processing wood

by Jesse Jones

Wood firing is an arduous task. One way to help reduce the time and labor it takes to process wood for a firing is to build a metal rack that holds the wood in place and allows it to be quickly cut to size.

Potters who wood fire know too well the strain of processing the cords of wood required to heat their kiln to temperature. At Pleasant Hill Pottery, we find ourselves seeking labor-saving methods to streamline the wood-firing process. Our wood is sourced from the scrap of three local sawmills. Much of this wood is in slab form (2–4 inches thick, 6–30 inches wide, and 8–16 feet long). Rather than cutting the wood on the ground (ruins your back and your chainsaw chain), I built metal racks that allow the wood to be loaded onto them directly from the truck or trailer then cut to manageable lengths (1). The system is versatile, portable, and adapts to a variety of wood sizes (long slabs, logs, branches, or dimension lumber) (2). Racks of similar design can be built out of wood but they are not as durable or sturdy.

The racks are built out of $1\frac{1}{2}$ -inch angle iron ($\frac{1}{2}$ -inch thickness). The base is 30×120 inches, although all dimensions can be adjusted to fit your specific needs. The spread at the top (32 inches) is designed match the length of the chainsaw bar (3). There are six X-frames welded to the base. The intersection point of the X-frame is about 24 inches from the ground. There are short (12-inch) gussets between the two end X-frames and the base for support (4). Most hydraulic splitters have a 25 inch or larger capacity. Spacing the X-frames 24 inches apart and cutting in

the middle of each pair of frames (5), produces 24-inch-length wood. This spacing can be adjusted to fit your splitter or desired wood length.

The racks are designed to be moved around by two people and are light enough to lift. They can be loaded by one or more people in just a few minutes, with wood longer than the racks hanging off the ends. Once the racks are loaded, the sawyer can cut between the metal X-frames, staying well clear of the metal. Leaving the lowest board uncut in the rack will allow the cut wood above to stay in place and not fall to the ground. After being cut, the wood can then be split smaller, if needed.

I have three racks, which hold a total of about a cord of wood when full. Cutting a full rack only takes a few minutes, minimizing chainsaw run-time and noise. During the whole process, the wood is kept between chest and knee level, lowering the potential for lifting injuries. There are tennis balls on the ends of the X-frames to provide protection from sharp corners.

Plans for the racks are available on the Pleasant Hill Pottery website (www.pleasanthillpottery.com).

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1 Metal X-frame racks allow wood to be quickly loaded on and cut to manageable lengths. 2 Jesse Jones and Chris Pate loading and cutting wood, using the X-frame racks. 3 Jonathan Steele cutting wood down to 24 inches in length. 4 Gussets are used for support between the X-frames and the base. 5 Cutting between the X-frames is a quick and efficient way to cut a large amount of wood down to an exact size.