

Filing & Filework



Files

It's easy to think of a file as a simple tool that rounds off sharp edges, but in skilled hands, files can do much more. Skill consists of using the correct file, proper stroke and stable grip. See the Tools chapter for information on the files themselves.

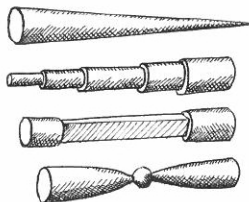
Stroke

All files cut on the push stroke, away from the handle. To extend the life of the tool, lift up slightly on the return pass. This prevents the teeth from being pushed down and is especially important when working on tough metals such as steel, platinum or titanium. Files cut in proportion to the force behind them—without a solid pressure, even a sharp file will have little effect. Place your index finger on the top face of the file to improve control and increase leverage.

A downward force is only as good as the upward support beneath it, which is why the bench pin is so important. It must be stable, at a comfortable height and shaped so it prevents the workpiece from slipping. Don't file while walking around or holding the work unsupported; you'll do more harm than good.

Exercises

Time spent mastering the use of files will be rewarded in confidence and efficiency. Here are several time-honored exercises designed to teach and test proper filing. Brass rod is ideal for these because of its low cost and clean cutting.



Sweeps

Filings of precious metals are caught so they can be recovered. Most craftspeople send the small particles to a refiner for this, after pulling out small clean pieces they will recycle themselves. In other studios it is more efficient to send everything to a refiner.

Traditionally, leather aprons were attached to the underside of the bench, a system that guarantees almost total capture. More common now is the watchmaker's variation in which a drawer is pulled out to catch filings as needed. If you work mostly in one metal, let all your filings mingle and let the refiner sort it out. If you work equally in gold and silver it will be worth your while to keep the sweeps separated. Make two drawers or use trays that stack into the sweeps drawer, putting the appropriate tray on top.

