

LEGACY
Ornamental Milling
MAGAZINE

\$6.00

www.legacywoodworking.com

VOLUME THREE



800-279-4570

*Legacy
Woodworking
Machinery*

*a division of
Phantom Engineering, Inc.*

*1122 South 900 East
Provo, Ut 84606*

**New Models -
starting at
under
\$500**

**Turn without
a lathe for
just \$449**

see page 25

Created by Mark Davis



Using the Legacy to create **TURNINGS WITHOUT A LATHE!**

Lathe

vs.

Legacy

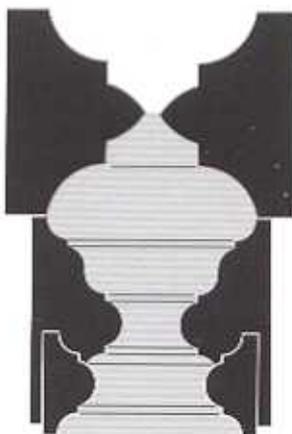
- Skill based system. Requires hand-eye coordination, physical strength and dexterity.
- Requires manual manipulation of gouges.
- Generally uses a storyboard layout to assist in the design of the piece.
- Can follow or duplicate from a pattern. (copy attachment required) Quality of cut is extremely rough, requiring excessive sanding.
- Without copy attachment, turning requires a "cut & measure", "cut & measure" process. Which is time-consuming and inaccurate.
- Straight or tapered turnings are created by the operator adjusting the depth of the gouge.
- Stock rotates between 800-2400 rpm - if stock is out of balance spindle whip occurs making the part extremely unsafe.
- Turnings must be round.
- Most lathes are limited to a 36" stock capacity.
- 10 minutes to learn, a lifetime to master.

- Mechanically based system.
- Uses the predetermined shape & diameter of the router bits to create the design, creating clean cuts and making duplication much easier.
- Can follow or duplicate from a pattern.
- Adjustable bed allows for turnings to be straight or tapered.
- Turnings can be round, square, multi-sided, or spiraled.
- Up to 83" stock capacity.
- Router cuts up to 21,000 rpm - resulting in an extremely smooth finish.

Plus the Legacy allows you to do things you will never be able to create on a lathe. Such as:

- Add reeds and flutes.
- Add joinery i.e. mortises, tenons, dados, dovetail slots, pocket holes, etc.
- Create custom flat and circular mouldings.
- Create square or multi-sided spindles or posts.

Turning on a lathe is nothing more than creating shapes. As simple as that sounds, it requires the operator to develop a set of physical skills, using gouges to scrape unskillfully against the grain of the wood.



Creating turnings on the Legacy uses the predetermined shapes and diameters of router bit profiles, making the turning process much simpler. The Legacy also allows you to follow a custom-built pattern to turn and duplicate shapes.

The finial design pictured left, uses 3 different router bits (black shapes) to layout the design.

Copyright 2003 Legacy Woodworking Machinery. All rights reserved

CONTENTS . . .

Legacy Builder:

Mark Davis - Glendora, CA

page 3-6

Featured Project: Victorian Staircase

Cal Wylie - Rexburg, ID

page 7-8

Featured Project: Spiral Staircase

Tip & Tricks

page 9

Idea Corner:

page 10

Technique: Honing router bits for a sharper edge

page 11

Router Bit Profile: Pattern Following Bit

page 12-13

Inside Manufacturing

page 14

Model Comparison Chart

page 15

New Products: Design Kit

page 16

What about router bits?

page 17

Gallery & Testimonials

page 18-19

Tradeshaw Schedule

page 21

Legacy Model 1800

page 22

Legacy Model 1200

page 23

Legacy Model 900

page 24

Legacy Model 400

page 25

Legacy Accessories

page 26-27

Horizontal Turning Center

page 28

Shop Tools & Supplies

page 29

10 Legacy Projects

page 30

Advanced Legacy Builder Projects

page 31

The Final Turn

page 32

FEATURED WOODWORKER

Legacy Builder:
Mark Davis
Glendora, CA

Featured Project:
Staircase &
Kalidescope

"Fluting, reeding, banding . . . designs that couldn't be done on the lathe. It's just a different animal! When I discovered the [Legacy], I moved into the next realm of woodworking. Before I had the machine, I wouldn't have considered myself a Master Woodworker, but with this machine, I became one."



Once upon a time in upstate New York, there lived a little boy named Mark Davis who had a grandfather. This grandfather had a scroll saw that he allowed his little grandson to operate, making every shape Mark's childlike mind could imagine. One day however, when Mark was 12 years old, Mark's grandfather passed away and Mark's fascination with wood lay dormant until he was 20 years old, when he moved from New York to Southern California and met a friend named Danny Francis, who would change his life. This friend was in the process of building a record cabinet out of African Paducah wood (circa 1976). "When I saw this cabinet, it was like a light went on inside my head. I knew I wanted to build something too," said Mark.

From 1976 to 1994, Mark, "... toiled in relative 'squareness'," as an everyday Joe by day and his own woodworker by night. Unfortunately (or fortunately, depending on how you look at it) the conventional boxy woodworking created with run-of-the-mill woodworking instruments was just not enough to satisfy Mark's imagination. "I have always been a student of shapes. I am always thinking of ways to create shapes - to figure out how the masters did it."

About 1994, two events took place that changed Mark's life forever. He met a charming young lady who also loved wood, who later became his wife, and, he discovered at a woodworking show held in the Long Beach Convention Center the *Woodchuck Ornamental Milling Machine* - the predecessor to the *Legacy Ornamental Mill*. "When I saw the Woodchuck, it was like a light went on. All of the shapes that I had stored in my head but couldn't create - even though I had a lathe and various other fancy tools - were all of the sudden within my grasp. I thought, 'This tool will do it'". Mark firmly believes that his Ornamental Mill enables him to now create many of the shapes and designs that began to form in his head when he was a child. "Fluting, reeding, banding (areas Mark eventually carves) . . . designs that couldn't be done on the lathe. It's just a



The kalidescope is just one of many pieces that Mark Davis has created with the Legacy Ornamental Mill.



different animal! When I discovered the Woodchuck, I moved into the next realm of woodworking. Before I had the machine, I wouldn't have considered myself a Master Woodworker, but with this machine, I became one".

One of Legacy's favorite Mark Davis originals is the kaleidoscope (pictured previous page), an idea that Mark gleaned from a magazine he had read. *"My wife loves wood and I love woodworking. It's one of the things that attracted us to each other. We saw an advertisement for plans that could be purchased. The advertisement claimed that it could be easily accomplished by any novice woodworker."*

Mark and his wife were so impressed he promised his wife that he would build one for her for her birthday. The "easily accomplished" claim turned out to be false. However, Mark was able to accomplish the feat by modifying some of the plans and the aid of his Woodchuck. Because Mark was in the middle of building a new home and shop, however, the project took 4 years to complete. *"It took a lot of discipline. It was hard not to lose parts and to remember your train of thought after a few months or even a few weeks."*



Though the project took a lot of perseverance, Mark's Woodchuck turned out to be invaluable because it made it fairly easy to go back and revisit settings. Mark has also crafted stairway balusters for his home, a coat rack with a section carved with a decorative oak leaf and vine pattern (Mark: "I couldn't have done that on a lathe!"), several 40" plant stand columns with flutes, barley twist and rope patterns, pens, pencils, 6' x 6' V-trusses for the vaulted ceiling in his home, fence posts with Victorian rosettes and caps, handles, drumsticks, and more.

Despite his great love for the craft and his untold talent, Mark has shied away from becoming a woodworker by trade. Says Mark *"It is too hard to make a client's expectations match my expectations. I could make money at it, but I prefer not to, though I do have a small clientele that knows the value of my work and appreciates the time that goes into my craft."*

If you want to change the limits of your woodworking, . . . You can't buy another tool or enough tools to do what this machine does.

When asked what Mark would tell a friend who was looking at purchasing a Legacy, he said *"Buy it. If you're serious about testing the limits of your woodworking, buy it!"*

Sometimes, if Mark happens to be attending a woodworking show where Legacy has a booth, Mark will stand in the middle of a group of onlookers watching a demonstration and say, *"I've got one folks, buy it. If you want to change the limits of your woodworking, buy it. You can't buy another tool or enough tools to do what this machine does. I have been so impressed with this machine - it is amazing what it can deliver. Legacy's slogan is so true . . . 'You're only limited by your imagination'. If it's in your head, the Legacy will bring it out. And it's fun . . . it's a riot. I will be working on a piece and think, 'oh yeah, I could do it this way' and the machine takes me off on another wild tangent that I had never thought of before".*



"In the hands of a woodworker with any kind of vision, this machine performs for you . . . even if a woodworker has no vision at all, it can still work magic. You got-to use it."

As a final thought, during his interview Mark stated that, *"When I met that guy and saw that Paducah cabinet, not only did I know that I wanted to build something, I also knew what I wanted to do for the rest of my life. I will never have a mid-life crisis because I know what makes me happy and Legacy's Ornamental Mill makes life that much brighter."* Well Mark, it's good to know that the Legacy also doubles as a natural anti-depressant.

Mark Davis currently resides in Glendora, California. He claims to be a "woodworker by night," but "...has woodworking on my mind twenty-four hours a day, seven days a week. It never leaves my head."

FROM THE COVER

Anatomy of a staircase

Created from quartersawn white oak by Mark Davis, Glendora, CA. The following details were created using the Legacy Ornamental Mill

- **7" Diameter Ball** -
Created using the template follower.
- **Removable Base**
Turned between centers using router bits.
- **Medallions** -
Details are hand-carved, however the prep cuts were milled following a pattern on the Legacy, prior to hand-carving.
- **Ballusters** -
Turned and fluted all 30 pieces.
- **Corner Beads** -
Turned and fluted half columns on 4 corners.
- **Dentil Mouldings** -
Created using the indexing system and x, y controls.

FEATURED WOODWORKER

Legacy Builder:

Cal Wylie
Roxbury, ID

Featured Project:

Spiral Staircase



In 1942, after returning from World War II, Cal Wylie's father purchased a Shopsmith multipurpose tool. Mr. Wylie, Sr. used the Shopsmith to make his 6 year-old son, Cal, a rocking horse. When Cal was 14 years old, he came upon this same Shopsmith in the garage where it sparked his interest and initiated a hobby that would eventually turn into a career. After Cal's recent marriage, he decided that he needed some extra income. He knew a lot about woodworking and had a sizable interest in custom creations, so he made up his mind to start his own business.

One factor that significantly determined the direction that Mr. Wylie would take in his new business was his particular fondness for canes. When he found out that his second cousin's son made canes with a spiral cut, Mr. Wylie decided to check out the available information related to ornamental turning on the internet. He searched the word "spiral" and, among other things, came upon the website of Legacy Woodworking Machinery. After trying a couple of the "other things" that were available, Mr. Wylie decided to purchase a Legacy Ornamental Mill.

Cal's very first project was presented at a local woodworking workshop. He was speaking enthusiastically to another workshop attendee about all the things he could do with his new Legacy, when she told him to "put his work where his mouth was" and hired him to build her a spiral staircase for her cabin. Cal was able to use the indexing system on the Legacy to precisely mill the horizontal mortises on the center post every 27 degrees at 12" intervals (?). (every 3rd hole using the 40 position index plate, each hole is 9 degrees, therefore $9 \text{ degrees} \times 3 = 27 \text{ degrees}$)

During the next six weeks Cal spent about 80 hours to complete the project. The 80 hours encompassed everything from start to finish, including a pre-installation trial-run at the Wylie shop to make sure the staircase would fit in his client's cabin. Considering this was the first time Cal had ever tackled any project that big, that's not bad at all.



The Legacy was used to turn the 6" center post to round. It was milled in two sections. A 3" dowel was milled on the end of one section and a 3" round mortise was drilled into the end of the other section. The two sections were then secured together with a horizontal wooden dowel inserted through the 3" dowel. Cal Wylie also used the indexing system to position the dados for the stair treads around the post. The treads themselves were notched out using the rotary indexing table on the Legacy.

"I am a perfectionist. I always think I could have done something better than I did, but the Legacy made everything easier and more accurate than I thought possible."

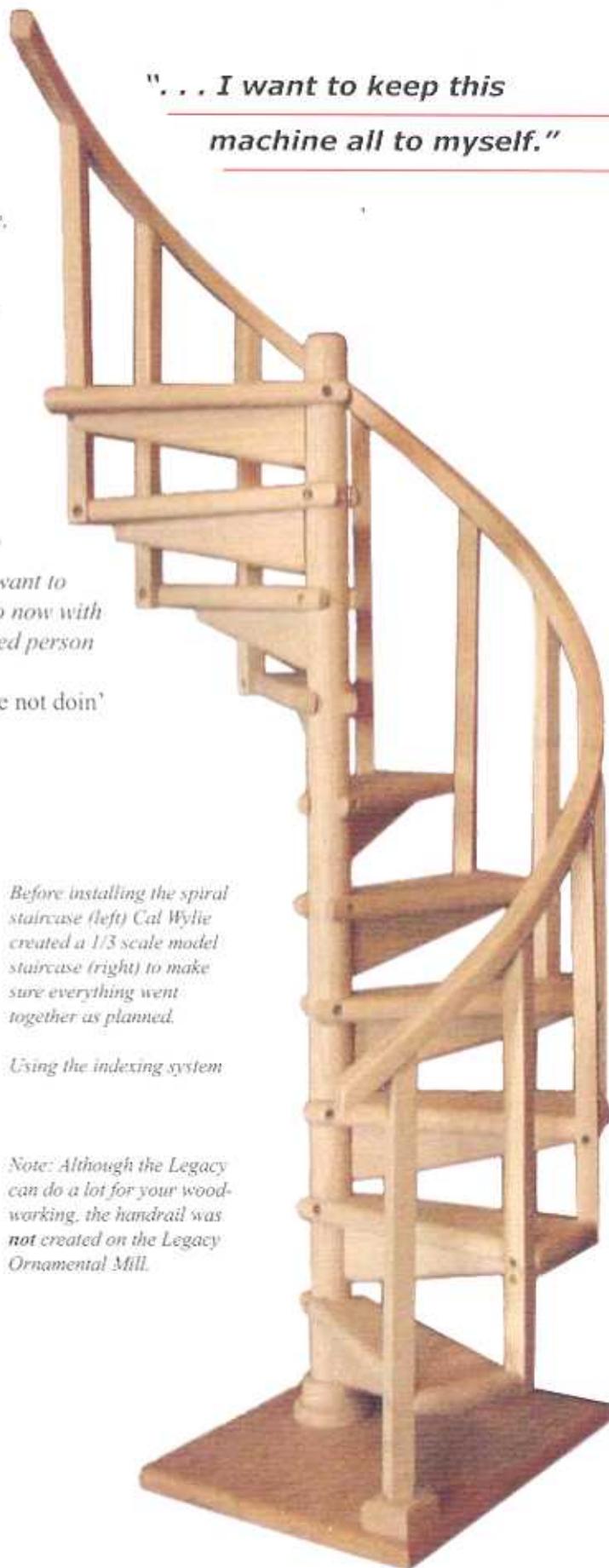
Cal genuinely believes in the powerful combination of one's imagination and a Legacy Ornamental Mill. "As I'm speaking, I can look around me and see 30 different canes. I've built a 1/3 scale spiral staircase, a 4-poster bed, hiking sticks, etc. I have a whole den stuffed with projects I've created with the Legacy. The diversity of patterns you can use on different projects is almost endless."

Mr. Wylie also appreciates his Legacy's "ease of the way things can be done." "I am a perfectionist. I always think I could have done something better than I did, but the Legacy made everything easier and more accurate than I thought possible."

When asked what he would tell a friend who was considering purchasing a Legacy Ornamental Mill, Cal said, "Please don't! I don't need the competition and I want to keep this machine all to myself. After seeing all I can do now with my limited experience, I can't imagine what a well trained person could do . . . it just blows me out of the water."

Well, Mr. Wylie, the Legacy staff agrees - but you're not doin' so bad yourself.

Cal Wylie lives and works in Rexburg, ID.



" . . . I want to keep this machine all to myself."

Before installing the spiral staircase (left) Cal Wylie created a 1/3 scale model staircase (right) to make sure everything went together as planned.

Using the indexing system

Note: Although the Legacy can do a lot for your woodworking, the handrail was **not** created on the Legacy Ornamental Mill.

TIPS & TRICKS

Problem: I'm milling caps and bases for columns on the rotary indexing table. I seem to be getting an unwanted divot on the piece as a result of plunging the router down on the material. Any suggestions on how to avoid the divot?

Solution: The best way to avoid the unsightly divots (Fig. A) is to avoid plunging down on the material. Where possible use the y-axis lead screw to approach the material from the side instead of plunging down from the top. This means of course that the depth of the cut is preset and allows you more control as you bring the router in from the side using the lead screw.

If the design of the piece is such that you can't approach it from the side (Fig. B), then try being more gentle as you plunge down. It's also a good idea to make sure the adjustable bed rails are locked into place on all 6 positions. This will eliminate any flexing in the rails that may show up in the rotary table.



These two pieces (round and half-round) require at least one cut approached from the top so as not to cut into the high spots on the mouldings.



Problem: I think I'm a relatively sharp guy - I've been able to count for a number of years now, but occasionally when counting holes for indexing I find myself not hitting the proper hole and my spacing gets messed up. Short of going back to kindergarten do you have any suggestions?

Solution: Counting the holes and marking them with a pencil prior to cutting the piece is always a good idea. After a while however, the index plate has a bunch of pencil marks on it that can likewise become confusing. Pictured to the left is an idea that may help. Color coding the positions with adhesive dots makes indexing quick and easily accessible for the eyes. In this example, the red dots indicate every fourth hole for 6 divisions (24 positions divided by 4 = 6 evenly spaced divisions), blue dots on every third hole for 8 divisions, yellow dots on every other hole for 12 divisions, and green dots on every sixth hole for 4 sides positioned at 90 degrees. The three green dots on the inside of the holes indicate 120 degree spacing or every 8 holes.

Dots such as these can be picked up at just about any office supply store. The only drawback to this method is that it requires knowing your colors, another kindergarten activity. Good luck.



Problem: I move parts in & out to make the same cut on multiple parts, such as table legs, this method is quicker than making multiple setups. However, the parts from one setup to the next are not as clean as I would hope, it is as if the part is out of center. What causes this and how do I avoid it?

Solution: The parts, when taken in and out of the machine, lose their registration. To insure that the parts maintain center and stay registered it is best to return the hub back to the drive center as it was originally. To do this mark either the material or the prong of the hub with a marker, and mark the corresponding spot on the drive center. When you put the piece back into the machine, align the marks and the part will be registered to center.

A function to follow the form -

Using the hollow spiral design to create a functional plate rack

You know the old design adage; "form follows function". Without getting into a lengthy discussion, the jest of it is simply that a piece must first be functional and then the "form" or the design comes to enhance the function. In the case of the hollow spiral (the form), we asked ourselves if it lends itself to a function, something more than just decorative. A letter holder perhaps, or a game of sorts (let your mind wander as to the possibilities there). The result was a decorative plate rack (pictured below) created using a left and right-hand hollow spiral to hold the plates upright. The central box, that helps add structure (and a necessary space between the 4 left plates and the 4 right plates), makes for another kitchen nicety; a recipe box.

This project (with techniques for creating the hollow spiral) can be purchased on video tape with shop notes for \$29, or FREE with the purchase of any Legacy machine accessories (see **Customer Appreciation Coupon**, page 21).



Created by Dane Calkins

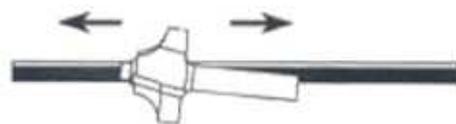
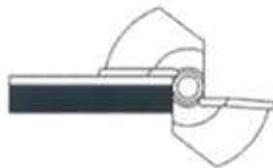
Honing router bits for a sharper edge and a longer life



One of the big misconceptions that woodworkers have is that bits need to be sent out to a sharpener to have a new edge ground on them. This kind of sharpening is not only costly but tends to shorten the life of the router bits. After two or three grindings the router bit has lost its original profile and subsequently has to be replaced. An inexpensive and effective alternative is to hone your bits as needed on a diamond whetstone from DMT®.

SHARPENING TIPS:

- Always sharpen the flat side, never the profile.
- Use water only for lubrication - no messy oils.
- Glide the bit with light pressure along the stone. As a rule, 5-10 minutes on a conventional oil-stone is equal to about 20 seconds on a Diamond Whetstone.
- Repeat the same number of strokes on the opposite wing of the bit.
- Usually only requires between 5-30 strokes.
- Use the fine side (red) to maintain a sharp edge.
- Use the coarse side (blue) to restore a damaged edge.
- Initially the diamond stone will seem especially rough. It will smooth over time with gentle stroking. You need not exert extra pressure - let the diamonds do the work.
- After use, rinse and store dry.
- When further cleaning is needed on diamond whetstones, use an abrasive cleanser (non-petroleum base) and a scrub brush.



Coarse side (blue) >

< Fine side (red)



Once the router bit has been honed to a sharp edge, spray it with DynaGlide lubricant to keep the bit cutting sharper and cooler, thereby extending the life of the bit.

Other uses of diamond whetstones include woodworking tools, hunting knives, kitchen cutlery, gardening tools, industrial tools, skis and snowboards. More information on sharpening can be found at: www.dmtsharp.com

save \$4.00 on the purchase of a diamond whetstone

see page 29 - offer valid until 5/31/04

Using a pattern bit and the Legacy template follower



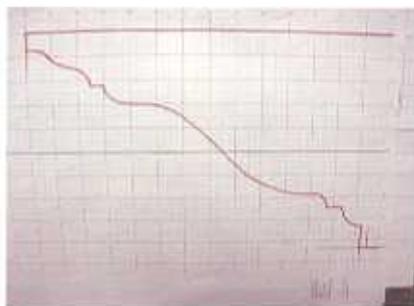
Created by Dave Calkins

Using a pattern bit with the Legacy's template follower allows for easy duplication of contoured shapes based off of a pattern. Pictured above sits a trellis atop three milled columns.

Using the Legacy design kit (page 16) the pattern was layed out 9 1/2" high and 14 1/2" long.

The pattern was then taped to 3/4" mdf and cut out on the bandsaw. The template was attached to the Legacy, and using the template follower and the horizontal bench vises we were then able to let the stylus follow the mdf pattern and use the pattern bit (Magnate #S7623) to cut the shapes out.

The bit has been designed with a 5" long shank, a 3/4" cutting area, and a bearing positioned above the cutter to provide stability over a long reach.



Pattern Bit #S7623
available from Magnate at 800-827-2316

ROUTER BIT PROFILE

The material being milled is 3 pieces of 1/2" mdo (signboard) laminated to a thickness of 1 1/2". The bit is plunged to cut a little lower on each pass. Once the bit has cut the first 3/4", the bearing begins to ride along the material - supporting the bit on subsequent passes.

To avoid tearing out the material it is best to climb mill, as opposed to under-cutting the material. The router bit rotates in a clockwise direction, therefore to climb mill we would cut the piece from left to right, or from tailstock to headstock. If you are concerned about tearing out the bottom face of the material, try using masking tape on the surface - this generally does a nice job of eliminating tearout as the bit comes through the underside.



Created by Dana Calkins

New laser facilitates change in Legacy models

Phantom Engineering, Inc., parent company of Legacy Woodworking Machinery, and sole manufacturer of the Legacy Ornamental Mills recently purchased a new laser that allows for cleaner parts as well as increased production. According to company President, Andy Anderson, "Having a laser in house with our cad/cam programs has really sped up the whole process - from concept to design, prototyping, and in the end, even our manufacturing".

Although the thickest Legacy parts are 1/4" hot-rolled steel, the laser will cut thicknesses up to 1/2" at between 50" - 60" per minute. According to laser operator Neil Johnson, "Most of the parts created for the Legacy are ran around 90" - 100" per minute. Given the parts were made out of thinner gauge material, say 18 gauge cold-rolled, this laser could scream right along at 200" per minute."



According to Anderson, "The laser also means that custom parts, such as gears can be cut." As an example; the Legacy comes equipped with up to 19 different pitches for spiraling. What Legacy has determined to be "standard" distances of linear travel. "With the laser we can program a drive gear in a cad program to give it the proper number of teeth for a "custom" pitch. In an afternoon we can have a custom gear pitch available." Indeed that has already been a scenario for one of Legacy's customers. Pete Moffa (*New Leaf Custom Woodworks, Cornwall, NY*) needed to reproduce a total of five, 2-start barley twist spindles for a home in historic Newburgh, NY. This particular design called for a pitch that was $2 \frac{3}{4}$ ". A phone call and \$100 dollars later, Pete had what he needed to complete the project. "Being able to recreate these parts allowed me to be the guy that was solving a very particular problem in the restoration of this historic home. I like knowing that when there is an opportunity for an out-of-the-ordinary design, I have options available to me." (Using the 2X gear multiplier, Pete can also make a spiral with a $5 \frac{1}{2}$ " pitch).

For information on custom gear pitches, call 800-279-4570.

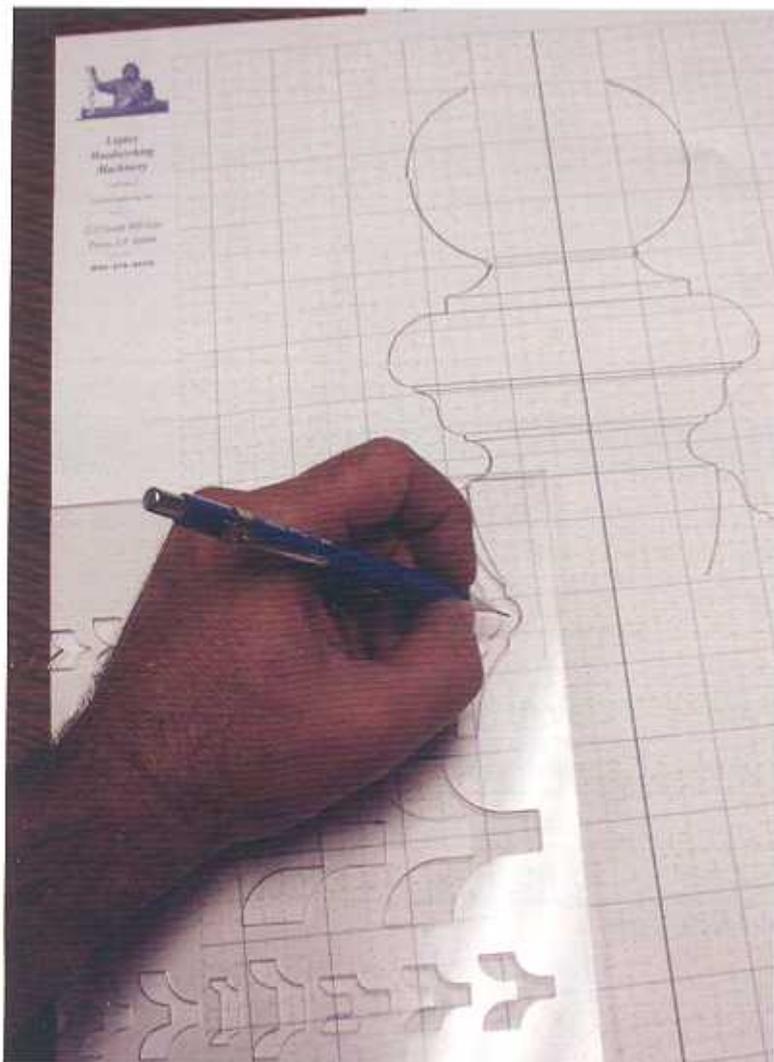
Legacy Design Kit

Creating turnings on the Legacy has several distinct advantages over a lathe. Including speed, ease of use, and repeatability, not to mention router bit profiles are: (to borrow an old computer term) WYSIWYG (what-you-see, is-what-you-get). Not only can you see the profile of the cut, but by matching up router bit profiles, (right) you can design the piece before you ever make a cut. To make the design process easier Legacy has a NEW Design Kit available.

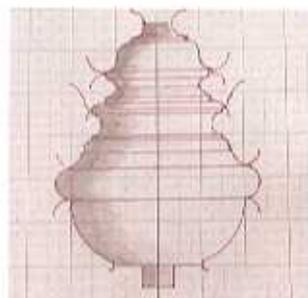
The Legacy Design Kit consists of:

- 3 - clear acrylic templates containing 107 router bit profiles (27 design styles)
- 3 - Router bit keys for easy identification of bits
- 1 - 11" x 39", 50 page DesignPad (Spindle Layout)
- 1 - 13" round DesignPad (Determining divisions for reeding & fluting)
- 12 Sample Designs
- How-to video tape includes:
 - Designing Turnings
 - Designing Mouldings
 - Designing Spirals
 - Designing for Indexing
 - Designing Contours

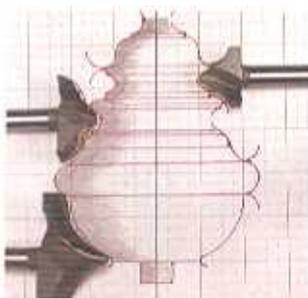
Eliminates guesswork, saves time & money!



This design kit allows you to lay out the shape of the piece before making any cuts.



Use the router bit templates positioned next to each other to determine the position of the design along the length as well as the desired depth of the cut.



Once the design has been decided, purchase the necessary bits to complete the project.



"The design kit removed all of the anxiety for my next project. My customer liked what he saw, and I can now finish the job with a greater degree of confidence."

Harry Tippetts
Hobble Creek Mills
Hobble Creek Canyon, UT

GALLERY & TESTIMONIALS

Richard - California Needed 5' of a 14" wide crown molding, milled it on the Legacy in 3 hours, start-to-finish. Richard took the final to a shop in San Francisco to have them bid on it. They told him it would take 2-3 weeks, and cost a minimum of \$2000.

Carl - Florida A spiral turning job was turned away by five professional shops as being impossible to do. Carl completed the job in an afternoon and made \$900.

Dave - Utah Needed a prototype to bid on a job, attempted to have a sample made on a CNC machine (shop rate \$80/hr), it required 3 attempts in 2 days before they could successfully complete the operation. Dave milled the piece on the Legacy as a first time user, and finished it in 3-4 hours.

Terry - Alabama Created 250 rosettes for the remodel of his Alabama home, using the Legacy and the rotary table attachment. His contractor saw the potential of the Legacy for his business and immediately ordered a machine.

Fence Contractor - Illinois Made finials on the Legacy for a fence he built. His competitor called the homeowner to find out where he could purchase the finials - now he makes parts for his competitor.

Barry - Texas Building common cabinetry, nice, nothing too fancy, added 4-5 hours of work by creating fluted columns, rope molding, other decorative details on the Legacy, and added \$1500 to the price of the cabinets.

Courtland - Missouri Had his Legacy 3 months, started doing ornamental turnings, featured in *Fine Woodworking* magazine *Current Work* (February 2001) section. Five months later entered a piece into the Memphis Woodturners competition, won *Best of Show*, and First place in the Advanced category as a novice Legacy user.

Paul - Michigan As a furnituremaker Paul was barely making a living, his wife had to work to help pay the bills. The first month he had his Legacy he got a job to make rope molding, it took him 2 weeks to complete and made \$3000. At the same time he was building an entertainment center that took 4 weeks to complete and only made \$3500. Now Paul makes components for cabinetmakers, finish carpenters, and contractors building multi-million dollar homes.

Alvin - Ohio Purchased the Legacy for his woodworking hobby, it now pays for all of his other hobbies.

Pete - Florida Made 212 Barley Twist legs in 1 month, "made a lot of money".

Jim - Pennsylvania Has milled "over 7000 pieces" in the year-and-a-half that he has owned his Legacy.

Richard - Utah After cutting his first mortise on the Legacy, he called us to see if we knew of someone who wanted to buy his mortising jig.

The Legacy is also used for prototyping by top Piano, Billiards, and Furniture manufacturers in the U.S.

As a furnituremaker I am always looking for tools that set us apart from the rest. The Legacy Ornamental Mill is just the tool to do it. I have been using my Legacy for almost a year and I am turning out jobs that I could only dream about. "By working smarter and not harder" my machine has paid for itself over and over. That's not a statement, it's a fact! We are going into our second season with our machine and actually tripled our sales volume because of the caliber of our product. In short, we are making our own legacy in the custom woodworking business. Thank you."

Frederick Haas
President, Grace Designs

Created by Frederick Haas



I had never even turned on a router until last Saturday, and a week later, after 8 or 10 hours on the Legacy, I am doing tapers, reeds, and ready to try a mortise - and I AM HOOKED!!"

Marcia Benner



Created by William Henzen

The Legacy gives our kids a real advantage. On this one machine they can mill the parts, add the flutes, spirals or other decorative details, and then add the joinery. It's also very safe and a lot of fun for the kids to use. It not only builds beautiful furniture, it builds self-esteem."

Floyd Simmons
Kress High School

Created by Dean Mohring



My ornamental milling capabilities have really put my business over the top! This has been my best year ever. My Legacy gave me the edge I needed, it's the main piece of equipment in my shop."

Tim Schoonard
Marywood Studio

Created by James Kelly



This does so much. I wish I had bought the Legacy 7 or 8 years ago - I wouldn't have spent so much money in the long run."

Paul Ferguson

I thought the price to be steep but the versatility, accuracy, and reproducibility have caused me to reconsider. If I couldn't get another, an offer of double what I paid wouldn't get it away from me."

E. Jay Loy

Created by Barry LaChance



My company makes cabinets, furniture, and architectural millwork for homes in the \$800,000 to \$10,000,000 range. The owners want one of a kind items and this equipment allows us to quickly do just that while commanding premium prices."

Dean Mohring
Rockton Hardwood Products

GALLERY & TESTIMONIALS

Created by James Neff



When people ask me if I can do production work on the Legacy, I just show them this picture (left).

James Neff

Created by James Neff



When you find a machine that will work with you and not against you, something that fires up your imagination at age 79, and makes you look forward to each day, and each new cone with anticipation, then you have something of great value, more precious than silver or gold.

Monty Gould



Created by John Hale

Hello Legacy.

*... someone told us about the Legacy, which information excited me and my family to get one to do the 80" x 6" posts (bed - pictured left). Also, my son-in-law decided to get one for my grandchildren, so we bought two of them. I set it up and practiced on a little scrap of wood and went right into the posts. I have enclosed a picture of my **first project**, which I am satisfied with and my wife is happy with. Also, the mortising capability is great!*

I am now challenged by my family to make greater pieces... I am still anxious to gain more experience and enlarge my little shop industry with this unimagined potential. I have a whole lot to learn, but am encouraged in my old age to see my grandchildren learning these skills that have been lost in this last century. Thanks for helping make this possible.

John T. Hale

The great thing about the Legacy is that it allows me the freedom to create almost any design style I wish, from the simple to the ornate.

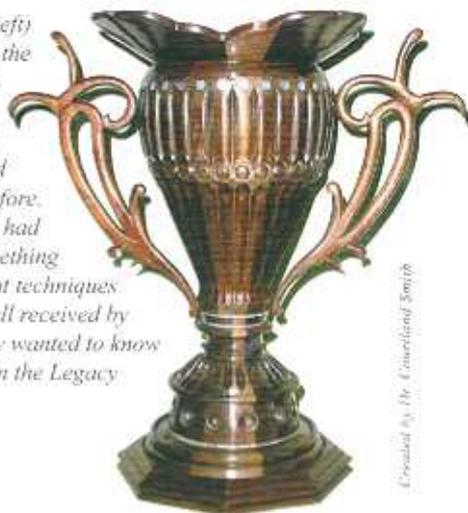
John Hennen

Created by Dr. Courtland Smith



I recently entered this covered bowl (left) in a woodturning contest sponsored by the Memphis woodturner's. There were 95 people from 5 states. It got 1st in the advanced class and Best in Show. They said that they liked it because it showed them something they had never seen before. There were no judges - each individual had one vote! I think that this backs up something that we've discussed before - that is that techniques used on your machine are generally well received by traditional woodturners. Of course they wanted to know what machine I was using. I bragged on the Legacy and gave them your web address.

Dr. Courtland Smith



Created by Dr. Courtland Smith

The only limitation is your imagination!

The Final Turn

Hollow spiral
candle holders
created on the
Legacy
Ornamental
Mill by:

Robert Mower
Spanaway, WA

Made of ebony
with sterling silver
hardware from
Packard Woodworks,
www.packardwoodworks.com



**VISIT OUR
WEBSITE!**

Gallery of Legacy Users

You'll see:
pool cues, hollow
spirals, log beds,
furniture,
kalidescope,
fireplace mantel,
church furniture,
peace pipes,
and more.

Tips & Tricks

Learn about:
router bits,
half-ropé mould-
ing, accenting
flutes, slotted
dovetails, and
more.

eMagazine

Featured
woodworker
& project,
more tips
& techniques.

To have your
work featured
on the Legacy
website, send
photos to:
Legacy Builder
1122 S. 900 E.
Provo, UT 84606
or email:

legacywood@earthlink.net

800-279-4570

www.legacywoodworking.com



Legacy Woodworking Machinery
1122 South 900 East
Provo, UT 84606

www.legacywoodworking.com

Mikes Custom Woodworking
1108 Lofton Dr.
Midwest City, OK 73130

Presorted
Standard
U.S. POSTAGE
PAID
PROVO, UT
PERMIT NO. 323