

Open stove build tutorial

Introduction

We're proud to be able to offer you this easy-to-make, easy-to-use oven and grill project. The main objective was to respond to a primary and vital need: how to eat and cook when we have little or nothing. We wanted to offer a solution to the problems and difficulties faced by a number of people today on earth where access to a cooking system is difficult.

After several weeks of research and design, we came up with the product you'll find below. It has been designed to be quick and easy to make, using very few raw materials that are readily available everywhere.

To understand the steps that follow, we need to explain how the oven works. The oven is made up of 3 distinct parts. The bottom part supplies heat to the other two compartments. The middle section is the oven. You have a door that allows you to open and close the oven, and you can place the dish to be cooked on the metal rods that serve as supports. Finally, the top section serves as a grill when you are already using the middle section as an oven. It is enclosed and keeps the heat in. The grill is placed on the metal rods. If you're not using the oven section, you can easily remove it and place the upper section directly on top of the lower section for maximum heat. What's more, you can use only the lower section to grill your food on the metal rods.

Note that all the parts with metal rods can be used directly as a grill.

I should also point out that the top part is also closed with a door and can be used as an additional oven for heating a second dish. It's up to you how you use it, depending on your needs!

If you're interested in this project, don't hesitate to build it and send us your feedback, which we'll be delighted to receive. You'll find all the details, explanations and assembly instructions below.

Tools

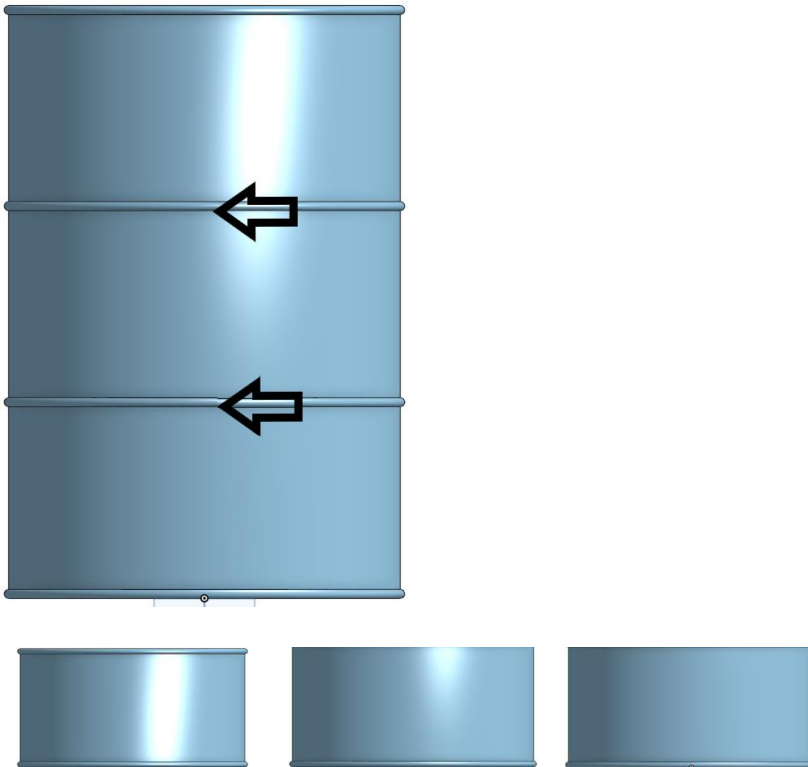
To make your Oven & Grill product, you'll need a range of tools and materials. These can be salvaged or bought specially for the occasion. The choice is yours. Here's the list of supplies:

- a 200L barrel
- screws
- 2 hinges
- more or less one meter of a metal T bar
- 10 cm diameter cylindrical bars
- a metal saw
- a screwdriver
- angle grinder if you have one
- a welder, if you also own one

manufacturing guide

Step 1

Take the barrel and clean it thoroughly. Under no circumstances should there be any trace of anything that may have been there before. Once this is done. You need to cut it into three equal parts as shown in the diagram below. Make sure you cut in the right places, and cut cleanly and neatly. This will be important for the rest of the process. To do this, use the hacksaw.



Step 2

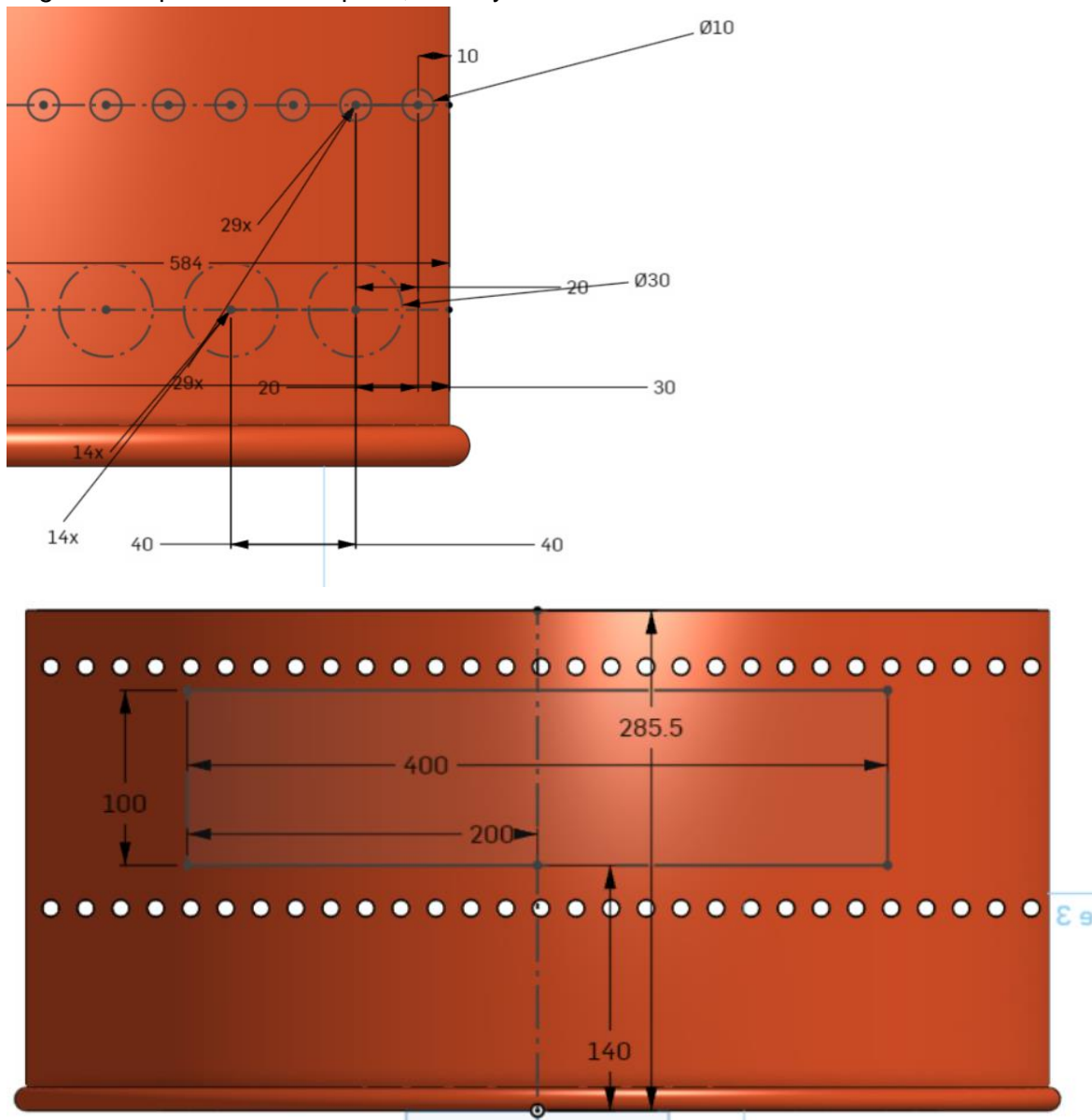
You now need to cut each piece in a very precise pattern. The aim of this stage is to cut the holes that will accommodate the cylindrical reinforcements. To do this, you can drill the holes using a 10mm drill. Make sure your holes are straight and aligned so as not to interfere with other drilling.

You can refer to the 3D diagram to find out where to make the holes. You can also look at the plan below.

For information, on the bottom piece, you need 2 rows, one at the top and one at the bottom, on the middle piece, also two, and finally on the top part, you only need one row of

holes. These holes are for the reinforcements that will support and consolidate the shape of the barrel.

Once your holes are drilled, you can now tackle the door on each piece. To do this, cut a rectangle with the dimensions given below. You can use a disc cutter or a hacksaw. Don't forget to keep the removed parts, as they will be used to make the door.



Repeat the operation for all three parts of the barrel.

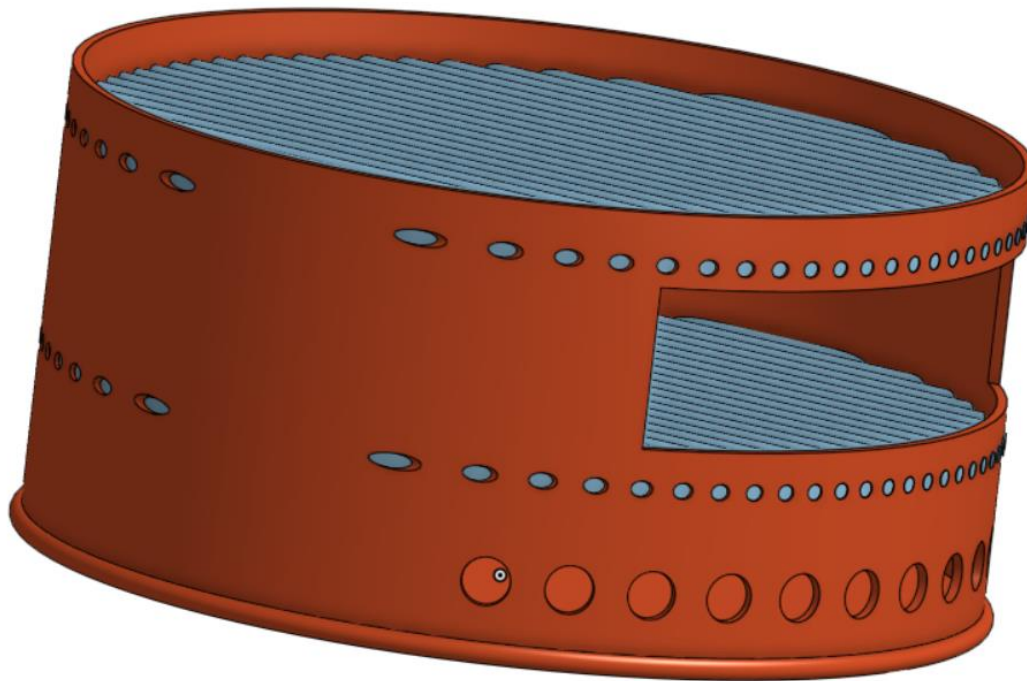
Step 3

This involves cutting the 10mm diameter metal bar and fitting each end into a hole. You need to do this for all three pieces of the oven. You can refer to the previous step if necessary.

Once you have enough ends for each hole, cut off the lengths protruding from the barrel. Use the hacksaw to do this.

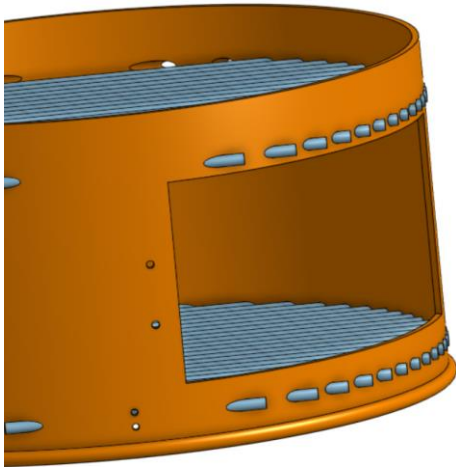
Finally, you'll need to weld the rods in place if you're able to do so. You'll need a welding machine for this. Once everything is fixed, your assembly will be perfectly rigid and will resist any heat-related deformation.

If you can't attach them to the structure, then the bars will simply be used to place the food on top.



Step 4

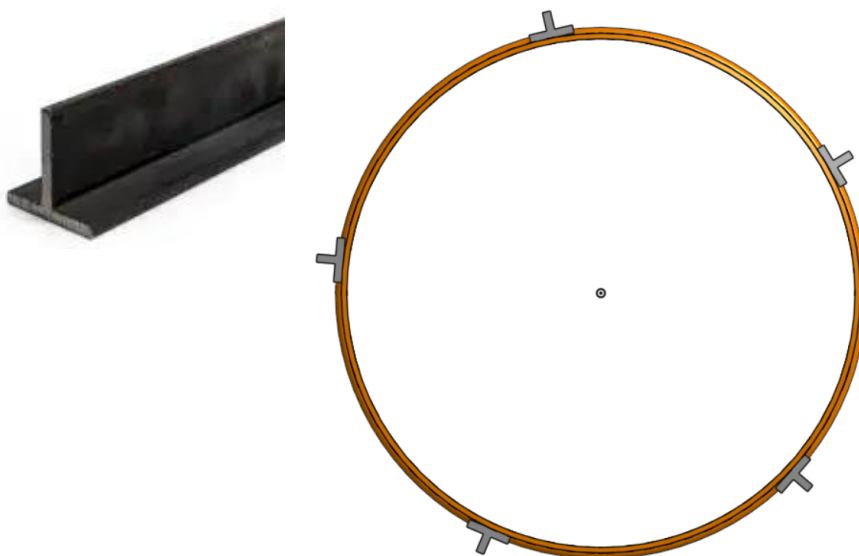
Make the holes to fix the hinges to both the barrel and the doors on the pieces of barrel previously removed. The size of the holes will vary depending on the hinges you use. Make sure you can close the doors perfectly. As a reminder, you need doors for the top and middle sections. There are no doors in the lower section, as the hole is used to place the fuel.



Step 5

For this fifth and final part, you'll need to get hold of the T-bar, as shown below. You'll need to cut equal pieces to hold each part of the barrel together. To hold the top section together with the middle section, then the middle section with the bottom section, you'll need lengths of 4cm. This will do. Cut them with the hacksaw, then fix them to the structure. As a reminder, use 5 per part of the barrel, so 10 pieces of 4cm long.

Finally, for the bottom part, you're free to put some in too, to prevent the barrel from resting directly on the floor. In this case, make sure that the length is exactly the same for all the lengths. You can adjust the length to suit you, if you prefer it to be higher or lower. Bear in mind that the higher the structure, the less stable it will be.

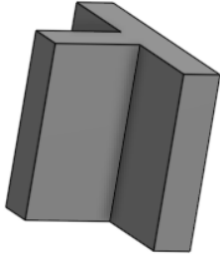


Your barrel is now finished and ready to use. You'll find the user guide below to get you started!

How to use your oven/grill

To use your oven/grill, you can first refer to the introduction, which explains the function of the three parts of your oven/grill. Once you understand the functions, you can start using it for the first time.

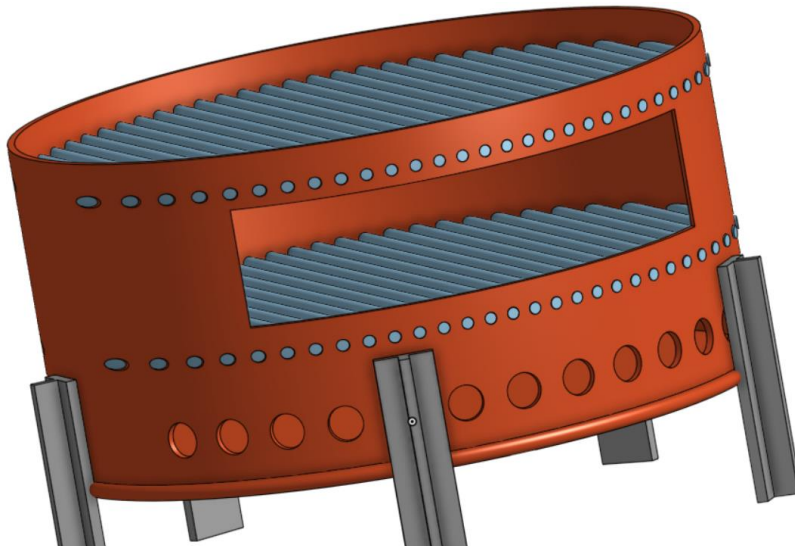
It should also be pointed out that when you modify the structure of your construction to suit your needs, always check that the T-blocks are correctly positioned and hold the structure in place. Otherwise you could run into problems if one part tips over.



light the fire

To start cooking for the first time, you can begin by lighting the fire. To do this, you can place wood, charcoal or any other fuel you have on the metal rods at the bottom. The image below shows the area where the fire will be built.

The holes at the bottom act as air vents during combustion. You can then light the fire. The hatch allows you to refill with fuel and keep the fire going.



Use the good part for your cooking

Once your fire has been fuelled and started, you can now place the middle "oven" part and the top "grill" part on top.

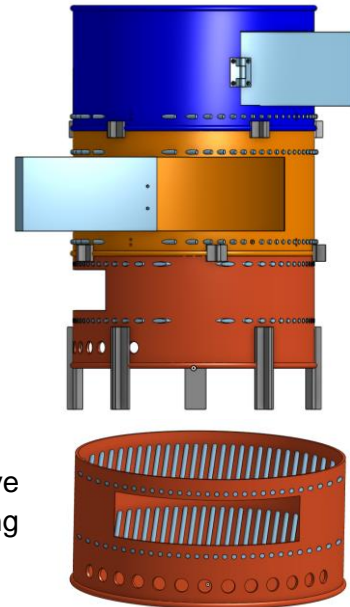
Just wait a few minutes for the barrel to heat up, then you can place a dish in the oven part. If you need to, you can also use the top part as an oven. Be careful with the heat, though: metal is a good conductor of heat and you risk burning yourself if you touch the metal with your bare hands.

To use the grill section, simply wait a few minutes for the heat to build up and settle, then place your food directly on the metal bars.

For faster cooking, and if you don't need the oven at the same time, place the top third of the barrel on top of the heating third. This will give you a more efficient grill.

Note that the lower part can be used independently, just place the food directly on the metal rods above. This will give you a more efficient, open-air grill. You can refer to the drawing above for a better understanding of the explanations.

Get cooking !



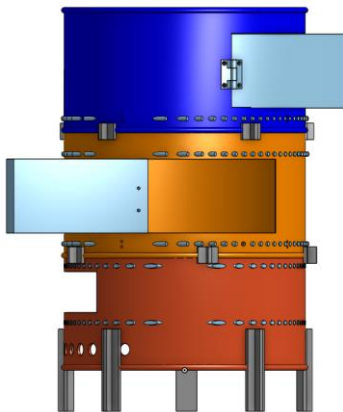
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Grilling



For the grilling process you only need the bottom section. Put your combustible (wood, charcoal, coal, leaves, ...) on the bottom grill and put the things you want to cook on the top grill

Smoking



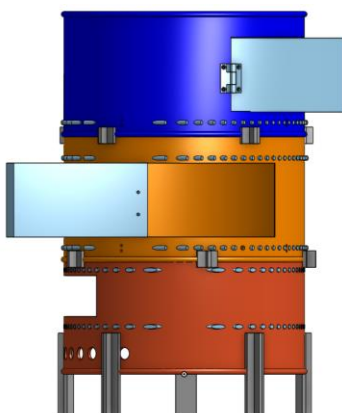
For the smoking process you need all three sections arranged in the same way as the picture on the left.

Put your combustible (wood, charcoal, coal, leaves, ...) on the bottom grill of the red section.

Put the meats you want to smoke on hooks and hook them to the top grill of the yellow section.

Close the doors of the yellow section and open the door of the blue section to let smoke out.

Oven cooking



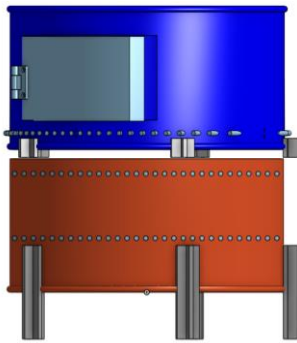
For the oven cooking process you need all three sections arranged in the same way as the picture on the left.

Put your combustible (wood, charcoal, coal, leaves, ...) on the bottom grill of the red section.

Put the things you want to cook and put them on the bottom grill of the yellow section.

Close the doors of the yellow section and the blue section to let smoke out.

Stove cooking



For the stove cooking process you only need the top and bottom sections arranged in the same way as the picture on the left.

Put your combustible (wood, charcoal, coal, leaves, ...) on the bottom grill of the red section.

Put the things you want to cook and put them on the top surface of the blue section.

Close the doors of the blue section to let smoke out.