

## EXPANDABLE DOOR HANDLE

The extension of the door handle can reduce the risk of a contact infection via door handles, where a very high concentration of virus and bacteria is often.

Covid-19 is a global humanitarian challenge. It is spreading, causing many local emergency situations in hospitals. Rapid Shape provides information for its 3d printing community to #standtogether



## MATERIAL REQUIRED:

### 3D PRINTER:

All jewellery, hearing aid, dental and industrial 3D printers manufactured by Rapid Shape can be used, including our private label printers from Dental Wings, DMG, Shera and Straumann, except the x10+ printer.

### CAM SOFTWARE:

- Autodesk Netfabb

### 3D PRINTING MATERIAL:

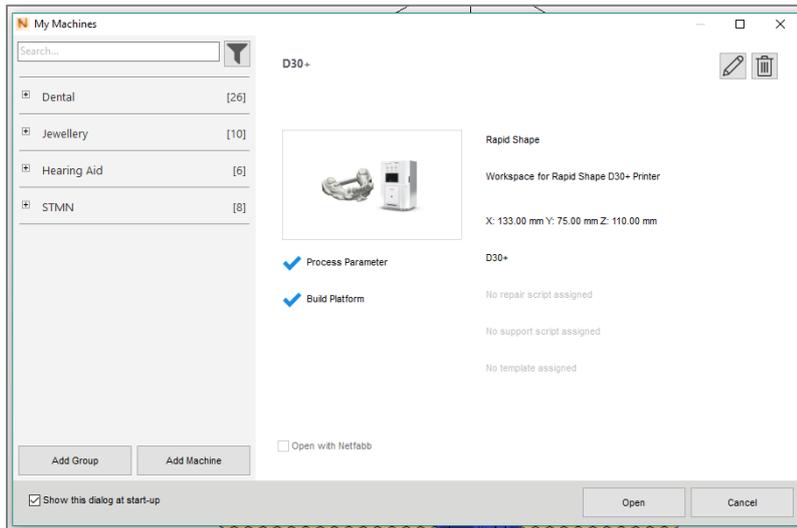
Any material can be used.

We recommend e.g. model resins as they are the cheapest version with a sufficient level of stability.

### ADDITIONAL MATERIAL:

- 1x M4 threaded screw
- 1x M4 nut
- 1x 3 mm hex key

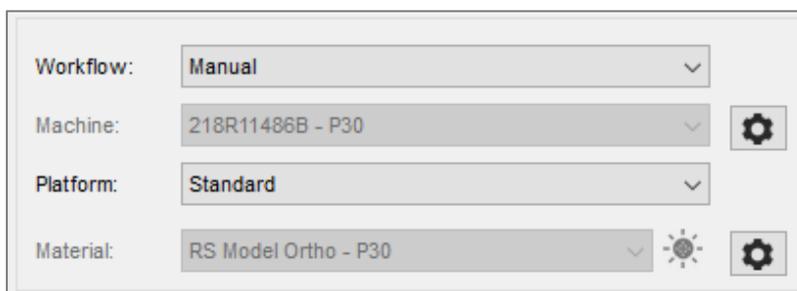
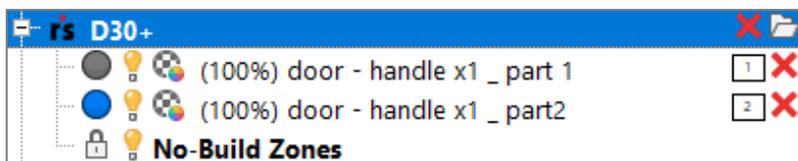
## How to prepare the DOOR HANDLE print job:



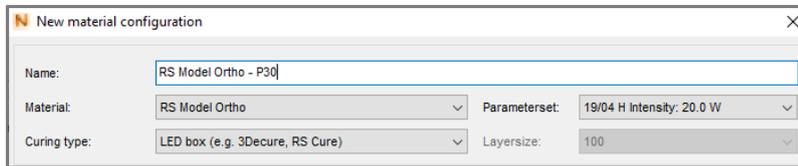
Step 1: Please **download** the ready-made fabbproject file and open it in Autodesk Netfabb.

Step 2: Please **load** the job file and open target machine.

Step 2: Drag & drop target file into **Machine Environment** (e.g. D30+). You can place one or two DOOR HANDLES on the platform.

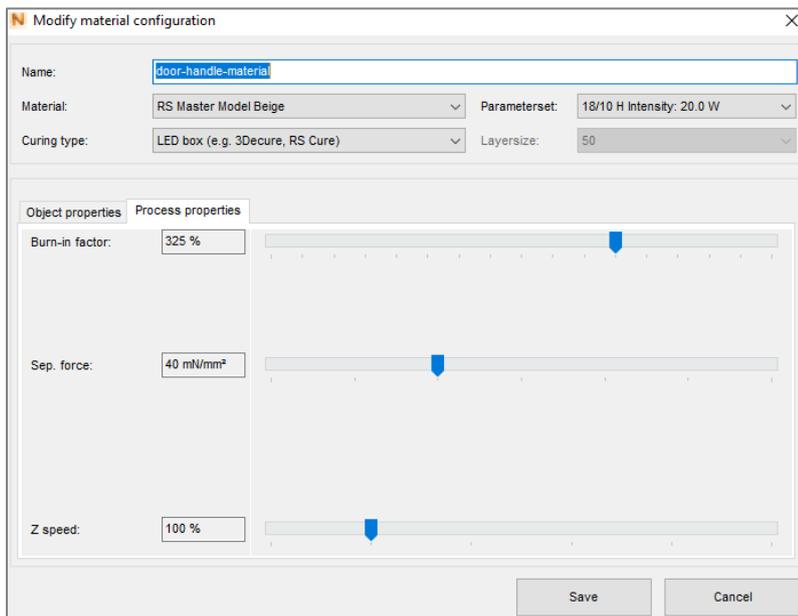


Step 3: Open the **material library**.



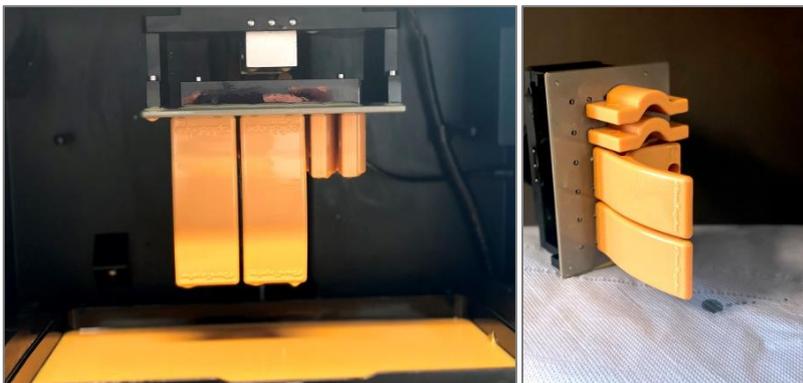
Step 4: Please **select** the chosen material in the material library.

Step 5: For the recommended resins please **modify the material configurations** as follows:



Note: The burn-in factor has to be between 300-325%. It is not recommended to go higher as the reservoir could get damaged.

Step 6: Create the job file and start printing.



## POST-PROCESSING



**Detach** the handles from the building plate with a spatula and with a hammer as needed.

## How to wash the DOOR HANDLE:



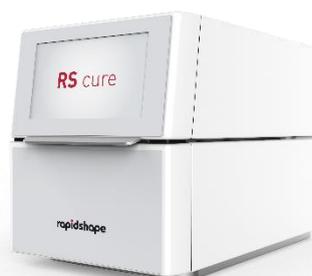
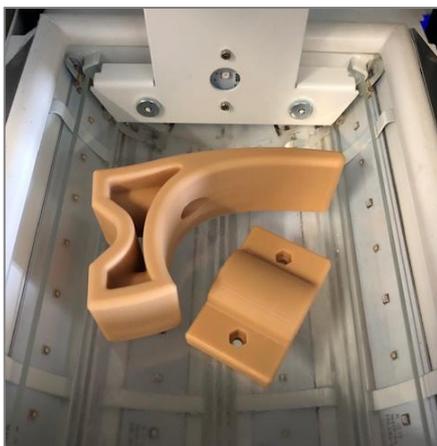
Step 1: Clean the door handle in the RS wash or in an Ultrasonic Device.

Step 2: Cleaning program/time depends on the material. Please follow the **resin manufacturer's instructions** for use.

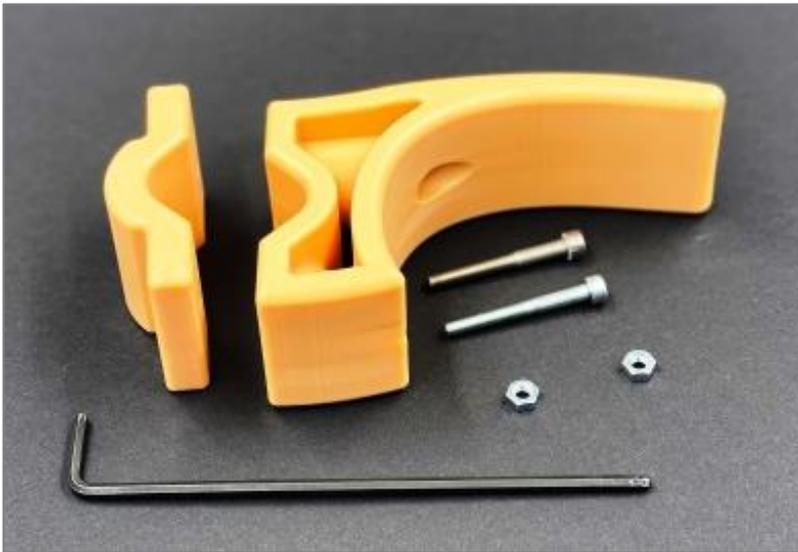


## How to post cure the DOOR HANDLE:

Step 1: Dry the DOOR HANDLE with **compressed air**. For example, with the RS cure or Dentamid PCU LED N2. Please follow the **resin manufacturer's instructions** for usage.



## How to assemble the DOOR HANDLE:



Step 1: **Plugg** the two printed parts together over your doorknob in a pleasant position.

Step 2: **Join both parts together** with the M4 threaded screw and M4 nut until tight.

