# THE WOODLAND MILLS HW126 BAND SAW MILL



WHEN IT CAME TIME FOR CUSTOM FURNITURE DESIGNER, BUILDER, AND EDUCATOR MICHAEL FORTUNE TO ADD A PORTABLE SAWMILL TO HIS CREATIVE PROCESS, HE FOUND THE PERFECT BALANCE FOR HIS NEEDS IN THE WOODLAND MILLS HM126 BAND SAW MILL.

ortable sawmills are as diverse as those who own them. Some are all about high production; others are about ease of use, portability, accuracy, or any combination of these factors. Michael Fortune's needs were even a bit more demanding given his eye for the unique, both in raw material and finished product.

I caught up with Michael on a mild spring afternoon (one of those all-too-few yet blissful days between snowbanks and blackflies) at his home and studio near Warsaw, Ontario. The long, tree-lined driveway led me to an unexpected sight—an historic log homestead, painstakingly restored and modernized over two decades of weekends and summers, and

home to Michael and his wife since relocating their residence and business from Toronto in 2000. Tucked in behind an original, yet also lovingly restored, historic outbuilding, I found Michael removing the last boards of an ash log from his mill. Working with Michael on this day was fellow artist and designer Kelly Parker, recently arrived from her home in Missouri to spend several weeks as an "artist in residence" at the Fortune compound.

Michael had been operating the mill for nearly a year at the time of my visit. Previously, he had relied on other local mill operators for custom sawing; however, his small volume and somewhat unique dimensional requirements never seemed to lend themselves well to a commercial milling operation. Having full control of the milling process has also allowed Michael to use his artist's eye when breaking down a log into lumber. Adjustments for grain, knots, imperfections, or other characteristics are easily made, and can later be incorporated into finished furniture pieces.

### Impressed by the Mill

Michael purchased his mill after going to see a demonstration at the factory, located in nearby Port

Left; Michael Fortune pushes the saw carriage through a black walnut log. Clutch engagement/throttle, height adjustment, and blade-tension adjustment handles are all located within easy reach.

The top photo shows one of Michael's creations; a coffee table made from steam-bent ash with a figured ash top.



Perry, Ontario. Designed as an inexpensive yet well-built sawmill largely targeted at the hobby sawver, Michael was unsure whether the mill would be sufficient for his needs. Kelly, who also happened to be visiting at the time of the demo, admits "the sawyer I use has a \$30,000 mill, and I was prepared to be underwhelmed, but I was completely blown away.' Impressed by the ease of use and quality of cut, the mill seemed like a perfect fit for Michael's business, and appears to be living up to or even exceeding his expectations. Powered by a 9.5-hp Kohler gas engine, the standard mill has a capacity to cut logs up to 26 inches in diameter, and 10 feet long. Additional track sections are available in 6-foot increments, and Michael had added one section to his mill, allowing him to cut timbers up to 16 feet in length. The mill turns standard 1-1/4-inch x 144-inch saw blades on 19-inch, cast iron band wheels, which are kept lubricated while in the log by a water drip fed from a tank mounted on the saw carriage, and operated by a simple on/off mechanism. All major components of the mill are either powder coated or galvanized, in order to withstand exposure to the elements. Michael picked up his mill from the factory, and found assembly to be straightforward, due in large part to an excellent instruction manual

#### Demo

After a tour of his impressive shop and studio, it was time to fire up the HM126 and put it to work. A thick, poured-concrete slab and a pressure-treated wood frame provide a very solid, level base for Michael's mill, with the added benefit of elevating the mill to a comfortable working height, eliminating the need for repeated bending while milling. Having no heavy equipment for moving logs, Michael has developed a couple of



Michael slides the telescoping log supports from the log deck before rolling the next log onto to the mill. When extended, the pipe section rests securely in a contoured block of hardwood secured to the mill deck. His recently constructed solar kiln, with a full load of black walnut lumber, is visable behind.

options for efficiently moving logs onto the mill deck. The preferred method is to have a neighbor drop by with his small tractor and push logs onto the elevated log deck Michael has constructed, and from which logs are easily rolled onto the mill using a cant hook and a couple of telescoping steel log supports, which slide neatly out of the way when not in use. Alternatively, logs can be easily rolled up onto the log deck using a portable electric winch secured to the deck nearest the mill, and the winch cable then used to simply roll the log onto the deck surface.

On this day, the deck was full of a mix of hardwood logs, including black walnut, maple, and elm. Michael's mill is used predominately for milling hardwood logs for furniture; however, he has also sawn a number of pine and cedar logs for use as construction material or building jigs for other projects. Logs for milling come from a variety of sources, but there never seems to be any shortage of material. "We're in the middle of hardwood central," states Michael. Although he does incorporate some exotic species into his pieces, for the most part all the raw material is sourced locally, often from a neighbor's bush lot. Michael and Kelly each grabbed a cant hook and muscled a sizeable black walnut log

#### **HM126 Band Saw Mill**

Maximum log diameter26 in	
Throat size21 in. between the guide:	S
<mark>.og length</mark> 10 ft.	,
optional 6-ft. extensions available	
Weight750 lbs	
<b>Bed length</b> 12 ft. 10 in. (optional extensions	
<mark>Bed width</mark> 30 in	
Rails6 ft. 5 in	
Carriage wheelsYes	
Carriage bearingsYe	
C <mark>arriage feed drive</mark> Manual push	1
<b>Wheel diameter</b> 19 in	
Nheel constructionCast iror	
Wheel shaft1-indiameter shafts	
<b>Wheel speed</b> 660 RPM (band wheel speed	
<b>Saw speed</b> 3,300 ft./min. (blade speed	
<b>Saw blade</b> 144 in. x 1.25 in. x 0.042 in	
Lenox Woodmaster C Sharp	
Type of guidesGuide blocks with rear bearing	
Gcale standardMagnetic scales included— Inch, 4/4 and 1-in. and 2-in. board scale	25
.og turnerManua	I
.og loaderManua	I
.og dogsQuick cam lock style	5
Towing packageN/A	
Free off-road trailer drawing available	
on company website	
Narranty2 year on the sawmill 3 year on the Kohler engine	,
Base price\$2,899 USE	
7030 price	•

#### MANUFACTURER'S ADDRESS

Woodland Mills 171 North Port Rd., Unit 1 Port Perry, Ontario, Canada L9L 1B2 ph: 855-476-6455 www.woodlandmills.ca



The cam-locking log dogs are quickly and easily adjusted, and maintain a secure hold on the log while milling.

into place. This log and several others came from land cleared by the local utility company for an office expansion. Rather than see the material go to waste, they contacted Michael to design and build a boardroom table to be used at the new location.

As the log rolled onto the mill, I noticed not the slightest movement or flexing as the heavy log was locked in position. The mill is equipped with two easy-to-use log dogs that hold the log securely in

place. These units replaced the original dogs shipped with the mill and, according to Michael, are much easier and faster to use than the older design. Another item that had recently arrived from the factory, but had yet to be installed, was a relocate bracket for the single-handle throttle and blade-engaging clutch. When shipped from the factory, the unit is designed to operate at ground level, putting the handle at a comfortable height near the waist. With his mill raised off the

ground, the handle sits nearer shoulder height, which, although still effective, is less than ideal while pushing the blade through the log. The new setup moves the throttle handle lower on the saw carriage, allowing it to be placed at an optimum height for Michael's operation.

Being a basic mill, the HM126 does not have any hydraulics or other powered attachments. To help secure and align logs on the mill, Michael has made several hardwood wedges to adjust the log position. He has also taken the added step of painting the wedges and other items he uses around the mill a fluorescent orange, which greatly reduces the likelihood of them being unknowingly swept up or tossed out with the sawmill debris. With the log secured, and bark and dirt removed along the planned cut line using a chain saw and hatchet, Michael headed for the controls. Tucked neatly beneath a cedar pole-framed roof



when not in use, the saw carriage is largely shielded from the elements. The back wall of the structure contains a door (salvaged from the original homestead) that opens into a small shed, where chain saws, cant hooks, and safety gear are kept organized and close at hand. Michael raised the blade to his desired location for the first cut. and then locked the sawhead in place using a cam-locking handle, preventing the sawhead from moving vertically while making a cut. A single pull on the recoil cord and the engine came to life. The gravity-fed water tank was turned on, and Michael squeezed the throttle and clutch handle, and proceeded to start the first cut.

#### **Performance**

The mill easily powered the blade through the log, and had soon produced the first slab, which was removed and piled, to be used for firewood. Sawdust is directed into a 5-gallon pail that Michael has attached to the mill, which is then easily removed and carried off, keeping the mill area clear. The cut surface was very smooth and level, with no detectable wandering or other flaws. Being a furniture designer, Michael has been extremely pleased with the quality of cuts he has been able to achieve with the HM126. "Exceptional—



Kelly Parker takes a turn at the controls of the HM126. Like Michael, she has been impressed with the capabilities of the mill.



like really good." Not being focused on production, Michael feeds the blade through the log at a comfortable pace, which also contributes to the quality of the cut. Aside from an encounter with a large lag screw, Michael has been able to avoid cutting into any damaging foreign objects that are often hidden in logs salvaged from yards, fence lines, and roadsides.

If not cutting for a specific element of an existing design, Michael generally sticks to a couple of standard measurements that he has found work well for his operation; "Essentially I'm cutting my thin stock 5/4 inches, and my thicker stock 9/4 inches." This allows him to resaw if required, and leaves a little more material to work with when preparing finished surfaces. The HM126 has the ability to cut to within an inch of the saw deck, if required.

Sawn timbers are stickered, and piled either in a pole-framed open-

sided structure or in Michael's new home-built solar kiln. Currently full of black walnut lumber destined for the aforementioned boardroom table, Michael expects the kiln will cut his drying time in half, from roughly one year of air drying, to six months in the kiln to reach his target moisture content of 14% to 16%. The kiln uses a simple electric fan to circulate the air and a standard dehumidifier to remove excess moisture. When finished in the kiln, lumber will be moved into the heated shop until it reaches roughly 6% moisture content. Because Michael does a lot of steam bending for his designs, it is important that the lumber he uses is dried in this manner, as a conventional heated kiln does not produce a product that is readily bent.

In the time he has owned the mill, he's experienced only one minor issue, which was easily resolved with a quick phone call to the manufacturer, who sent out a new part that arrived the next day. "You couldn't ask for any better [support] than that," says Michael. He also attributes much of the mill's reliability to its simple. focused design, which he describes this way: "Nothing is extravagant, it just does exactly what it is supposed to do." Even though he does not rely directly on the mill to run his business, it is clear that the Woodland Mills HM126 has become a key component of Michael's operation. Just like the custom furniture he designs. Michael has found a sawmill that is not only functional, but is the right fit for the particular niche it is required to fill.

Jon Marriott is a Registered Professional Forester in the province of Ontario. When not enjoying the outdoors with his three young daughters, he can be found assisting private landowners with the management of their woodlots.





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