STEEL DRUM BBQ

JAMIE & JIMMY'S FRIDAY NIGHT FEAST SERIES 6

Overview

A classic steel drum BBQ that not only provides a large cooking area for searing meat or char-grilling veggies, but a side stove to cook accompanying dishes - You can cook all kinds of meat and veggies on this versatile BBQ.

What you will need

- 45 Gallon Steel Drum Ungalvanised & Unpainted (This steel barrel must be food safe. If you are using an old one it must have been used to previously carry food or drink)
- Stainless steel wire mesh
- Angle Iron 30x30mm
- 25mm box section steel
- 15mm box section steel
- Various M5 Bolts and nuts
- Wood for handle (eg fence post)
- Large stainless steel saucepan
- 2' BSP iron pipe
- 2' BSP iron elbow
- 2x M8 coach bolts 150mm
- 6' wooden poles
- Metal coat hooks
- 3 Stainless steel hinges

Tools & Safety equipment

- Ruler
- Felt tip pen/pencil
- Angle Grinder
- Hex Driver
- Drill
- Centre Punch
- Side Cutters
- Wood Saw
- File
- Hammer
- Dust Mask
- Appropriate clothing/ footwear
- Safety glasses
- Mask
- Hearing protection
- Rigger gloves

How to build a Steel Drum BBQ

I. Cut steel drum lid + deburr

- Stand the steel drum upright and find the center of the circle of the drum, using a pencil and ruler - draw two lines at a 120 degree angle. Continue these lines over the edges and down the length of the drum. Now connect the two lines by drawing along the circumference, 40mm in on both ends of the drum.
- Have somebody hold the drum securely
- Use an angle grinder to cut along the marked lines of the lid. You and your helper will need to wear appropriate Personal Protective Equipment for this. If you are inexperienced or do not feel comfortable using an angle grinder then, ask someone experienced to help you.
- Once the lid has been fully cut and comes off clean, take care and be aware that it will have sharp edges.
- Put on rigger gloves to handle the lid, and use a file to deburr the edges of the lid and the steel drum.

II. Attach lid using hinges

- Place the lid up to the steel drum and mark the holes for the 3 hinges spaced evenly apart
- Drill, ensuring you wear safety goggles.
- Use nuts and bolts to attach hinges to lid and drum with fasteners.

III. Cut legs and grill brackets

- Mark out the length of each leg onto box steel metal tube - 118cm
- Mark out the length of 2 pieces of box steel to the length of the inside of the drum. These will be grill brackets inside the steel drum and will hold the grills where food can be cooked.
- Using an angle grinder or hacksaw (and wearing appropriate protective equipment), cut the box steel to length.
- Wearing gloves, carefully deburr the ends of the box steel so it is smooth.
- You need to cut a total of 4x legs and 2x steel brackets for the steel drum.
- Carefully deburr the ends with a file so each cut piece of metal is safe.



IV. Drill holes for legs and grill brackets

- Mark out where the legs will be attached to the side of the drum at each end.
- Mark out where the nuts and bolts will go through each leg.
- Mark out where the metal brackets will be attached on the inside of the drum, which will hold two levels of grill.
- Drill holes in the legs and also in the side of the drum.



V. Attach legs and grill brackets

- Using M5 nuts, bolts & washers attach the legs to the side of the steel drum.
- Stand the steel drum up-right.
- At the back of the grill, attach the 30x30cm angle steel for both grill levels.
- Attach the box steel across the middle section inside the steel drum.



VI. Cut grills

- Measure the inside of the steel drum from end to end.
- Using side cutters wearing gloves and safety goggles - cut the ungalvanised stainless steel wire mesh so that it sits on the metal grill brackets.
- You want three sections of these grills, and they need to be loose - so you can add in charcoal into the steel drum, and clean them after having a BBQ!
- Wearing gloves deburr the cut ends so that they are rounded and safe to touch.
- *Use: side cutters*
- *Wear: safety glasses, appropriate clothing/footwear, gloves*


VII. Make and attach wooden handle

- Just like a regular bbq, the steel drum will get extremely hot with lit charcoal inside it, so you will need to add a wooden handle to raise and lower the lid of the drum.
- Using a length of round wood (eg. fencing pole) - cut this roughly 50 cms long with a saw, ensuring you wear safety goggles.
- Using an impact driver, drill two holes, securing the wood in a vice or with a G-clamp for safety.
- Drill two holes into the lid of the BBQ.
- Attach the wooden handle to the lid using long nuts and bolts - and space the handle with nuts so it sits away from the lid so the wood isn't touch the metal lid. Secure with nuts and washers to the lid.
- *Use: impact driver, drill, saw*
- *Wear: safety glasses, appropriate clothing/footwear, mask.*



VIII. Add chimney + airhole

- The steel drum should have a 2’ sized hole, which is normally used to add fluid into the drum. This will be threaded.
- Remove the metal bung (if your steel drum has one).
- Add the U-shape metal pipe.
- Add your 2’ diameter metal pipe to the top to act as a chimney.
- *Wear: safety glasses, appropriate clothing/footwear*

IX. Make rice stove

- Use a stainless steel pot, and an impact driver to drill holes into the base.
- Drill holes into one side of the pot - so it can be attached to the main steel Drum.
- Add some ungalvinised wire mesh to the bottom to hold a small charcoal BBQ.
- Cut one length of box steel using a hacksaw or angle grinder that sits over the size of the steel pot you are using.
- Cut two lengths of box steel, which will sit over the steel pot, either side of the longer length of box steel, and create a cross member which will act as a stove.
- Wearing gloves deburr the ends with a file.
- Drill a hole into the middle of the long section of box steel in the middle.
- Attach together the 2 shorter lengths to the longer length with washers and nuts.
- This should sit neatly onto the stainless steel pot.
- *Use: Angle grinder or hacksaw, file.*
- *Wear: appropriate clothing/footwear, safety goggles, gloves when handling cut metal.*



X. Attach hooks for carry handles

- Drill 2x holes into the legs at the same height on each leg (Just below the bottom of the steel drum).
- On each leg - attach coat hooks (4x hooks in total).
- Secure with nuts and bolts.
- To lift up the bbq, you can place a pole under each hook, just like a stretcher, and push in as you lift the steel bbq.
- This requires 2 people to lift! Always follow health and safety procedures when lifting.
- *Use: impact driver, drill bit.*
- *Wear: Safety goggles.*

XI. Place thermometer in lid

- So you can tell how hot the BBQ is with the lid down - placing an easy to buy heat thermometer on the lid will give you a guide as to how hot your BBQ is!
- Drill a hole in the middle of the lid.
- Attach the thermometer with a nut and bolt.
- *Use: impact driver, drill bit.*
- *Wear: Safety goggles.*

Specific Safety Notes

- The Jerk station will get VERY hot when in use. Ensure that no-one touches any part of the BBQ when in use other than the handle.
- The steel drum should have holes drilled into its base - so you can drain it if it gets wet, or if you wish to use water to put the fire out.
- These drainage holes mean that hot ash can spill from the BBQ when in use. Ensure the ground below the BBQ won't catch fire.
- Have a bucket of water or a powder fire extinguisher on standby.
- Wet the ground below this BBQ, especially in very dry weather.
- Ensure it is placed onto ground that is level.

End User Notice

Your BBQ should only be used outdoors. Only use power tools in accordance with manufacturers instructions. Ensure all necessary safety equipment is worn at all times when using specific tools and equipment. The BBQ can be kept outside, but as it is ungalvanised steel - it will rust quickly. Use a cover or store this in a shed or similar when not in use. The instructions in this document are intended as a guide only, any building you do is at your own risk. You should regularly assess the safety of the Build during construction and afterwards.

General Safety Guidelines

Flames

When lighting fires, using naked flames or tools that can generate sparks, please ensure that there is adequate space in the surrounding area and that there are no dry or flammable surfaces nearby. Having water on hand or a sand bucket is a good safety precaution. Never leave a fire unattended at any time and always ensure the fire is supervised for at least 60 minutes after it has been put out to ensure the area remains safe.

Food Prep

Please clean all surfaces thoroughly before serving food and ensure raw food preparation areas are not also used for cooked food serving and presenting.

Tools

When using tools, please ensure that you have read the instructions carefully and that you have the correct Personal Protective Equipment to operate them safely. If you are not experienced at using them seek help or advice from those more experienced on how to use them safely.

Heat

Please be mindful that inside the BBQ gets incredibly hot when heated so please be careful around the structure. Make sure others are kept at a safe distance and that you use the correct Personal Protective Equipment (PPE) including protective clothing when handling or working near these builds.

Once you have finished using the build, remain a safe distance from the build ensuring that it has cooled fully before you touch it.

Children

Make sure that children and others are kept at a safe distance throughout the making of the build and whilst you are using it. Ensure that the build is given enough time to cool fully before you leave it unattended.

Personal Protection Equipment (PPE) Safety Guidelines

TOOL	ADVICE
For any tasks that will generate dust / particles a dust mask is advised	
ANGLE GRINDER	• Hearing Protection • Safety goggles • Dust mask • NO GLOVES (spinning equipment) • Long sleeve cotton clothing • Safety boots
JIGSAW	• Safety goggles • Dust mask • NO GLOVES (spinning equipment) • Safety boots
MITRE or CHOP SAW	• Safety goggles

	• Dust mask • NO GLOVES (spinning equipment) • HEARING PROTECTION • Safety Boots
MIG WELDER	• Welding clothing • UV welding mask • UV eye protection for observers • Welding gloves
IMPACT DRIVER (DRILL)	• Safety goggles • NO GLOVES (spinning equipment)
HAND SAW	• Safety boots • Safety Gloves to be worn for all non rotating saws
FILING	• Gloves (especially for metal work)
HACK SAW	• Safety boots • Safety Gloves to be worn for all non rotating saws
BENCH DRILL	• Safety goggles / Bench drill guard • Safety boots
WIRE CLIPPERS/CUTTERS	• Safety goggles
LIGHTING FIRES	• Fire safety gloves (for putting coals onto a lit fire) • Bucket of water • Suitable Fire extinguisher • Fire poking tools (metal)
CHISEL/HAMMER	• Safety Goggles • Safety Gloves
TAPER DRILL BIT	• Safety goggles • SAFETY rigger GLOVE for securing metal bowl.