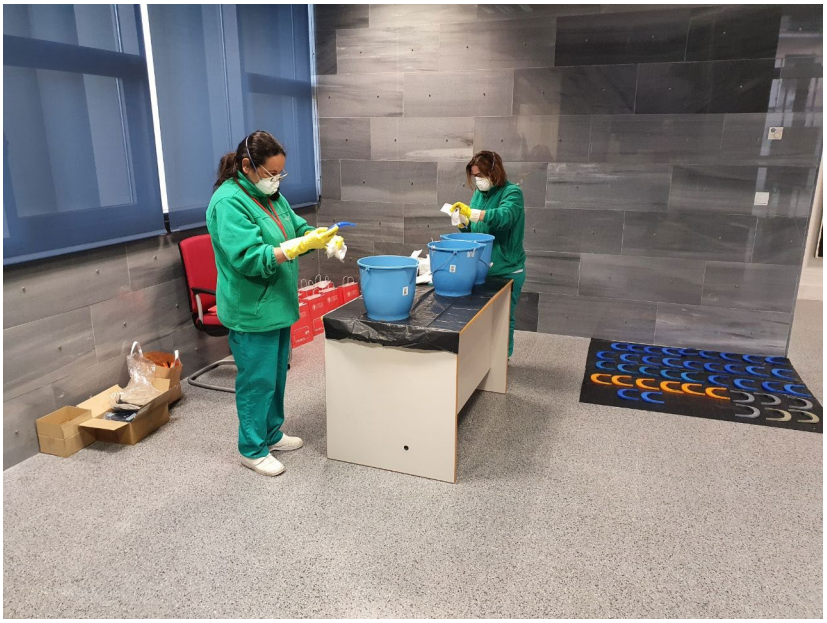
AT the moment we are building 200 parts day.

The problem:

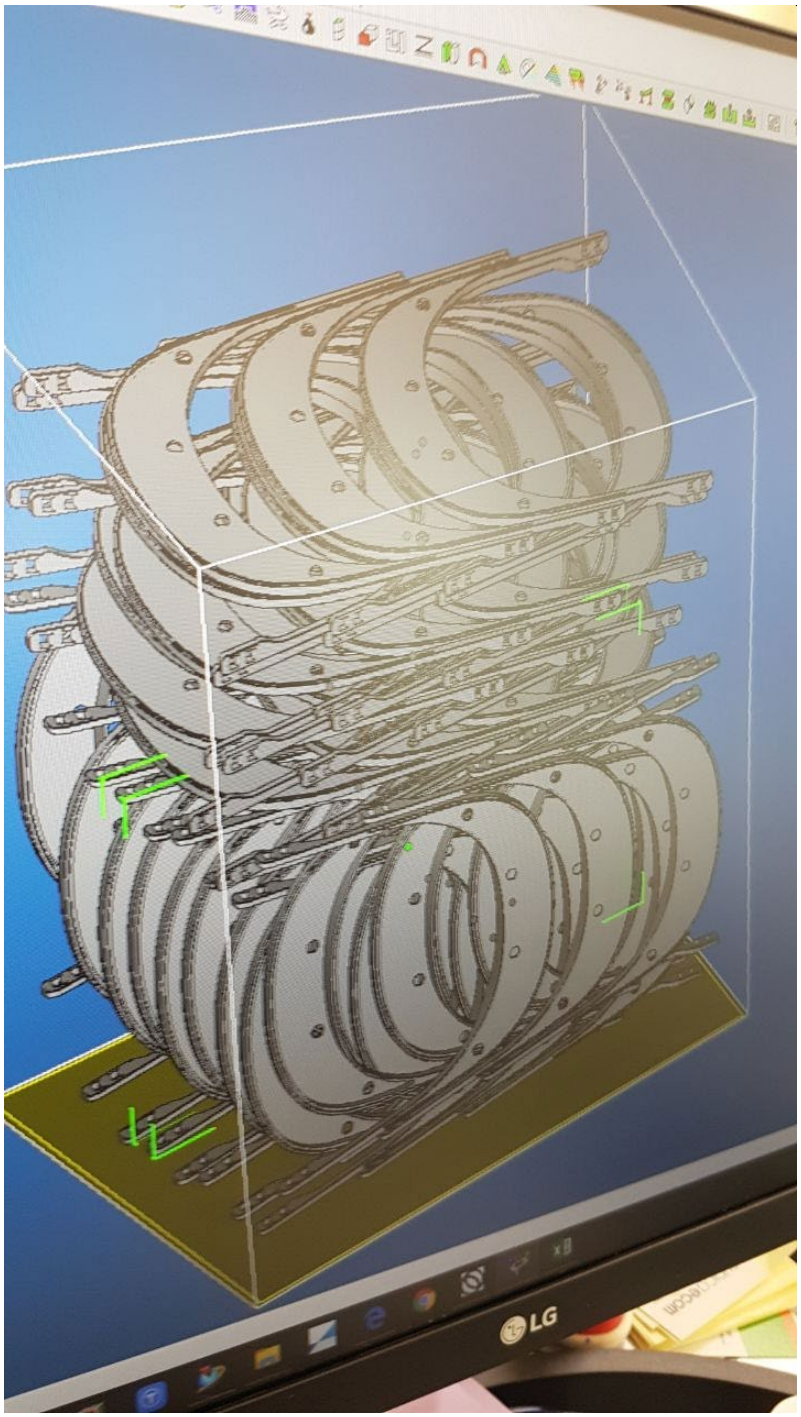
Logistic pick up parts from each home maker. We are working by pick up sectors. AT the same time we supply printing materials (PLA). Always we are in coordination with city major and local authorities. Sometime pick up the parts the local police or civil protection people.

The material it's free for the home makers, paid by university. But we begin to receive donations.

When we received the parts, we disinfects all parts with H2O+CL, before to deliver it to the hospital.



From yesterday collaborate the Technological institute AIJU, with professional 3d printing (Selective laser sintering) with very high production.

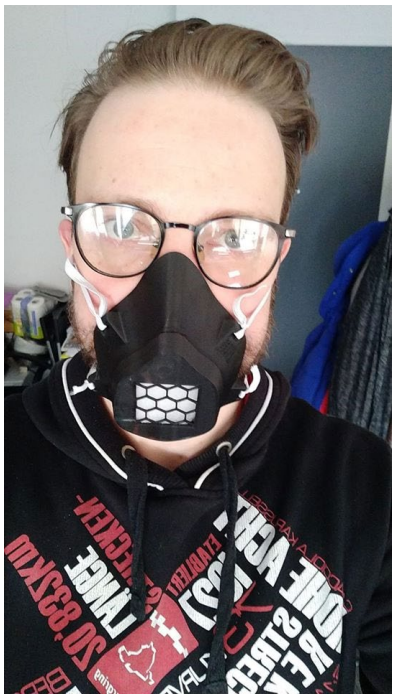


More information about emergency

open source covid19 medical supplies

https://blog.prusaprinters.org/from-design-to-mass-3d-printing-of-medical-shields-in-three-days/?utm_source=Prusa3D.com&utm_campaign=86c0dbe164-EMAIL_CAMPAIGN_2020_03_19_03_21&utm_medium=email&utm_term=0_4199f6d18b-86c0dbe164-124000095

Other projects for the farm:



https://www.thingiverse.com/thing:4225667

Respiratory valve. It has settings for controlling Respiratory Rate, Tidal Volume, and PEEP. Parts are readily available and total cost is under $100.

Check out www.ebcore.io for details explaining how to create this.

Always to be certified

If you need more information, please contact with me.

Santiago