## THE GREEN PAPER

## MANUFACTURING PROCESSES THAT ARE ECO-EXCELLENT

Every year the Wood Welded Companies fashion 8,000,000 board feet of hardwood into butcher block of beauty and function. Naturally, respect for our resources is a high priority. Our eye on sustainability and low-impact manufacturing is why we'll be into wood for good. Here are just a few ways we are keeping it green:

- **Sustainable harvesting:** Our forest stewardship team manages company-owned tracts of land. With sensible harvesting and resource management, we are able to maintain healthy hardwood forests. We also choose to work with reputable forest products suppliers whom share these same practices and philosophies.
- **Zero wood waste:** The scrap and sawdust generated during the production process is burned to heat our plant and fire our kilns. This allows us to stay off the public utility grid, thus reducing expenses and environmental impact. Our system saves approximately 1,000,000 gallons of oil annually.
- **VOC-free finishes and adhesives:** Our state-of-the-art finishing system and 100% formaldehyde-free glue produces no Volatile Organic Compounds.
- **Extended product lifecycle:** In a world of disposable products, butcher block work surfaces can last a lifetime when properly maintained. Tops can be easily resurfaced, repurposed or recycled. We often hear stories of discarded countertops being cut up, sanded, oiled and upcycled as cutting boards or even reused as garage workbenches.
- Minimally processed: Relative to many complex, highly-processed modern materials, solid hardwood butcher block requires less energy to produce.
- Further information can be found at:
  www.fsc.org
  www.woodisgreen.com





## THE GREEN PAPER

## **EXPANDED EDITION**

"Green" is a term heard more and more these days. It is in the media as never before and for good reason. We get one earth to live on...one environment to live within. What could be more important? We at the Wood Welded® Company realize this fact and are constantly looking for new and better ways to make a more earth friendly product. Below you will learn something of our shade of "green".

**Finish:** Our product uses a finish called "*Durakryl 102.*" This finish is catalyzed by means of ultra violet light. The process is quite fast. From the time the unfinished block enters the line of machines to the time a box is being wrapped around the top is about 3 minutes. In this time the top is roll coated twice with sealer coat, cured via UV light and then lightly sanded. Next, the top goes immediately into a third and fourth roller for subsequent coats of finish, cured and packed. Between each coat the top passes under a UV light box and the liquid finish is instantly solidified. This is a hugely efficient process but the intriguing thing about this process is the 100% lack of Volatile Organic Compounds (VOCs). VOCs are responsible for what is commonly referred to as smog and this state of the art finish system eliminates these, insuring a cleaner environment.

Going beyond the lack of VOCs is the fact that there is virtually nothing left, either dispensed into the atmosphere or as a physical waste byproduct, at the end of this finishing process. All the finish is used up as it is applied to the tops. There is NO solvent to suspend the finish prior to application. We feel it important to avoid discharge of these types of compounds and thus our UV finish line is the perfect solution to these concerns. The piece that you receive in the end will be coated with an extremely durable finish on an incredibly durable top. This unit can last for generations without the nasty side effects to the environment.

**Shipping Distance**: Bally Block Company is strategically situated in relation to both the market on the demand side and the forests on the supply side. Butcher block does not have to be manufactured 600 to 800 miles from a significant portion of the country's population. This location choice was surely seen as an economic decision in its day. Today however the economic concern is still valid. The reduction of shipping distances both on the supply and the demand side makes this very much an environmental issue since precious fossil fuels are not consumed in transportation.

Today we also warehouse product on the west coast for the very same reasons. Maximizing the load headed west saves the customer money and reduces the cost to the environment. Manufacturing on the west coast is not an option due to the absence of the proper raw materials.





A point is being made here because currently there are companies literally shipping non kiln dried lumber half way around the world; it is machined using inexpensive labor and returned to very near the place the wood began life. This seems inordinately illogical from an economic AND an environmental perspective. We have 7 species in our line of tops. Five of these woods literally grow in our backyard. The balance of the seven are plantation grown and efficiently managed both for cost and environmental concerns. Lyptus is actually certified green.

**Finger Joints and Saw Kerfs:** Finger jointing is the process by which we glue pieces of wood together end to end to make long rails. The rail can then be used in combination with full length pieces to create a top. The use of the finger joint increases the amount of the board we utilize thus it reduces the demand on the forest itself. As a happy benefit this also keeps the price of Butcher Block quite reasonable.

We seek every efficiency in production. Recently our plant personnel met and instituted another way to increase wood utilization from our raw material. It was determined through study and investigation that by reducing the thickness of our saw blades, a significant saving of wood could be achieved. Of course, the reduction in size was quite small but over the course of the miles and miles of saw cuts we make each year, the savings would be substantial.

**Low Level of Processing**: In the manufacturing world, all new products require a study that will map the production steps. You can well imagine the number of steps from raw materials to store shelf. How complicated this must be for some products that we see in our modern world. Imagine the transportation of all the raw materials for a television or jet engine. Quite literally parts come for around the globe. Glass from North Carolina USA, Gold from South Africa and plastic from oil drilled in the middle east and refined in Louisiana. These components literally come from all corners of the globe.

Now imagine a more simple product such as butcher block. What you have is essentially a top comprised of a single material, transported from a forest in close proximity to the manufacturing facility, and processed in steps that could be counted on one hand. We plane, cut, glue, sand and finish. Yes, in practice there are other steps in the process, but boiled down to its most basic form that is what we do. We cannot imagine a less complicated system which achieves such a valuable result. No molten fires melting and mixing potions which are assembled for exotic materials from around the world. Just wood, a little glue and some finish.

Carbon Neutral Footprint: An important development in the environmental movement is the sensitivity to a "carbon footprint." We hear in the media that we all carry a carbon signature. This quantifies a persons' impact on the atmosphere by looking at the products they use and certain behaviors which release carbon. Another wonderful thing about wood tops is their "Carbon Neutral" signature. Each tree captures carbon from the air and stores it. At some point this carbon will be released. In the forest the tree will eventually die and as it decays all the carbon stored within it will return to the atmosphere. It can be stated that the exact amount of carbon that is in that tree will be released whether or not the tree is lying on the forest floor or is eventually placed in a landfill and decays. Wood from a harvested tree in one of our tops is carbon stable and not adding to greenhouse gases. What then becomes important is the length of service of the top. A durable top is an environmentally sensitive top.





**Block Durability:** Recently a product has entered the US market which has caught our attention. This product is an example of "green" marketing. The product is Bamboo. The reason this has caught our eye is the manner in which it is being marketed to the public as a "green" option. We have been struggling to see the logic of this on several levels. In terms of product durability we find these claims to be somewhat dubious.

The first concern is the actual life span of the product. Bamboo is a notoriously soft material. The durability, and thus the life span, is greatly reduced. A bamboo top placed under the same conditions as a hardwood Butcher Block top, would fail many times over while the hardwood block would continue to function. It seems somehow environmentally shortsighted to use the energy and actual material (with a large carbon footprint) to manufacture the top only to have to replace that top in a few short years. Logic dictates that a durable top produced once is more environmentally sensitive than several tops, of short life span, for the same location.

Wood Welded Northern Hard Maple Butcher Block was originally conceived and designed to be a product that would literally last a lifetime. Butchers would buy the blocks as an apprentice and use the block their entire career. As the block wore due to continued use it would be "leveled" by planing off the top ¼" and flattened once again. The butcher in this manner would, over the course of many years, slowly consume the block.

Today Butcher Blocks for kitchen counter tops, cutting boards, locker benches or workbenches are essentially the very same product that was invented back in 1881. What was true for butchers in 1881 is still very much true today. When a butcher block top is nicked, scratched or marred to a point where rejuvenating the block is required, a simple sanding and reapplication of finish brings the top back to new. Environmentally speaking, durability is a windfall.

**Land filling:** Used tops do not always get claimed by someone on a job site and we do understand that some of our tops make it into land fills. Remember that wood is 100% natural. By placing a top in a land fill nothing different is actually happening that wouldn't have eventually happened in the forest. The wood decays into soil. Additionally, in many cases on the job site, wood is ground up and composted for use later in the landscaping industry. Our tops, for all practical purposes are 100% wood, are perfectly suited for this destiny.

**About cardboard:** Every factory has paper waste. Cardboard especially is the largest component of paper waste generated in our plant. We do not think such a suitable candidate for recycling should ever by sent off to a land fill. Instead we gather this waste and place it in a large recycling bin. Once a week it is picked up and sent off to the paper mill. This goes in lock step with our environmental consciousness. Why throw away something that can be reused?