



MAN CRATES  
PROJECTS

# KNIFE TO MEET YOU

DIY CHEF KNIFE MAKING KIT



Fact: 87% of cooking is just cutting things into the right shape. If you're preparing a salad, that statistic soars to a whopping 95%. It's no wonder a chef is useless without a dependable knife, and those bargain bin blades just aren't going to cut it.

In a world full of "As Seen on TV" Slice'n'Dice Machines, Wombo Combo Fruit Juicers, and self-sharpening spatulas, it can be tough to know which kitchen tools are grade A and which are woefully undercooked.

**THE ONLY TOOLS  
WORTH TRUSTING  
ARE THE ONES  
CRAFTED BY YOUR  
OWN TWO HANDS.**



Modern Damascus steel reimagines an ancient forging technique from the Near East. Layers of steel and iron are combined to form steel billets which are then folded and fused together over again and again. The process creates a stunning and uniquely patterned blade with an incredible balance of hardness and flexibility.





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## *The Chef Blade*

Your *Damascus Steel Blade Blank* was crafted with incredibly durable VG-10 steel. We're talking 67 layers of steel that have been hardened to HRC 60 on the Rockwell Hardness Scale. This knife is sturdy and extremely sharp, so its wielder will need to be just as sharp to ensure continued possession of all digits while chopping.

## *The Handle*

This is the most intimate part of your knife; it's what you'll be feeling every day. The two-tone linen *Micarta Handle Scales* are made from layers of hardened resin linen and are incredibly durable. The struggle of shaping and sanding will reveal a beautifully unique wood grain pattern that resists corrosion, acids, oils, heat, cold, moisture, compression, and apathy. The nickel *mosaics pins* will provide the perfect accent to compliment both the Micarta and steel.

## *The Tools*

Shape your handle to a perfect fit with a *gamut of files*, grades of *sandpaper*, and a *portable bench vise*. These tools and a little hard work are all you'll need to crank out a beautifully crafted knife. Elbow grease not included.



## Step 1: **SAFETY FIRST**



**WARNING:**

***THIS BLADE IS VERY SHARP!***

Look down at your fingers, and give 'em a little wiggle. They look amazing connected to your hands so effortlessly. If you agree and want to keep them that way, please be careful to observe these precautions.



***Leave the plastic sleeve on,*** and use masking tape or some other heavy tape to secure the plastic sleeve onto the blade. This will protect both your fingers from the knife, and the knife from the tools that you'll be using to make the handle.

## Step 2: **PREPARATION**

For best results, make sure you have a clean working space. It will definitely not remain this way, so take a picture if you need to savor the moment.

With a damp washcloth, wipe any dust or debris from the Micarta handles and tang, which is a fancy word for the part of the blade the handle is built onto. Dust can prevent full adhesion of the handles to the knife.

Take a dry run and align the tang, bolster, and handle scales to ensure the bolster and handle scales sit flush.

Once the scales have been attached with epoxy, they won't be going anywhere. Take the time now to file and sand any uneven areas to ensure the scales fit on the handle with precision and complete contact.





### Step 3:

# ASSEMBLY

Thoroughly mix equal parts epoxy, using just enough for attaching one scale for now. Spread the epoxy over both the scale and knife handle surfaces. Align the handle onto the knife tang and make sure it is flush to the bolster. Use the vise to clamp the pieces together and allow the epoxy to cure for at least 2 hours; be productive, do some pushups while you wait.

**PRO-TIP:** Glue could possibly drip through the pin-holes in the blade handle. Place a piece of tape over the holes on the opposite side of the handle to prevent accidentally gluing your knife to the vise.



Now that one scale is in place and fully cured, it's time to drill, baby, drill!

Use the holes in the tang as a guide to drill through the attached handle scale. Clamp the knife in place, and make sure to drill straight down so the holes are perpendicular to the scale.

Once both holes have been created, repeat the attachment process with the other scale by applying epoxy and doing more pushups. Once fully cured, clamp and drill holes through the second scale using the existing holes as a guide.



Time to put the “fun” in “functional kitchenware ornamentation” by inserting the mosaic pins. Coat both the pins and pin holes with epoxy, then insert the mosaic pins into the finished assembly. It's okay if the pins protrude from the handle surface. They can be shaped later with the handle.

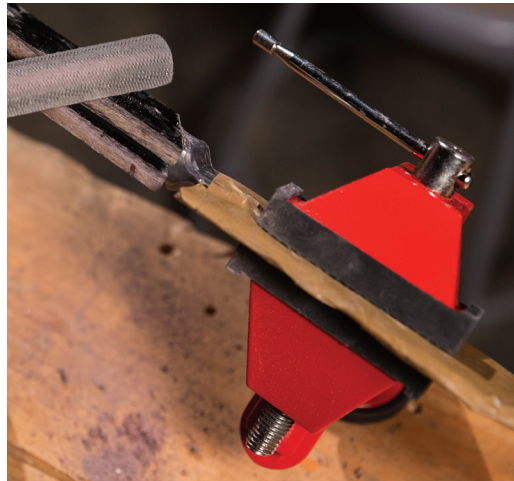
Finally, allow the full assembly to cure completely for about 8-12 hours before continuing.

More pushups. You're becoming mighty!

## Step 4: **SHAPING**

Clamp the wrapped knife blade securely into the vise with the sharp part facing away from you. Adjust the angle of the vise to accommodate your stature and range of motion.

Beginning with the rasp, the coarsest file, grind down the pins until they're level with the scales. Don't worry about scratching up the metal. The included sandpaper can bring back that polished look in no time.



Next, get to work removing the parts of the handle scale not in contact with the knife tang. Use the rasp for all the heavy lifting. Remember when we mentioned your work station would get messy? This is the time and place to make that mess.

Once the handle scales are flush with the metal along the entire tang of the blade, you can start thinking about the shape of the handle you want to hold.

It's time to get personal and give your knife some character. Remove excess handle material until it feels comfortable and familiar...like you're shaking the hand of an old friend.

Keep a careful eye on preserving symmetry. Or don't. You are the master of your destiny.

Feel free to explore using the files to remove material in ways that reveal interesting patterns in the Micarta.



Once you've achieved your desired handle shape, switch over to the mill file, and remove all deep gouges and scratches. The file can also be used to shape the bolster, but be prepared, the hardened steel will require more effort and patience.

**PRO-TIP:** A good rotary tool or saw can save you a lot of time. Just remember, when you're working twice as fast, you can screw up twice as fast too.



## Step 5: **SANDING**

Once you've completed the handle shape, the next step is sanding.

Start with the rough sandpapers, and don't move on until all of the deep scratches are removed. Sand the bolster, pins, and Micarta. Use the guide on the following page to help determine the level of finish.

No extra finish is required since the material is non-porous and synthetic. Stop sanding once you've achieved your desired look.

Now that you're finished, go ahead and remove the protective cover. You may need to shield your eyes from the sheer majesty you're about to unleash.



# F.A.Q.

## *Hey! There are black spots on my blade!*

Technically that's not a question, but we'll let it slide.

These spots are natural remnants from the molding process and are perfectly normal. Just wipe away and/or sand clean, then start working.

## *What do I do about gaps in the scales that were totally there before I started and definitely not my mistake?*

If you find any open cavities or gouges in the scales, you can use the 2-part epoxy as filler for the cavity.

Clean the cavity and fill the gap with epoxy. Once you've given it the proper amount of time to cure, you can file and sand it down as if it were part of the Micarta.

## *What should I do if I cut myself accidentally?*

Definitely not sue us. We warned you it was sharp!

Assess and address the wound accordingly with this helpful rhyme: "Prick on the finger? Bandage that stinger. Bleeding won't subside? Ambulance ride!"

## *What should I do if my garage is too cold?*

Try putting on a sweater. If that doesn't work, consider purchasing a space heater or a house located in a more temperate climate.

## *This was fun! Where can I find more projects like this?*

Glad you enjoyed yourself. We've uploaded the instructions booklets for all our other Project Kits at [www.mancrates.com/library](http://www.mancrates.com/library)

# CARE & LOVE

## *Cleaning and storage*

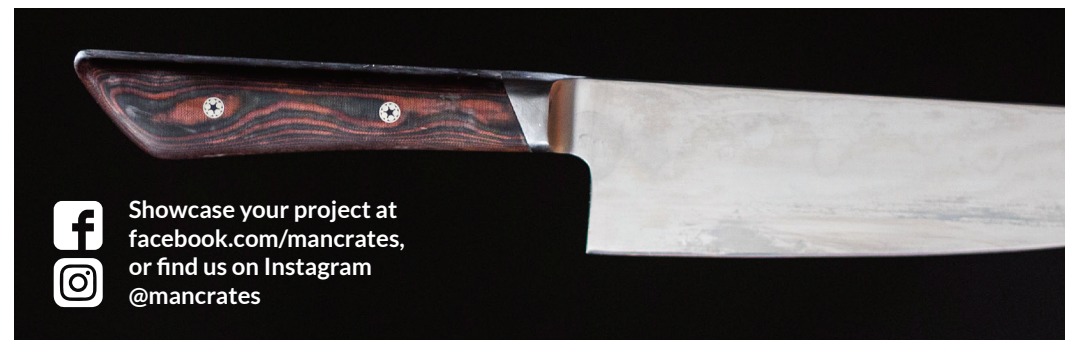
Handwash knives with soap and dry afterward with a towel. Avoid using the dishwasher, and soaking the knife in water. After cleaning, store in a butcher block, sheath, or drawer tray. We don't recommend leaving it loose in a drawer where it can bounce around and cut people or things.

## *Honing and sharpening*

Honing with a wet stone is a great way to keep your blade sharp. If you have a full set of stones, sharpen it yourself. Otherwise, we recommend taking it to a professional regularly, or as often as you rotate your tires.

## *Cutting surfaces*

We recommend using either wood or polypropylene boards. Avoid harder surfaces, like your granite countertop.







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