

## CAD, China and Reader Conversation

### CAD Can Do It

I was very pleased to see the CAD article ("The Ins and Outs of CAD Programs) in the *February 2007* issue. About a year ago, I settled on Alibre Design Xpress partly because of the incredible and enthusiastic support of the user community — there's even a woodworking section of their Xpress forum, and many woodworkers actively posting in the "full version" forum as well.

I'm continually amazed at how helpful and patient the other users are on the forums. They write tutorials, create re-usable models (e.g., drawer banks), patiently help newbies, upload examples, record video tutorials, solve problems and more. One user has even written a complete set of standards and best practices for modeling woodworking projects in Alibre Design. It's as if the users try the product, "catch the bug," and then they're hooked. It's really refreshing.

Anyway, two thumbs up for Alibre Design. Bill Hylton made a great pick!

*Alex Franke  
Chapel Hill, North Carolina*



I read the article on CAD programs with great interest. I have been trying out various programs over the years, including more than a couple of those mentioned in the article. I have introduced our Woodworkers Club of Houston members to some of them as well — a valuable woodworking tool!

I use a free (!) 2D program called CadStd for most of my drawings. It is very simple to learn and use, and does about 98 percent of the things I ever need a CAD program to do. It and an inexpensive upgrade to a "pro" version can be found at [www.cadstd.com](http://www.cadstd.com). I also use

DesignCAD for 3D, but it has a much higher learning curve.

*Rich Thomas  
Houston, Texas*

### China Syndrome

I've read your article ("Power Tools: the China

Syndrome") in the *February 2007* issue of *Woodworker's Journal*, twice. Each time I read the article, you made no distinction between the fabricator's ability to product a product to the design and tolerances specified by the American engineering/management company and the Chinese ability to design and build good tools. The design details of too many tools, outsourced to Mexico or China, are being degraded to make them cheaper to produce.

I rather imagine that if Tom Lie-Nielsen sent the design drawings for one of the Brian Boggs spokeshaves to a top-notch Chinese manufacturer and held them to the same standards Tom does in his own shop, they could produce them of the same physical quality. They would probably cost just as much, if not more, due to shipping, etc.

The point I'm trying to make is, how about doing an



article about how we, as woodworkers, are accepting poorer designed tools, power and hand tools, just to get them "cheaper"? Many times, restoring a [well] designed old Rockwell/Delt, Milwaukee, Stanley, Record or Oliver tool is well worth the effort. Please make a distinction between fabrication skills and design skills.

*Ed Straub  
Huntington Beach, California*

I enjoyed reading about Rob Johnstone's trip to China. It seems that his trip was quite educational — for all of us. Personally, when it comes to buying tools, as long as the item is well-made, accurate and within my budget, I will consider it regardless of its location (or brand) of manufacture. So, to that end his trip and subsequent article had little actual impact on my buying habits.

There is, however, one thing about China that Mr. Johnstone did not address that does make me

considerably nervous. It seems to me that at some time in the near future, all those nice Chinese people who are making all those fine woodworking tools are going to realize just what they are for, and then they are going to want to take up woodworking themselves. Considering the population of China, when they eventually match our per capita numbers of woodworking people, it will have a very distressing effect on the price of wood and hardwood in particular. Looking at what has happened to the price of oil and steel in recent years gives us a pretty good idea of what could happen to wood prices as well.

And, while I'm always happy to see new members in our woodworking community, you can have too much of a good thing.

*John R. Watts  
Inglewood, California*

Your views acquired in 12 days match many of mine acquired while traveling in China, Japan, Taiwan, Korea, Thailand, Malaysia, the Philippines, etc. for many



cumulative years over a period of two decades. There were some items in your article that require clarification:

1. While "quality" is often defined as totality of a product's characteristics (as you used in the article), in manufacturing quality is defined as conformance to specifications and compliance to requirements. The quality control functions for manufacturing, in a modern (last 30 years or so) sense have very little to do with the "quality" (as you used the term) of a product. The quality of the product is defined by the design; i.e., what features and performance characteristics are to be implemented (this is not even really the quality of design, which refers to the design process, not the product results). A \$100 driver usually does not have any better quality (of design or manufacturing) than a \$20 driver; i.e., both drivers meet all applicable specifications and requirements, just the \$100 driver has more features, better performance and possibly better reliability. Often, these products are made on exactly the same production line, with exactly the same quality control systems, just using different components and materials.

2. Please do not get caught up in the "myth" that American manufacturing jobs went elsewhere because of high labor rates. The

**Safety First: Learning how to operate power and hand tools is essential for developing safe woodworking practices. For purposes of clarity, necessary guards have been removed from equipment shown in our magazine. We in no way recommend using this equipment without safety guards and urge readers to strictly follow manufacturers' instructions and safety precautions.**





American worker is (and has been for a long time) the most productive in the world, meaning you get more from an American worker than anyone else (one of the reasons the most productive Japanese automobile assembly plants are in the U.S.A., not Japan: because of the American worker — using Japanese managers). In addition, for most manufactured items, the value of the labor is only a very small fraction of the total cost of producing the product; therefore, the actual worker labor rate can vary by an order of magnitude or more and not really affect the cost of the product. The real reasons for manufacturing leaving the U.S.A. are yet more complex and, if corrected, would mean manufacturing would return to the U.S.A. These include:

- A. excessive government-required documentation of all activities
- B. high taxation rates
- C. excessive overhead required when



unions are involved  
 D. poor management  
 This is especially true for quality, where no business school recognizes or teaches quality management skills (including quality management, quality assurance, quality control). These methods were almost entirely invented by Americans (e.g., Deming, Juran, Feigenbaum), yet are ignored in the U.S.A., while well-implemented in Japan and those that have accepted Japanese manufacturing skills.

E. Excessive concern for short-term profitability; e.g. a higher quarterly profit, at the expense of long-term growth



and profitability.

3. While there are pollution problems in many parts of Asia (high population density, rapidly expanding industrialization, cultural indifference to the environment), most of Asia is well ahead of the U.S.A. in acutal implementation of methods to reduce global

warming problems. Unfortunately, in the U.S.A., more money, time and effort is spent on documenting some token efforts to meet EPA requirements (see item 2A above) than actual serious work to achieve the goals. As someone in Singapore explained to me, when the ocean rises they lose their country, while in the U.S.A. many of us will not miss New York or Los Angeles. When, in the U.S.A., you have as many or more people documenting compliance efforts instead of actually implementing equipment and systems to reduce pollution, one is not making much progress.

4. While many will note the standard of living in many Asian countries does not meet U.S. government proclamations, the actual improvement over the last few decades has been significant. The improvement in the standard of living as well as GDP is a direct positive correlation with the efforts of most mainland Asian countries to reduce the population growth rate (along with industrialization).

Some footnotes on quality and reliability:

1. Quality, from a manufacturing point of view, has to do with defect rates, whether during manufacturing or when the product is used by the end customer. The issue is whether the product functions to the spec, not how extensive the specs are.

2. Reliability is how long a product will last. This is



primarily a function of design and materials selection. While historically, latent manufacturing defects (quality) would affect reliability, most reliability is now driven by material properties and design margins, not latent defect rates.

3. When using the term “quality” to describe features and performance, one must be very careful to not confuse with quality that affects manufacturing (costs) and reliability. These are technically quite different concepts.

*David Sweetman  
 Dyer, Nevada*

In reference to your article, “Power Tools: The China Syndrome,” let me mention that the author quotes “the traveler (who) was an American who has been doing business in China for 10 years.”

That is precisely why during that time China has executed more than one million innocent Tibetans; more than one million helpless Chinese have died of starvation, and grossly more have died of their

pollution. I’m also not mentioning their well-known punitive (and lethal) practices on personal freedom.

When are we going to get it? How many have to die for us to realize that it’s not about money...as our government, the United Nations and this author would have you believe. The battle has not been lost to the Chinese and their marketing machine; it has been fuelled by our money — buying Chinese tooling and other goods. It’s not about the cost and quality of goods; it’s about the richer being able to say “no” — for a good reason.

Lives are being lost in the name of “low-cost



manufacturing.”

Just say “no” to buying any Chinese goods and choose another solution. It’s hard.

Let your voice be heard.

*Matt Blum  
 Morgan Hill, California*

Imports are only as good as the company rep. or the company QC. These “Made in America” brands should say “Assembled in America,” as some parts are still made overseas.

I feel the American worker[s] brought a lot of this on themselves. Wanting more and more money and more perks. The health care providers and insurance companies wanting more money. The big auto companies are burdened by pension plans and benefits for workers no longer on the force. China has yet to reach that point. How they handle it will be interesting to see. Events are happening so fast, and they are not prepared for it. Events in one area have a ripple effect and influence things far removed. Caring for the elderly, farm production are all affected.

*Ralph E. Shartle  
 Cedar Hill, Texas*

### Band Saw Tension

Your article on band saw blade tension (“Blade Tension”) in the *February 2007* issue was interesting but could have said more.

For those of us who opt for a better blade than the one that came with the saw, there is more to it than just using the saw’s scale. The particular blade I use is a premium quality product that

transforms my saw into a much better performer. The info that comes with this blade gives specific instructions on how to set the tension. I would be afraid to tension it according to the scale on the saw. It isn't close.

Another recommended method is to measure the deflection of the blade when it is pressed from the vertical when the blade is tight.

A band saw artist who is very knowledgeable in the field and who has written a book on band saws uses the sound of the blade when plucked like a harp string. This might not work for everyone.

Perhaps the scale (on the saws that do have a scale) is suitable for blades furnished with the saw.

It would be interesting to know how many sawdust makers who do really fine work use the original blade.

*John Birch  
Menomonee Falls, Wisconsin*

Congratulations and my compliments on the "Blade Tension" article by Mark Duginske and Aaron Gesicki. There are too few articles by



"experts" that are based on reason alone.

I enjoy my subscription to your magazine, and the email newsletters you send. Your choice of topics and levels of complexity suit me perfectly.

*Glenn Martin  
Ontario, New York*

I just picked up the *February 07* issue. Wow! You guys really outdid yourself this time — all kinds of good information, including the articles on drawing and CAD.

Regarding the article by Mark Duginske and Aaron Gesicki: I couldn't agree more with them, but I'm sure that you get a lot of feedback that attempts to refute their findings. A couple of years ago, I took a woodworking

course on "Mastering the Curve" taught by Michael Fortune at the Marc Adams School in central Indiana. Michael gave a 20-minute segment on using and adjusting the band saw, which included tensioning and blade tracking as part of the instruction. The entire week's worth of instruction was worth that 20 minutes! As a point of reference, Michael informed us that he uses a 20-plus-year-old General band saw for a lot of his work. The saw still has the original blade guides and thrust bearings (he doesn't even use the bottom guides and bearing), and about the only thing that has been replaced are the tires. He uses it a lot for resawing, and, by adjusting the tracking so that there is no blade wander, he can use the rip fence to cut thin pieces like veneer. He applied his know-how to the half-dozen or so band saws at the Marc Adams School shop and, needless to say, they cut very straight and true.

Great issue, ladies and gentlemen; keep up the good work!

*Wayne Stump  
Apple Valley, Minnesota*

#### Cedar and Finishes

I just read the little blip regarding finish on Eastern red cedar (*Finishing Hotline*, *February 2007* issue). I use Eastern red cedar almost exclusively, on the various live-edge high-end rustic-ish chairs, tables and stools I seem to specialize in. I sand to 600-grit, and the pieces

turn out to be more art than function. The Eastern red cedar is such a beautiful wood. My pieces turn out to be lovely to touch, to see, and just nice to be in the same room with.

I just want to say, I have used Watco Danish Oil, as well as poly and tung oil, on my pieces and have not noticed any curing problems, except that you have to wipe any excess oil off after a day or two of curing time. I tend to prefer an oil look and feel over poly, and I find the tung oil fades and lightens over time, while the Danish oil has a richer look and there is less fading over time.

*John Armstrong  
Montpelier, Vermont*

Your *February 2007* issue contained an article by Michael Dresdner titled "Sealing Cedar Successfully." The article mentions the common and scientific names of four "cedars," but misuses acceptable naming conventions and includes one wrong scientific name.

When a common name mistakenly refers to a genus, it must be either written as one unbroken name or hyphenated. For instance, eastern redcedar is not a true cedar, but is instead a juniper, as its scientific name, *Juniperus virginiana*, indicates. Therefore, "Eastern red cedar" is incorrect, but "Eastern redcedar" is correct. Similarly, *Thuja plicata* is "Western redcedar" and *Thuja occidentalis* is "Northern white-cedar," as neither of these species are

true cedars either. Finally, Spanish cedar's correct scientific name is *Cedrela odorata* since, like the others, it is not a true cedar. The article is interesting and will be useful to your readers but, despite its name, it does not really deal with cedars.

*Michael G. Messina, Professor  
Department of Forest Science  
Texas A&M University  
College Station, Texas*

#### Fun with Words

I had a chuckle when reading the letter referring to "stopped" grooves. A plow plane can truly produce "stooped" grooves. That's why my back prefers a router.

*G. Steve Murphy  
Bowling Green, Kentucky*

#### Tall Case Clock

I just received my *February 2007* issue and was immediately drawn to Scott Phillips's "Shaker-Inspired Tall Case Clock."

Just the type of project I am interested in. Most tall case clocks are just too ornate for my design taste or skill level.

The only thing that disappointed me was that the only photographs of the finished clock are with the doors open. Mr. Phillips used a highly figured board for the front of his clock, but unfortunately, we were never able to enjoy the full effect of this, because there was no photograph with the doors shut.

*Pete Halsted  
Washington, Missouri*

