



These lightweight rasps pack a big punch with a fast-cutting action.

high-tech, smooth-cutting Rasps

Way in the back of my tool chest are a few rusty, old rasps. I admit they're not used much. It's not that they don't work. When it comes to shaping curved and round parts, like cabriole legs, nothing beats having a rasp close at hand. They cut much quicker and more aggressively than either files or sandpaper.

The problem is they work almost too well. I end up spending so much time cleaning up the furrows and gouges left by the rasp, that I avoid using it. But recently, I came across a new tool that takes a totally different approach to shaping wood.

The *Microplane* rasps, like the one shown in the photo above, remove wood just as fast as traditional rasps. But the big difference is the smoother surface they leave behind. So you'll spend a lot less time sanding after using them.

Lightweight Tool. At first glance, a *Microplane* rasp doesn't look like a woodworking tool. It consists of a molded plastic handle with a long blade. And when you pick one up, you'll notice how lightweight it is. It seems more suited to the kitchen than the shop.

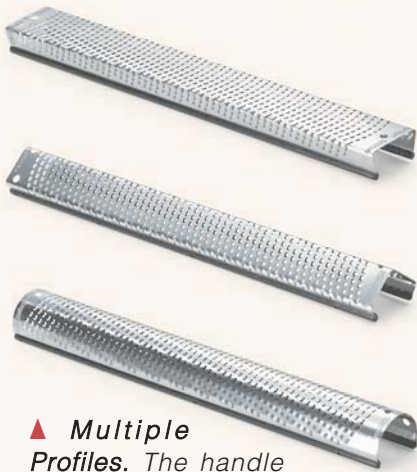
It's tempting to think these tools aren't meant for serious woodworking. But the truth is, these tools can stand up to more than just wood. *Microplanes* can be used on plywood, MDF, rubber, plastic, even autobody filler and fiberglass.

One Tool, Several Blades. Besides their unique look, *Microplane* rasps work differently than other rasps. A typical rasp has a thick, steel blade with raised teeth that scratch and tear away material. On most rasps, the teeth are set in even rows. This leads to deep gouges and can clog the teeth. (The box at the bottom of pages 40 and 41 features traditional-style rasps that leave a much smoother finish.)

Instead of thick, heavy steel, *Microplane* blades are made from thin stainless steel. The blades are replaceable and "pop" out of the handle with a pencil, like you see in the photo at left. This lets you swap out one profile for another. You can choose among flat, round, and angled profiles (photos on the top of the opposite page). Each profile



Replace the Blade. All it takes is a pencil to pop out one blade and snap in a different profile or grade.



▲ **Multiple Profiles.** The handle can accept flat, round, or angled blades in either “coarse” or “fine.”

comes in either a “fine” or “coarse” grade. For most woodworking tasks, I’ve found that the fine blades worked the best at removing material quickly and leaving a smooth surface.

Slicing, Not Tearing. The way a *Microplane* blade cuts is unique. In the right photo, you can see that the surface of the blade is covered with teeth much like a cheese grater.

The teeth are cut into the blade with a photo-etching technique that guarantees sharpness and a uniform size. These teeth act like

small, low-angle planes that slice the wood fibers cleanly, leaving a surprisingly smooth surface. Besides reducing sanding time, a big advantage of this design is that the teeth aren’t as likely to clog up with chips and stop cutting.

A side benefit of the snap-in tool handle is shown in the photo at right. The plastic handle has a small thumb grip built into the end. Although it may not seem like much, the thumb grip gives you a lot more control over the tool.

Long-Lasting Blades. The snap-in design makes it easy to purchase an inexpensive replacement blade when one gets damaged or dull. But the low-angle slicing action of the blades means there isn’t as much stress on each cutting tooth, so the blades will last a pretty long time before you need to think about replacing them.

Just how fast the blades get dull will depend on the material you’re working with. Shaping plastic and rubber will dull the blades faster than only cutting wood.

Care of Microplanes. The best way to care for a *Microplane* is to keep the blades from bumping into other tools. Dents and dings in the



Thumb grip



▲ **Sharp Teeth.**

Tiny teeth are “etched” into the stainless steel blade. The non-clogging teeth slice the wood fibers cleanly.

blades will shorten the life of the cutters and can lead to the blade tearing. But because the tools are made from stainless steel, they won’t rust like traditional rasps.

After trying out these simple tools, you’re sure to find some good ways to put them to use. *Microplanes* aren’t limited to rasp-like tools. You can see a couple other applications in the box below.

And on the next page, you’ll find some techniques and tips for getting the best, smoothest results when working with *Microplanes*. Turn to page 51 to find out where to get these handy tools.

Beyond Rasps: Fast-Cutting Tools

The same cutting action used in *Microplane*’s rasps has been applied to a couple of other innovative tools. The first is a finer-cutting replacement blade for the popular *Surform* tools shown in the photo below.

The other unique application is shown in the photos at right. Here, a *Microplane* rotary shaper is powered by a drill press for a smooth shaping action that cuts wood faster than a drum sander.



◀ **Tool Upgrade.** You can replace the regular *Surform* blade with a faster cutting *Microplane* blade.



▶ **Power Shaper.** A *Microplane* drill press rotary shaper cuts faster than a drum sander and won’t clog or burn the workpiece.



Techniques for Using a Rasp

A rasp is one of those tools that just seems to be easy to use — and it is. In fact, they don't come with instructions. But the truth is, there are a few techniques that can make getting smoother, more consistent results with a rasp as easy as 1-2-3.

There are three basic sets of motions for using a rasp effectively. The first two motions are used to remove the tool marks and rough out the overall shape of the workpiece. The final strokes will refine

and smooth the shape before finishing up with sandpaper.

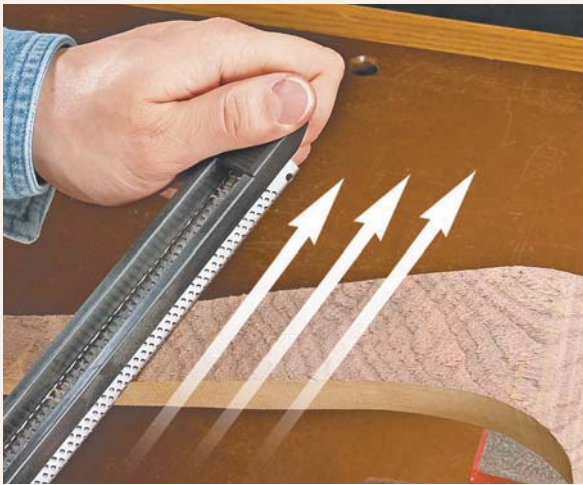
There's one more thing to note. While these techniques are shown using a *Microplane*, they work just as well with a traditional rasp.

Cutting Direction. Although rasps will cut in any direction to the grain, it works best to take cuts at an angle. This is especially true of *Microplanes*. The teeth are more likely to clog when taking cuts with the grain. The reason is that cutting

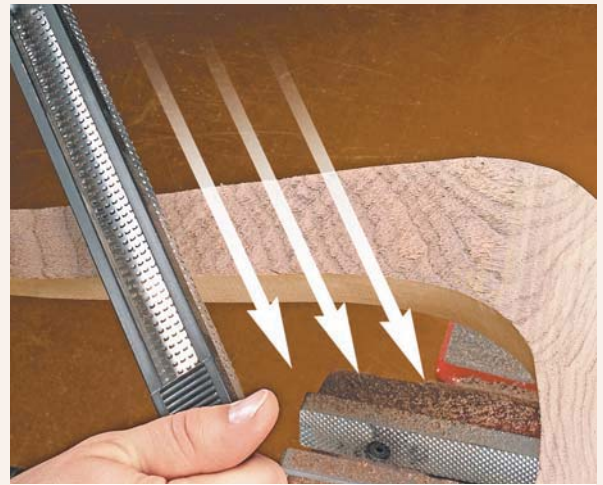
with the grain results in long splinters instead of small chips.

Cross Strokes. The first step in shaping a workpiece, like the cabriole leg shown here, is to remove the saw marks left by the band saw and establish the overall shape. For this, I use cross strokes.

I'll hold the rasp with both hands, then take an angled stroke across the workpiece with firm pressure. This stroke is similar to a sawing motion, as you see in the

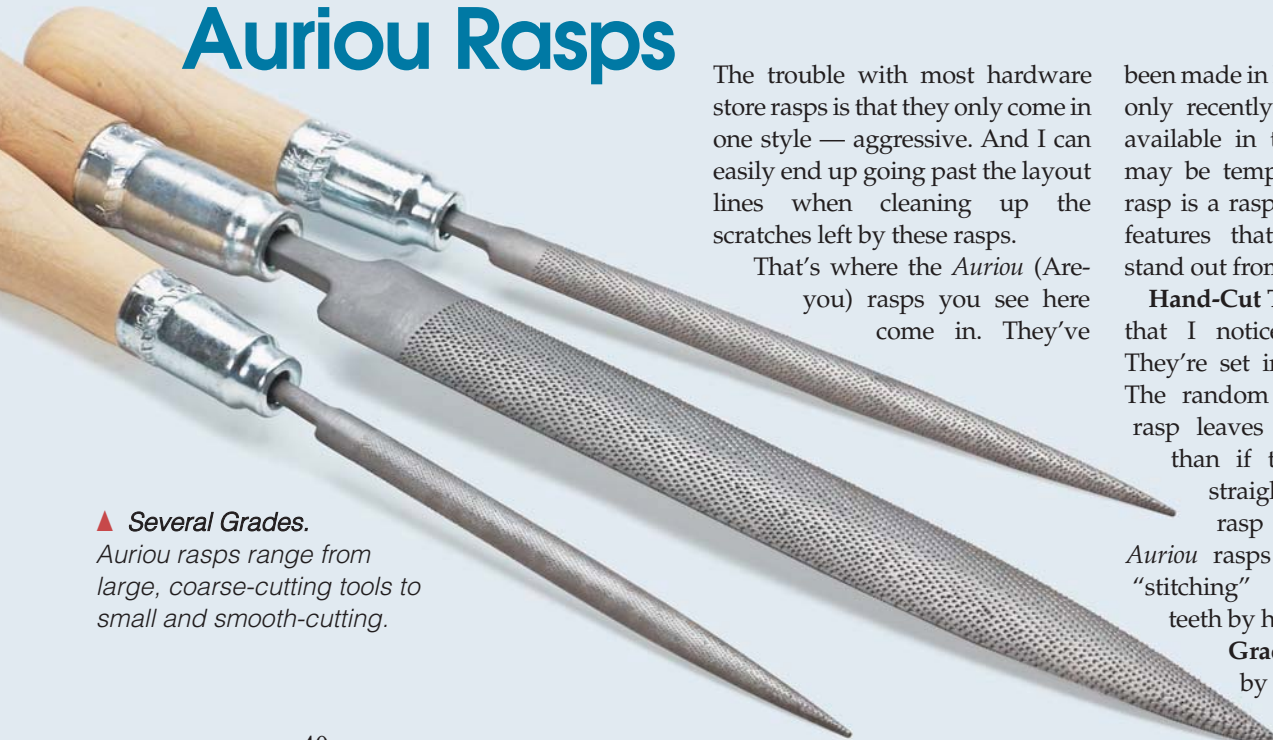


▲ **Cross Strokes.** Work the rasp at an angle across the grain to rough out the overall shape. The overlapping strokes will remove wood quickly.



▲ **The Other Way.** Use cross strokes going in the opposite direction to further shape the workpiece and remove the marks from the previous step.

Old-World Tool: Auriou Rasps



▲ **Several Grades.** Auriou rasps range from large, coarse-cutting tools to small and smooth-cutting.

The trouble with most hardware store rasps is that they only come in one style — aggressive. And I can easily end up going past the layout lines when cleaning up the scratches left by these rasps.

That's where the *Auriou* (Are-you) rasps you see here come in. They've

been made in France since 1856, but only recently have become more available in the United States. It may be tempting to think that a rasp is a rasp, but there are a few features that make these rasps stand out from rest of the pack.

Hand-Cut Teeth. The first things that I noticed were the teeth. They're set in a random pattern. The random spacing means the rasp leaves a smoother surface than if the teeth are set in straight rows like a typical rasp (photo at right). The *Auriou* rasps accomplish this by "stitching" or hammering the teeth by hand.

Grades. Cutting the teeth by hand makes it easier

left photo on the opposite page. Repeat this motion in long, overlapping strokes along the length of the workpiece. At this point, you'll notice the saw marks have been replaced with a series of diagonal scratches in the surface.

Reverse Direction. The next stroke is similar to the first. The goal here is to further refine the shape of the workpiece and remove the scratches left by the first stroke. There's just one differ-

ence. The strokes in this step should angle the opposite direction, as you can see in the right photo on the opposite page.

You can repeat these two strokes until the workpiece is close to its final shape. The left photo below shows a slight variation of the cross stroke that may come in handy.

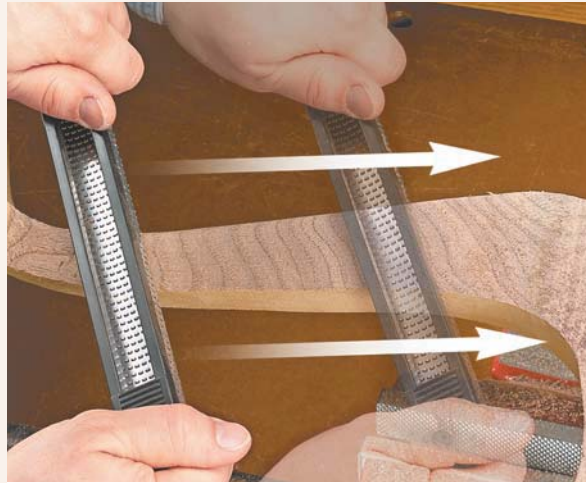
Reverse the direction of cut by pulling the rasp toward you from the opposite side. You may find this works well if you experience a

lot of chipout when pushing the rasp in the other direction.

Drawing the Rasp. The final stroke removes the scratches left by the previous steps and leaves a pretty smooth surface. To do this, hold the rasp at a slight angle and draw it along the length of the piece like you would skew a block plane (right photo below). You'll want to work with a light touch here to smooth the surface, not remove a lot of wood. 🛠️



▲ **Pull Stroke.** If you get tearout from the previous motions, try reversing the direction of the rasp. Flip the tool end for end and pull it toward you to cut.



▲ **Drawing the Rasp.** Sliding the rasp along the workpiece removes scratches left by the previous steps and smooths out the shape.

to vary the size of the teeth to make rasps of different grades or "grains." (Smaller teeth cut slower and smoother.) *Auriou* rasps are available in 15 grades.

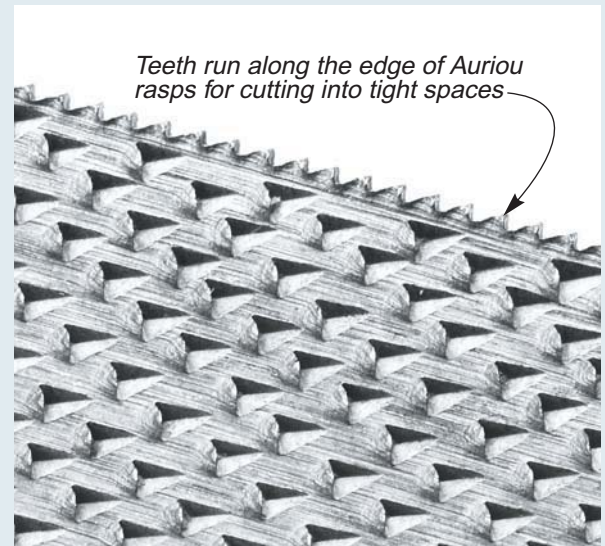
I found that the finest six grades are the most useful for woodworkers. The coarsest grades are used in stone carving. One of the benefits of so many grades is that you can move from a fast-cutting rasp to a finer, smoother cutting grade and still remove material faster than with files or sandpaper.

Shape. A final feature of these rasps that I liked is their shape. Like many rasps, the *Auriou* rasps come with one rounded and one flat side. But the big difference is at the end of the tool. All of the rasps

come to point. This point makes it easy for me to get into tight corners when shaping and smoothing details. There are even teeth cut in the edge right up to the point, as in the photo at right.

Cost. As you might expect, all these features come at a cost. The rasps range in price from about \$50-80 apiece. To find out where you can order these rasps, take a look at page 51.

Are they worth it? Well, if you do a lot of shaping curved parts and carved detail, then getting a few of these rasps will be just the thing. But occasional users may find they may need only one. Either way, you'll be reaching for them often and getting great results.



▲ **Random Teeth.** The hand-cut teeth on *Auriou* rasps are spaced randomly so that they leave a smooth surface and cut aggressively.