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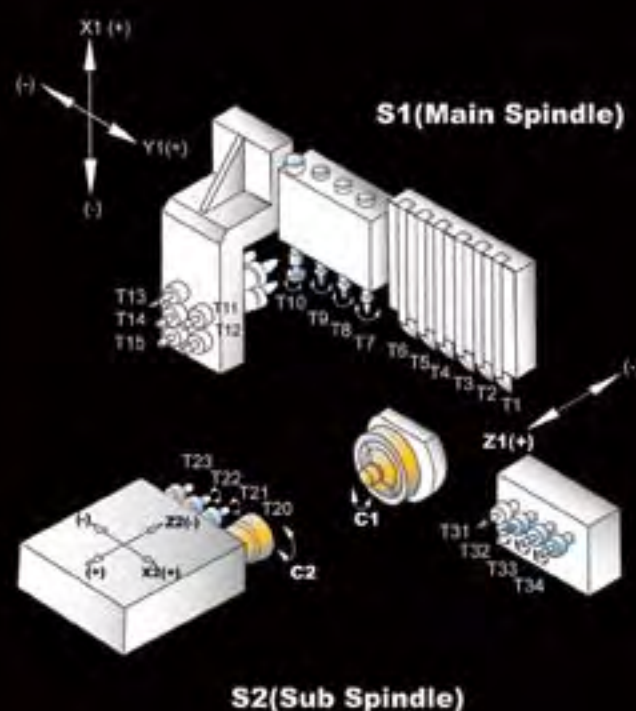


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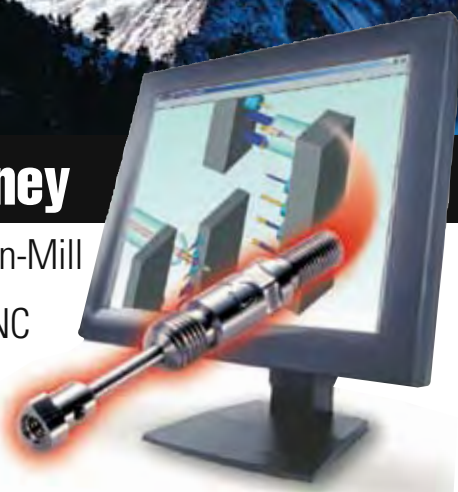
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(708) 535-2200

Switch Pitcher
Lloyd Graff
 (708) 535-2200

Publisher
Dan Pels
 (312) 342-6557

Managing Editor
Jill Sevelow
 jill@todaysmachiningworld.com

Features Editor
Noah Graff
 noah@todaysmachiningworld.com

Web Forum Editor
Noah Graff & John Iwanski
 noah@todaysmachiningworld.com

Creative Director
Terry Ntovas
 terry@todaysmachiningworld.com

Circulation Director
Judy Palmer
 judy@todaysmachiningworld.com

Sales Manager - East Coast
Bill Papp - 845-613-7329
 bill@todaysmachiningworld.com

Sales Manager - Midwest
Dianne Lach - 708-460-6383
 smlddl@comcast.net

Contributing Writers
Barbara Donohue, Mary Ethridge,
Russ Ethridge, Noah Graff.

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editor's note

Finding the Coins

In early April, while preparing for the demolition of the Sands Hotel and Casino in Atlantic City, the wreckers removed the old slot machines. Beneath the slots they found more than \$17,000 in loose change. Certainly, the cleaning staff must have vacuumed the casino floor every day, but they still found \$17,000 in nickels, dimes and quarters.

Whenever I look at a machining company which is closing – like an M & S Manufacturing in Hudson, Michigan – to figure its auction value I calculate a number for the stuff I cannot see, but know is there. It is a portion of the “pickup” number, which values the stuff I did see which has a marginal or unknown market worth. A homemade, second-operation machine, a measurement tool I've never observed before, or a closet full of yellowed machinery manuals fits this category. This is the flotsam and jetsam of the machining world. A man like Jeff Begg (see interview) sees value where others see nothing but scrap or kindling.

What I love to do with this magazine – and in the machinery business – is find the coins under the slot machines. I treasure the story that nobody else sees because they are focused on the obvious. The fun is in the obscure details like the copyright date on an old book that makes it rare and valuable, not just a musty relic.

Personally, I'm not a collector of things (although my accountant accuses me of that at Graff-Pinkert). But I am a devotee of stories. I love to watch *Antiques Roadshow* on Public TV, not for the antiques, but for the collectors' stories. Why does somebody keep a dollhouse or a cigar box in pristine condition for a lifetime and then pass it on in their will?

I hope you'll join me as we look for the coins nobody can see, and revel in the unique human stories of the people of the machining world.

Lloyd Graff
 Editor/Owner



Mary Ethridge spent 18 years with the former Knight Ridder newspapers. She recently covered business news for the *Akron Beacon Journal* in Ohio where she won several awards, including her enterprise reporting by the United Nations and the Associated Press. Her work has appeared in the *Philadelphia Inquirer*, *Cleveland* magazine and the *Miami Herald*. She graduated from Princeton with a degree in English literature. Ethridge is known for getting sources to spill all: Cindy Crawford once confessed to her an addiction to blueberry Pop-Tarts. Currently, her biggest challenge is coming to terms with her teenager's nose piercing.



Lloyd Graff has an M.A. in journalism from the University of Michigan. Lloyd splits his time between buying and selling machinery, writing Swarf and swarfblog and playing Fantasy Baseball on Yahoo. He is married to Risa, a world champion in Tae Kwan Doe. He has three children and a granddaughter who are all above average. One of his life goals is to make 65 consecutive free throws on his 65th birthday.



Barbara Donohue received her mechanical engineering degree from MIT. She worked in design, heat transfer and manufacturing for several years before changing careers to become a journalist. Now she writes about technology and business from her home office in Acton, Massachusetts. When not writing, she sings in a choir, volunteers as a literacy tutor, and is weekend "foster mom" to a yellow Lab puppy named Tikva that is training to become a wheelchair assistance dog.



Noah Graff has been working at *Today's Machining World* since 2005. He graduated from the University of Wisconsin Madison, majoring in film and history. He is the features editor for *Today's Machining World*, as well as the videographer for TMW and Graff-Pinkert & Co., producing training videos on screw machine maintenance and video stories for the TMW website. Noah enjoys investing, filmmaking and improvisational comedy. He is also a master of the sacred art of live band karaoke.

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Michigan Reality

"The Future of Michigan (March 2007) was a fabulous cover story. So many people who grew up and went to school there know all too well the reality of what 80 years of "high school education entitlement" has left the state with. I remember graduating from Loyola and going to work as an assistant editor making \$24,000 a year and commuting to Lincolnshire, while friends of mine who were the same age – who had, at best, a semester or two of community college – were working on production lines at home, living in west Michigan with a low cost of living and pulling down \$42,000 a year. Now, those same people are working at golf courses, doing janitorial work and struggling to find something that will pay them \$35K a year. It's a cold reality, but it's the world we live in now.

John Iwanski
Former TMW editor
Chicago, IL

Passion and Punch

I wanted to comment on how much I enjoy your magazine. It is very enlightening and presents a variety of topics from multiple points of view, which certainly can stimulate one's thought processes. I found your "State of the Unions" (March 2007) interview with James Hoffa interesting. Our employees recently decertified their machinist union affiliation after a 10-year lackluster romance they were happy to end. An interesting point from the Hoffa interview showcases just how early in life a true union member sells the necessity of membership and belonging to their family. Scary! Another interesting point was just how similar Hoffa's views and opinions on China, trade issues and politics were to many of the companies within our industry.

You have certainly been quite gutsy in writing about many topics that others would not touch, and I give you a lot of credit for that. While I do not always agree with some of your opinions, I certainly enjoy reading them. Keep up the good work.

Charles Heppner
Meaden Precision
Burr Ridge, IL

Divided Loyalties

Now that you've proven that loose lips sink ships, it's time to figure out just who owns what you have reported ("Ethical Compass," March 2007). It is precisely your columnist's "it isn't written down on paper" mentality that has made the U.S. the most litigious society and distracted management to deal with grievous matters rather than better engineering and art.

Your new employer is clearly not worried about using your knowledge to cause trouble for your former employer. What is your new job title, "Star Witness Against Your Former Employer?" Or is it "Industrial Spy Bringing Intellectual Property of Others?" It is unfortunate that you spilled some beans, because your current unethical employer is going to expect you to make chili.

You do not have a duty to your new employer to betray Intellectual Property that is not of your own invention. If you continue to sing this song, you will likely find yourself along with your current employer in court, and likely held liable for damages and the recipient of a "do not compete" order. You need to tell your current employer that you regret sharing another company's intellectual property and that you will continue to provide your expertise in your job, but will not be a participant in industrial espionage.

Personally, I would expect you to apologize and explain to your former employer, so that he is not ambushed by the Customs inquiry – or else you can expect to be similarly ambushed with some legal papers of your own. I believe this is called the Golden Rule and was actually written down somewhere...once upon a time. The sustainable way to "raise ones stock," is to add value, not distribute stolen property.

Merle Fiske
Tampa Screw

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Turning Maize into Fuel

We often think the economic world shifts in slow undulations, but the reality is that tectonic shifts often occur in a flash. Look at the price of corn. For twenty years corn hovered near \$2 per bushel, give or take a few pennies. But in the past year, it has rocketed to \$4 a bushel. Copper and nickel have had comparable or greater runups. The huge corn bounce will have a significant affect on the machining world we live in. Farmers in the U.S. and around the world are using to plant. Acreage estimates for domestic corn are up 12 to 15 percent, an enormous boost. This means a lot more tractors and trucks and rail cars to move the corn to all of the new ethanol plants being built to turn maize into fuel.

This also means more soybeans grown in Brazil that need to get trucked to port to be sent to China for their protein-hungry population. This means more engines from Caterpillar, Cammins and Navistar.

The transportation world is a tremendous growing market. Cars are hot in India, China, Thailand, Vietnam, etc., as the U.S. market contracts a little. When we focus our gaze at yesterday's hot markets like hard drives and cable connectors, we tend to miss the fabulous new opportunities in the mundane world of corn and beans.



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The big M&S Manufacturing auction in Hudson, Michigan,

at the end of March showed shocking vigor in the used machine tool market. Every category of precision machining equipment brought spirited bidding and high auction prices. Even multi-spindle National Acme screw machines, which have languished for years, showed renewed interest.

Part of this can be attributed to the quality of the M & S machinery, which was well appreciated in the Midwest. The auctioneer, Hilco, marketed the plant aggressively and drew foreign buyers to Hudson. Some of the machines were snapped up before the auction by companies picking up the M & S automotive contracts. At a machining company the size of M & S there is usually an enormous amount of accumulated stuff. Hilco sold 50 Winter thread rolling attachments for Acmes for more than \$150,000. Tooling for Nakamura CNC lathes brought in \$300,000. Both categories are scarce in the market and bring out the buyers.

I think the M & S sale dramatically illustrated what I see happening in automotive-land. The supplier base is shrinking. Delphi, Dana, Dura, Collins and Aikman, Tower and a dozen more major bankruptcies have hammered the Tier One to tears. I think we are beginning to see the rebound phase. Stronger companies are now saying no to the domestic Big Three and a weakened GM, Ford, and Daimler-Chrysler can no longer diss them with impunity. American car companies have significantly fewer options now, as they gut their own parts companies. GM can no longer readily choose between Delphi or an outside supplier when Delphi is chopped liver.

I talked to a lot of people at the M & S auction, most of whom are committed to the American auto industry. Many were loaded with work. This was not a downcast, bottom-feeding, bargain-hunting crowd, which surprised me a little. I talked to a number of guys who were adding manufacturing space at depressed prices. Michigan is starting to look like a low-cost area of the country to make things as real estate and wages sink down. Is Michigan the new Mississippi? Here are a few prices to give you a feel for the market: The 1-5/8" RBN8 Acmes from the early 1980s with threading and pickup brought around \$60,000 each, while the older machines with similar features hovered around \$30,000. The 2002 Nakamura CNC lathes brought \$150,000 to \$200,000 each, with the accessories adding another 30 percent to those numbers.

swarf

A big auction like the M & S sale

sale brought a thousand people to the site, and hundreds more on the web. A four-day machine tool auction is a cross between a barn-raising and a wake. A lot of people come together to remember the dead and to build something new.

One young guy who is building amidst the rubble is Denny Grice of R & H Manufacturing. He says he has been growing his business 30 percent per year consistently, and making money. He started in a garage a few years ago with some old Brown & Sharps. I met him in 2003 at a Delphi auction in Dayton where he was bidding on 8-spindle National Acmes. It was the absolute bottom of the recession. He told me then that he saw his future in graduating to 8-spindles from 6-spindle multis.

At M & S, Grice, who majored in accounting in college, told me he recently bought 3 Tsugami Swiss CNC machines. What he was looking for at the M & S auction was an Index CNC multi at pennies on the dollar.

Denny Grice may be young, but he is extremely shrewd in the wiles of the machinery world. There was one MS-42 Index CNC multi in the sale. It was the oldest of the Index CNC multis. Robert Levy, the auctioneer, struggled to find action on the machine when it came up for sale.

Grice ultimately bought the machine after the sale for a reasonable price. The machine will put him in a position to bid on tighter tolerance work with smaller volumes than his Acmes allowed.

The seesaw of business always goes up and down.





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Joshua Bell is one of the elite

concert violinists in the world. He recently decided to experiment with his fame by becoming a street musician, sitting himself down at a Washington, D.C. subway stop. He played his heart out while the trains went by.

Bell sells out concert halls with tickets going for \$100 a pop. His take for his one hour performance in the D.C. underground was \$32, and twenty bucks came from the one woman who recognized him.

I think we can learn quite a bit about business from Joshua Bell's subway stint. People pay for reputation. They pay for the packaging and the brand, as much as the quality of the performance. You put Bell at Carnegie Hall or Lincoln Center with the proper hype and he sells out. Put him at the 135th street subway stop in New York and he may get mugged.

If you bid a job like an anonymous street vendor, you will be treated like one. If you enter a bidding contest with a brand, an identity, a well-known package, you will be regarded much differently than a person bidding solely on price.

Joshua Bell has spent twenty years building his marquee value. A business should be doing the same, even in the world of machining where companies too often toil in the obscurity of commodity pricing. Machining, like violining, rewards the people with the name.

Look at your own business. Do you have a recognizable brand that people will pay money for? Or are you working for pennies near the tracks?

It is nice to see Hardinge get

its mojo back. The venerable American firm, based in Elmira, New York, had a huge quarter following IMTS, and the stock jumped 20 percent when earnings were released. Their new advertising shows dramatic spec-to-spec comparisons with top quality Japanese competitors. They are making the bulk of their line in their big American factory so they still have the "buy American" wedge to use. Hardinge had lost market share to Haas during the 90s and early 2000s on the low price end of the market.

They are positioning themselves in the mid-priced sweet

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spot of the market led by Mazak, Mori, and Okuma. The Hardinge dealer organization has been outmaneuvered by the Haas factory outlet style and the Japanese producers' relentless marketing on quality at their regional technical presentations, but the new Hardinge aggressiveness in both their show presentations and print marketing bodes well for the future of the brand.

One of the beautiful success

stories of the customized manufacturing revolution taking place before our eyes is Threadless, a seven-year old Chicago tee-shirt maker.

The business plan is elegantly simple and clever. Each week Threadless solicits original tee-shirt designs from amateur and professional graphic artists. The designs are submitted on the web. Each week the owners of Threadless pick

seven new creations to make, and rush a limited production run out of their shop-factory in a trendy neighborhood on the north side of Chicago. They limit the quantity and claim they have sold out almost every design they have ever made.

The run limit adds an artistic caché to a mundane product. The Threadless website has become a social networking venue for artists and designers and customers. Because the Threadless community provides the designs and is rewarded monetarily and with recognition, the site continues to build momentum.

Threadless has been building sales exponentially. They will probably do \$20 million this year, and say they hope for \$60 million next year.

With a white bread product like tee-shirts, they are tapping into some of the most dynamic trends in business today. "Citizen" input is hot. Blogs about products and companies are proliferating and giving tremendous momentum or headwinds on the web.

The Threadless approach has institutionalized client feedback in the product cycle. Symmons Industries, which I featured in a recent Afterthought, is doing this with showerheads and faucets. In a slightly different variation,



Art by "Starman"

Align Technologies is doing it with orthodonture.

The Threadless crew (their motto is "No Longer Nude") starts each week with the generic white or colored tee-shirt as their blank canvas. It probably costs them \$2 to \$3 per shirt. They charge \$12 to \$25 for the designer shirts, and \$40 for a hooded sweatshirt. They pay \$1500 for each week's design that they accept, plus a \$500 gift certificate for their merchandise. They pick seven designs per week and run 1,200 short sleeve shirts of each design and a few hundred long sleeve. Only if they get exceptional demand for a shirt design will they run a 1200 piece reprint at a later date.

Last year they decided to expand their line and keep a stock of pre-designed shirts in stock. It will be interesting to see if going conventional will work for them.

In seven years, Threadless has built a valuable brand and a hugely profitable niche business. Whether they can keep their momentum going remains to be seen, but the concept of "citizen" design, quick turnaround production, social networking, and transforming the generic into the scarce and desirable is a business recipe we can all learn a lot from.

corn and soybeans which we may be seeing already in the acreage expansion in corn.

The use of non-corrosive materials in water handling devices will continue the strain on stainless steel, nickel and copper, which has been indicated by the runup of these materials.

Protein and water may not sound as sexy as aerospace and bone screws, but it is going to a juicy spot to position your firm in today's world.

What do you do if you are an

unknown pipsqueak company with a killer idea, going up against a giant with an almost unlimited marketing budget?

On April 16th at the biggest running event of the year, the Boston Marathon, tiny Spira Shoe Company of El Paso, Texas, stole the show from Nike.

For two thirds of the race, two unknown Kenyan runners led, wearing brilliant yellow Spira shoes. Spira shoes have a superior design to their competition aside from just their color. Tiny springs are put into the heel of the shoes. This idea is getting traction in the footwear community but has not been deemed kosher by the running mavens. The Spira guys did not expect to win the Marathon. They just wanted to be noticed. And for one hour 32 minutes of the two hour, 10 minute race, they were front and center.

Nike can buy every track star on the planet (the winner did wear the swoosh), but the talk of the race was these two wannabee Kenyans with the incredibly yellow shoes.

Spira had promised the Kenyan rabbits \$150,000 if either won the race. The runners would have had to forfeit the official marathon prize because of the springs, but Spira knew these virtually unknown runners were not going to finish first.

Unknowns do not win the Boston Marathon, but this year one did – Spira.

Another riff on the Brazilian

soybean crop. When Brazil and the U.S. export soybeans to China, they are really sending protein and water across the Pacific. China, with its massive export manufacturing economy is wrecking its own air and water. As the country gets richer, its consumers get hungrier for water and protein in the form of soy, and shun rice as the uncool food of the old poor China.

As the U.S. gears up for the enormous ethanol handout mandated by our politicians, we are seeing a shift in acreage from corn to beans. This will soon mean significantly higher beef, poultry and egg prices as we pay for protein at world prices.

Water is going to be one of big plays over the next ten years. Positioning yourself in the stream of water handling products, large and small, will be a profitable and growing niche.

Food machinery from the farm and through the processor is also going to be expanding as the demand for protein pushes prices much higher than we have seen in recent time. The stock market is taking note. Deere stock has zoomed as has Monsanto, which is now primarily a biotech seed company.

Global warming may open up new acreage to cultivate





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BY JERRY LEVINE

book review

The Real Inconvenient Truth

If you want the cold facts on science's hottest topic, you might warm to Al Gore's *Inconvenient Truth* and Fred Singer and Dennis Avery's *Unstoppable Global Warming*. These two volumes provide the bookends for an ever expanding library on climate change.

While the style and target audience of each book is different, surprisingly much of the basic data is the same – it's the conclusions that vary. Global warming science has been obscured by highly politicized partisans, making it difficult to trust much of what is printed in the press. One needs to read both books to gain a reasonable understanding.

Both Gore and Singer agree the earth is warming and CO₂ levels are increasing. Gore claims Earth's current temperature increase is caused by man's use of fossil fuels. Singer says the warming is caused mainly by solar activity in a roughly 1500 year cycle and CO₂ has little to do with it.

Earth's temperature has been both higher and lower several times in the past 650,000 years. The temperature varies by about 20 degrees F from low to high in cycles of approximately 100,000 years. The lows are ice ages; the highs are called climate optima (because we like it as it is today).

Earth's current temperature is near the top of the cycle, but it has been exceeded several times in the past. Singer writes that data shows CO₂ changes lag temperature changes by 200 to 1000 years, because higher temperatures cause the ocean to give off dissolved CO₂. The present warming began at about 1650 C.E. at the end of the "Little Ice Age." CO₂ began rising 250 years later, around 1900. Gore writes that due to man's impact, CO₂ levels are higher now than they have been in the past 650,000 years.

There is a tremendous amount of peer-reviewed science on the subject of global warming. The best compendium is the United Nations' Intergovernmental Panel on Climate Change (IPCC), which publishes a scientific summary every five years. It's compiled by several hundred scientists from many countries. There is so much information with conflicting conclusions, one can cherry-pick to fit one's bias.

The IPCC also develops a shorter Executive Summary, written by a smaller group of scientists/politicians from around the world. A fair amount of negotiation goes into the wording to get one's political position advanced. The Executive Summary is attacked for being too alarmist, while the main scientific text is attacked for being too conservative.

Singer's book draws heavily on peer-reviewed science with hundreds of footnotes and citations. Gore's references include several non-technical websites. He frequently says the scientific consensus agrees with whatever point he is making, so there's no need for further evidence. Singer counters that most of the recent IPCC scientific report agrees more closely with him, so he calls out Gore as the one out of step with the scientific consensus. Two recent *New York Times* Science articles point to many gross exaggerations by Gore.

Gore's doomsday view featured in his book and movie is that global warming will melt the ice on Greenland and the polar ice caps. This increased water volume will cause 18 to 20 foot increases in sea level with significant world-wide flooding. He shows simulated pictures of a vastly smaller Florida as an example. (Revenge for the election of 2000?) The increased cold fresh water could also stop the natural ocean current circulation.

The Gulf Stream flow would stop, causing European cities to become much colder. Gore warns that warming will cause more violent weather and the spread of tropical disease. Singer refutes these scenarios.

The IPCC and *The New York Times* Science writers agree with Singer. Sea level increases are estimated by IPCC to be up to two feet at the end of the 21st Century, not 18 to 20 feet. The IPCC estimate is close to the actual six inch sea level rise in each of the last two centuries. The Greenland ice melt rate is estimated to take over 1000 years, and this is tempered by a growing ice pack on Antarctica. The *Times* Science



section also takes Gore to task for not understanding what caused the circulation of ocean currents, nor that cities located on the western coasts of continents had milder weather than those in the interior.

As to weather patterns, there was such fierce debate at IPCC on whether global warming caused more severe hurricanes that Chris Landsea, a leading NOAA scientist and U.S. hurricane expert, resigned from the IPCC in protest. Interestingly, hurricanes were down significantly in 2006 and none struck the Gulf Coast. Severe Pacific storms were also down last season, in what was labeled the hottest year on record.

While Gore and Singer agree on past world temperatures, they disagree on the temperature during the period from 900 C.E. to 1200 C.E. Gore shows a small rise, while Singer shows a significant increase. Singer describes this 300 year period as the most recent previous solar driven warm period before our current warming, backed by tree ring and stalagmite data from around the world. This warm period allowed a flourishing Viking community of about 10,000 people to inhabit Greenland for over 200 years. They moved away during the Little Ice Age, but many of their relics and artifacts remain, encased in ice.

The truth is there are very few significant practical solutions. Singer says the sun's activity is the problem and money spent on mitigation of CO₂ is a waste. Gore says the U.S. needs to reduce CO₂ emissions by 60 to 80 percent by the year 2050. Other than advocating the use of hybrid cars and green electric power, he doesn't propose much else that will contribute to this huge reduction.

Gore's main CO₂ reduction chart comes from a 2004 *Science* magazine article, which calls for a huge worldwide commitment at an enormous cost to stabilize CO₂ emissions at the current level. Gore calls for twice those CO₂ reductions, which he implies will take place at essentially no significant commitment or cost. This is the greatest weakness of his book. He says we can have our cake and eat it too, and he drives a hybrid SUV that probably gets 18 miles per gallon to demonstrate that fact. Gore also has many CO₂ reduction suggestions for individuals, but

most run counter to our lifestyle and often sound downright silly, like discontinuing bathing or taking vacations by bus.

Finally comes the most inconvenient truth of all. The costs are exorbitant. I was a member of a global warming commission convened by then Vice-President Gore in the late 1990s to study ways to cut CO₂ generation from the transportation sector. Transportation represents about one-third of U.S. CO₂ generation. The projected cost for the U.S. to meet the Kyoto treaty ran into the hundreds of billions of dollars yearly. And Kyoto is just a small step toward stabilizing CO₂. Fareed Zakaria of *Newsweek* writes "slashing CO₂ emissions by 60 percent would require cutting back on industrial activity across the globe on a scale that would make the Great Depression look very small." To stabilize CO₂ the U.S. would have to cut back much further than the 60-80 percent Mr. Gore advocates.

It must be recognized that most of the world is not currently committed to reducing their CO₂ emissions. Of the 132 countries that ratified Kyoto, only 23 are required to reduce emissions. And, of the 23, almost no one is not meeting their goal. Throughout the world Kyoto is a lip service document.

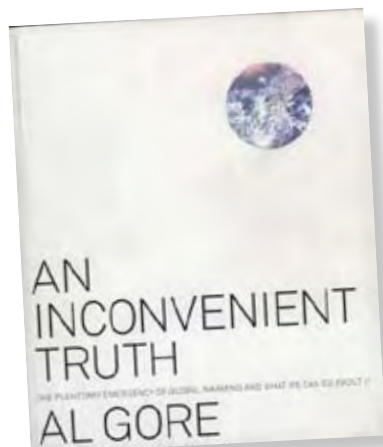
Conclusion

Mr. Gore is to be praised for bringing forward a discussion of global warming. If the effort leads to meaningful fossil fuel conservation in the U.S. and elsewhere, he will have achieved a major accomplishment for mankind. The United States needs to provide world leadership in order to press China,

India, Russia (no Kyoto requirements for these countries) and Canada (Kyoto's greatest scofflaw) into action.

Adapting to global warming sounds defeatist. But unlike plans to slow down global warming, which require simultaneous international efforts, adaptation strategies can be pursued by individual countries and localities. Humans have successfully adapted to rapid temperature swings in the past without the sophisticated technology now available.

Many environmental advocates avoid talking about coping, for fear it will hamper efforts at mitigation. The answer is to do both – mitigate what we can and adapt to the rest.



Comments? You can email Jerry at jerroldlevine@yahoo.com.

SPINDLE POWER

BIG Kaiser Precision Tooling Inc. will showcase tooling product lines in Booth #5229 at EASTEC. Their Air Power Spindle provides ultra high speed and precision, offering variable spindle speeds up to 80,000 RPM. Air Power Spindle is an air-driven tool that can be used on existing machining centers to provide surface.

Also on display will be the new Fullcut Mill FCR Type. FCR's geometry expands capabilities in multi-functional milling, achieving supreme milling performance for ramping, helical-, shoulder- and plunge-milling operations.

BIG Kaiser will also showcase the new integral-shank design for the EW2-50XL precision finish boring head. The new integral design will be available for CAT40, BT40, HSK-A63 and Capto C6 size spindles and provide a shorter tool than the modular shank/boring head combination.

For more information, please contact BIG Kaiser at 888-TOOL-PRO or visit www.bigkaiser.com.



RAPTOR ATTENTION

Datron Dynamics is showing their EZRaptor™ CNC machining center in Booth #1261 at EASTEC. The EZRaptor's vibration-dampening concrete polymer machine table is equipped with a built-in 3-tool, Automatic Tool Management System™. The EZRaptor's 30,000 RPM spindle produces low force when tooling 0.250" and under. An integrated Ethanol-Mist Coolant System™ provides for surface finishes and eliminates secondary processes like de-burring or de-greasing to further improve cycle times. At a list price of \$64,800, the EZRaptor includes standard features like a 1.2kW, 30,000 RPM spindle, full protective enclosure with door safety interlock, chip disposal tray, Microsoft Windows® and Microsoft Windows-based control software, PC with C3 1GHz, 256 MB RAM, 40 Gig HD, 15" CRT monitor, keyboard, hand-held controller, Ethernet networking capability, remote monitoring capability, CD-ROM drive, and USB ports.

For more information, contact Datron Dynamics, Inc. at 888-262-2833 or visit www.DatronDynamics.com.

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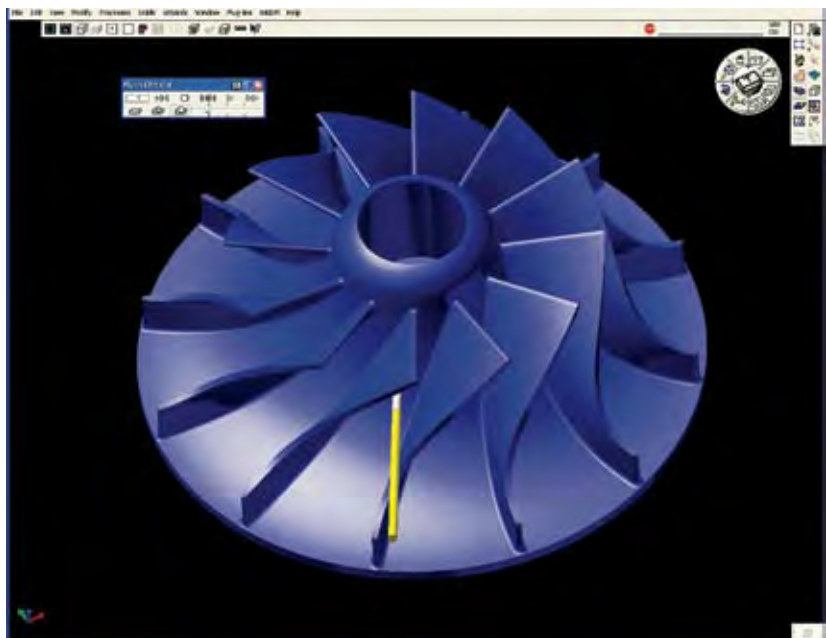
Hardinge's ELITE 27 MS turning center (built in Elmira, New York) will be unveiled in Booth #1351 at EASTEC. The new ELITE 27 MS turning center has a 27mm bar capacity spindle and comes standard with Hardinge's jaw chuck/collet-ready spindle, a 16-station turret top plate with live tooling, C-axis contouring, and a sub spindle. The machine has a weight of 7,820-lb. The main spindle features a 5C, 1-1/16" (27mm) bar capacity, utilizing a wide range of interchangeable workholding devices such as collets, jaw chucks, step chucks, expanding arbors and much more. The 8,000-rpm spindle drive system features a 10-hp (7.5-kW) power rating with 35 ft-lb (47Nm) torque rating.

For more information, please contact Hardinge Inc. at 800-843-8801 or visit www.hardinge.com.

ON ITS AXIS

Gibbs and Associates announced that a new GibbsCAM option, which supports 5-axis simultaneous milling, will be demonstrated in Booth #5429 at EASTEC. The new option provides the user with a complete range of 5-axis milling functionality. The new 5-axis module introduces the following capabilities: Multi-surface 5-axis roughing and finishing; surface edge 5-axis swarf cutting (trimming vacuum-formed parts); adaptable interface, based on part type strategy, shows only what is needed; advanced gouge checking ensures safe cuts in even the most complex operations; complete control over entry/exit, cut-to-cut, and between cut moves and 5-axis depth cuts machining.

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ALPHA BET

LNS America will display the new Alpha series automatic bar feeds and oil mist collectors along with other LNS bar feeds, chip conveyors and high-pressure coolant systems in Booth #800 at EASTEC. These machines are designed for pairing with entry level, CNC sliding headstock lathes. The Alpha ST 212 handles bar stock diameters from 2mm to 12mm, and the ST 316 accommodates 3mm to 16mm diameters.

The ST 212 mechanically advances the material to the loading position with a unique, positive action nylon screw. The ST 316 uses a gravity fed rack and loading fingers that flip the bar stock precisely into the channel. Also new to the LNS assortment is a line of oil mist collectors. Five models with capacities of 170 – 1250 CFM filter water soluble or straight oil coolants to eliminate mist, vapors, smoke and odors. Although designed for wet applications, the devices can also be used in mixed (wet/dry) situations.

For more information, please contact LNS America at 513-528-5674 or visit www.LNSamerica.com.

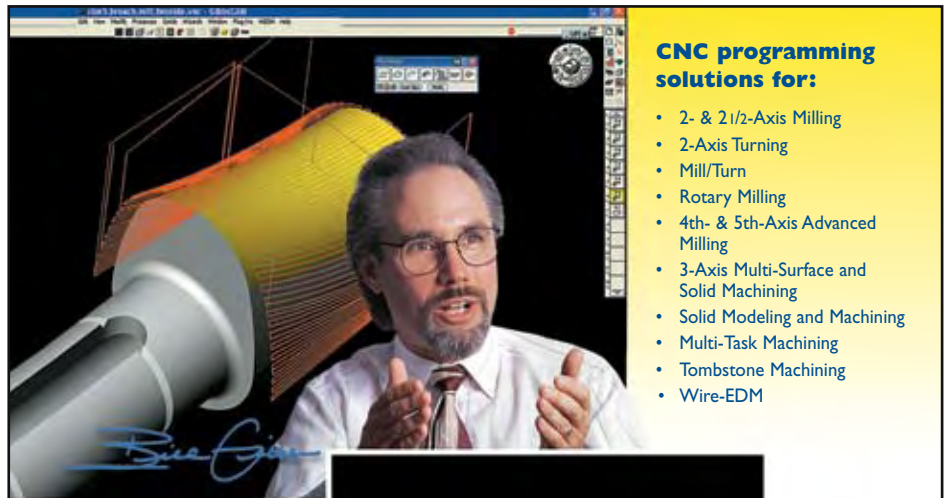
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Machine Prodigy

SNK's will feature the Prodigy GT-27 gang tool lathe in Booth #2139 at EASTEC. The GT-27 features C-Axis spindle as standard and polymer base. The absence of a turret eliminates tool changes. The Prodigy GT-27's spindle speeds reach up to 6,000 rpm. The lathe uses three axes of motion that can be commanded in absolute or incremental modes. The Prodigy's C-Axis spindle allows for indexing and positioning as well as more advanced functions including interpolation and polar coordinate milling.

The Prodigy GT-27 can index in .01degree increments. SNK's Prodigy GT-27's GE Fanuc Controller contributes to ease of operation, as well as faster and more responsive performance (with the inclusion of brushless digital servo drives).

For more information, contact SNK America at 866-379-6068 or visit www.snkamerica.com.



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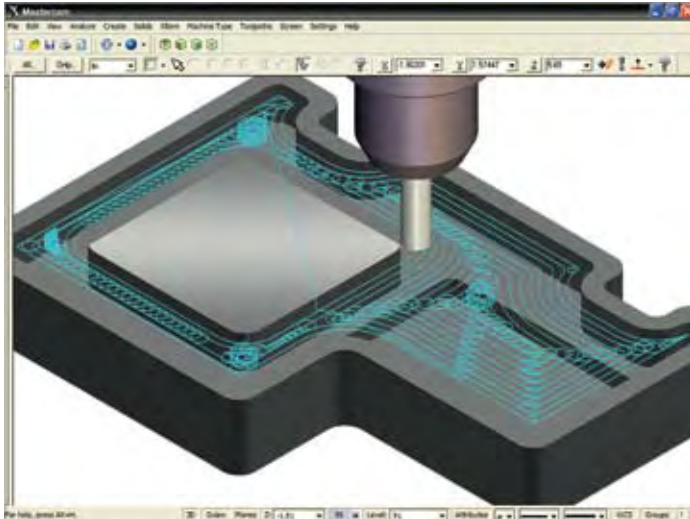
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Mastercam X2's Maintenance Release (MR1) will be showcased in Booth # 5245 at EASTEC. The high speed machining Pencil toolpath has been enhanced to provide smoother motion with fewer retracts when used with rest material. Mastercam can now calculate the appropriate number of offset passes needed, based on tool diameter. Trochoidal motion in high speed toolpaths assists with the machining of harder materials. Trochoidal motion maintains an acceptable tool load, allowing feeds and speeds programming to be reliable. Mastercam's 5-Axis Flowline toolpath has been enhanced to support undercuts. The Advanced Multiaxis toolpaths have also been enhanced to support solid geometry.

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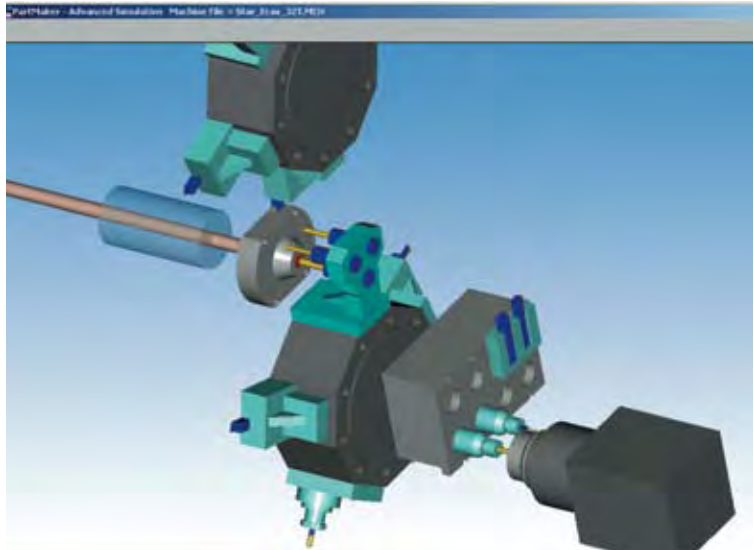
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A DATE FOR EIGHT

PartMaker Inc. will unveil Version 8 of its PartMaker® CAD/CAM software for CNC Mills, Lathes, WireEDM, Turn-Mill Centers and Swiss-type lathes in Booth #5323 at EASTEC. PartMaker Version 8 features enhancements including the introduction of the PartMaker Full Machine Simulation module, which allows the user to view a photo realistic 3D model of the machine for which they are programming a part. The new version also improves the optimization of NC output for the machining of complex, free form geometries. PartMaker Version 8 also includes enhanced tools for optimizing cycle time for machines capable of synchronized machining as well as an improved capability for proving out individual machining processes on a part with a number of machining operations.

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For more information, please contact UNIST, Inc. at 800-253-5462 or visit www.unist.com.

THREE SCORE

Toyoda will showcase Toyoda's SelectG grinder, FH450S horizontal machining center and SP2016 bridge type machining center in Booth #1205 at EASTEC. Toyoda's SelectG is an economical universal grinder designed for flexible, precise, small-lot work. The machine's wheelhead rotates from 90 to 60 degrees and is changeable between straight and angle grinding wheels. FH450S is a 40-taper HMC suitable for a variety of applications. It has a significantly larger work envelope than comparable machines, yet the streamlined enclosure requires less floorspace. The SP Series bridge type machining center offers a work envelope up to 197x550 inches. A full splash guard, dual chip conveyors, and Fanuc CNC make them easy to use and maintain.

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PHYSICIAN OR SUPPLIER INFORMATION

32

Politics may make strange bedfellows, but it has nothing on health insurance reform. Who could imagine a world in which Wal-Mart Stores Inc. embraces one of the country's largest unions? Or that Arnold Schwarzenegger, the Republican governor of California, would take his cue from U.S. Senator Ted Kennedy, the poster child for government intervention.

These odd pairings – and there are several – are forming at a rapid pace for a simple reason – desperation. Like shipwrecked tourists stranded in a lifeboat, health care reformers have decided their best shot at survival is cooperation. “You see people working together who ordinarily wouldn’t,” said Gino DiCaro, spokesman for the California Manufacturing and Technology Association in Sacramento. “Sometimes it’s surprising.”

Perhaps even more surprising is the majority of these efforts aren’t coming out of Washington, as everyone expected, but from the halls of state capitals across the

proposed solutions include the use of high-deductible health plans and provisions allowing the purchase of insurance on a pretax basis.

“The states don’t believe the feds are taking any significant action. These little tweaks here and there, like with the savings accounts, aren’t enough,” said Enrique Martinez-Vidal, acting director of the State Coverage Initiative, an arm of the Robert Wood Johnson Foundation that helps states set up plans. “The states are on the frontlines, and they’re tired of waiting for someone else to deal with it.”

it Out

BY MARY ETHRIDGE

country. In the past two years, a growing number of states have taken matters into their own hands. From Maine to California, the governments are forging their own plans to search for the holy grail of insurance – affordable, universal coverage.

“I think communities realized the current situation could not be sustained much longer,” said Amanda Austin, director of legislative affairs for the National Federation of Independent Businesses. “Something has to happen.”

Proposed solutions on the state level range from offering tax credits to help people afford private insurance to single-payer, government-run programs. The federal government hasn’t been entirely mute on the subject. President Bush expanded on his 2006 tax credit proposal in his 2007 State of the Union address. His

Anyone who has had firsthand experience with health insurance knows too well the current system is flawed, but its problems are more far reaching and profound than many realize. The numbers, culled from several respected studies, are dramatic.

- Americans spent about two trillion dollars on health care last year. That number is expected to double in the coming decade.
- In the United States, health care spending accounts for more than 16 percent of the Gross Domestic Product. It’s expected to rise to 20 percent by 2015. In 1980, that figure was 9 percent. For Germany, France and Canada, it’s 10 percent or less.
- An estimated 46 million Americans do not have health insurance of any kind, according to Physicians for a National Health Program.

- Health care premiums for a family in 2005 included an extra \$922 to compensate for the cost of care to the uninsured. For individuals, the cost was \$341, according to a study by Families USA.
- Since 2000, premiums for health insurance have risen four times faster on average than the wages of workers during the same period, according to the Kaiser Family Foundation.
- The average employee contribution to company-provided health insurance has increased more than 143 percent since 2000. Average out-of-pocket costs for deductibles, co-payments for medications, and co-insurance for physician and hospital visits rose 115 percent during the same period.
- Insurance costs are the number one concern of business owners, according to a survey of the membership of the National Federation of Independent Businesses.
- The average premium for a family of four has more than doubled in the last decade to \$10,000, according to a report by McKinsey & Co. Most of that rise has been in the past three years.

Take a breath. There's more.

- In 2005, employers spent nearly \$600 billion on health benefits, up from about \$400 billion just five years earlier. The share of an employee's premium covered by employers adds up to about \$700 a month, according to the Kaiser Family Foundation.
- General Motors cites health care costs as the primary reason for its dire financial state. The company said its health care obligations add \$1,500 to the cost of a new car.
- In 1960, health insurance was 14 percent of employers benefit costs. Now it is 44 percent, according to the Employee Benefits Research Institute (EBRI).
- These enormous sums aren't creating better health care. The World Health Organization ranks the U.S. health care system number 72 out of 190 in the health of its citizens.
- Starbucks now spends more on health benefits for employees than on coffee beans for customers.

Faced with dismal statistics and a growing swarm of frustrated constituents, state lawmakers felt compelled to take action. Although Hawaii set up employer mandates for insurance in the 1970s, it wasn't until 2003 that the current state movement took shape. That year, Maine and Vermont devised their own health care blueprint. Those

plans called for the creation of a government-supported office to help people secure medical coverage from private insurers. The cost of that insurance would be based on the buyer's ability to pay. The programs are entirely voluntary. Neither state has reached universal coverage yet, but supporters say it's just a matter of time.

In 2006, a whole new approach to universal care took center stage. Gov. Mitt Romney of Massachusetts, with the help of U.S. Senator Ted Kennedy, devised a plan requiring every resident to get health insurance. Romney, a Republican currently running for President, likens the mandate to the law requiring drivers to carry auto insurance. He said if he were elected, he would carry the plan to the national level.

Under the plan, slated to take effect July 1, those at or below the poverty line (about \$55,000 for a family of four), will not have to pay for insurance. Those earning up to three times poverty income can purchase insurance

“General Motors said its health obligations add \$1,500 to the cost of a new car.”

on a sliding scale. The plan calls for the expansion of Medicaid to cover those considered too well off under the old system to qualify. It also offers tax benefits for health savings accounts and to businesses that offer insurance.

The insurance is purchased through a quasi-government office known as “the connector.” Businesses with 10 or more employees are required to provide employees with insurance or suffer a loss of the tax benefits and must pay a penalty of \$295 per employee each year. That money goes into a pot to help low income residents buy insurance. The pot already has a \$1 billion head start, thanks to a long-existing fund that had been designated to pay for uncompensated treatment of the uninsured.

California Governor Arnold Schwarzenegger was so impressed by Romney's program, he proposed a nearly identical system in his state. Several other states are drafting their own proposals for universal coverage.

“It's been simmering for a number of years, but Massachusetts really got things going. Once you've got someone on board, you've got the whole herd behind them,” said Paul Fronstein of the Employees Benefits Research Institute.

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Bill Rennie, public affairs director of the Retailers Association of Massachusetts, a merchant trade group, said the push to universal coverage could be a burden to retailers, particularly to smaller merchants with slightly more than 10 employees who do not currently pay to insure them now. Just the additional regulations and paperwork alone could overwhelm those struggling to make it, he said.

However, Rennie said nearly everyone agrees something has to be done. His members saw their premiums rise 22 percent on average in the last year, he said.

"They can't absorb those sorts of hikes. Everyone knows this problem has to be fixed, but is the state going about it in the right way? That's the question," Rennie said. Rennie said many of his members remain confused by the new insurance law.

"There are a lot of people out there who don't know how this law applies to them. They're just trying to figure it out," he said. "There are a lot of questions that still don't have clear answers." Rennie cited the law's lack of a clear policy on part-time employees, the backbone of retailing's workforce.

Do they count in this? Do we provide them with a different plan? What plans are the best? These won't be easy decisions for businesses to make," he said.

Businesses were not typically involved in employee health insurance until the period immediately after World War II. It was then that the U.S. government became increasingly concerned with companies gouging veterans and their families, who were building houses and setting up households. Regulators put a limit on the profit a company could claim without triggering an extra tax. The sole way companies could plow that money back into the business was by using it to provide health care policies for their employees. The backers of that law likely had no idea they were creating a precedent that would continue for more than six decades and become a national nightmare.

Jim Henderson, president of Dynamic Sales Inc. in St. Louis, said health insurance for his seven employees has become his personal nightmare that won't go away without some intervention.

"Anyone who thinks the health care problem will resolve itself is crazy," he said. "The whole thing is a real headache."

Dynamic Sales, which equips industries with parts

and tools, was founded by Henderson's father in 1966. It not only made insurance available to employees, it paid 98 percent of their premiums. There wasn't a deductible either. In the 1990s, because of rising premiums, the company lowered its share of the tab to 70 percent. Since then, Henderson has struggled to find an affordable plan that would take care of his employees adequately. The insurance brokers told him the only way to keep premiums down was to raise the deductible, which he did, to \$100. It now stands at \$2,000, and premiums have gone up between 10 and 26 percent every year. Henderson said he has the same insurance as his employees, so he suffers the same escalating costs and diminishing coverage as everyone else.

"We're getting less of a plan for more money," he said. "Nobody is happy about this."

Henderson bristles at the mention of employer and individual mandates to achieve universal coverage.

"The reality will be more like a brutal boxing match than a love fest."

"I don't like them. I think they're too much of a burden on a small business," he said. "I like President Bush's idea of tax credits and savings accounts."

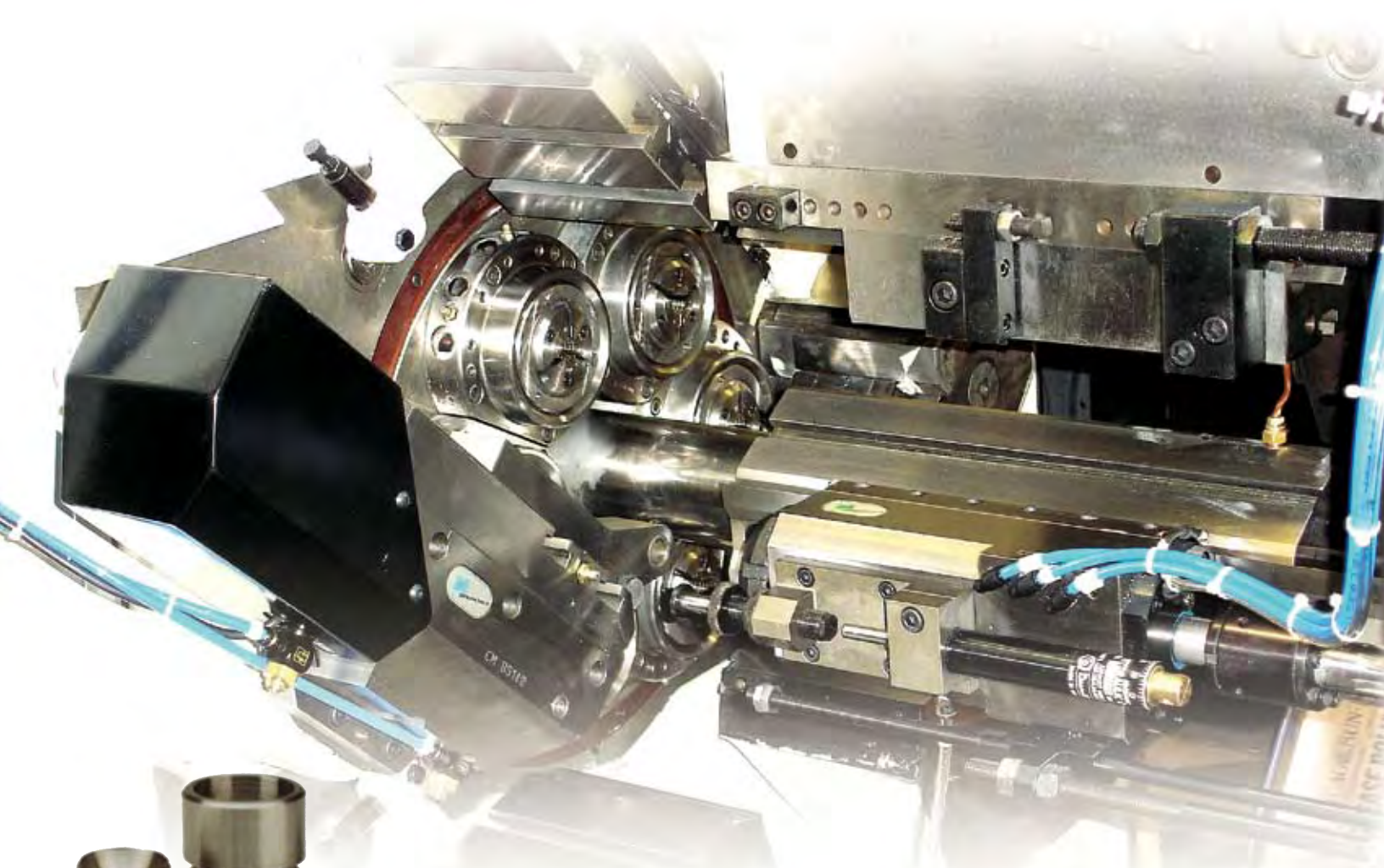
Although Massachusetts received an enormous amount of media attention when it announced its plan a year ago, it's not the only proposal garnering headlines.

In February, Wal-Mart, the nation's largest employer joined forces with the Service Workers International Union, one of the largest unions in the country, to support the goal of affordable universal health care coverage by 2012. The two, along with three other businesses and another union, vowed to work together to make that happen.

Just a month before, a coalition that includes the U.S. Chamber of Commerce and the American Association of Retired Persons (AARP) jointly called for the expansion of health insurance for children and poorer Medicare recipients.

As warm and fuzzy as this all seems, the reality will be more like a brutal boxing match than a love fest, experts say. And like a boxing match, it will be rife with fancy

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For a sneak peek into the conflicts ahead, consider the case of Maryland, Wal-Mart and ERISA. In late 2005, Maryland legislators passed a law requiring for-profit employers with more than 10,000 workers to spend at least eight percent of their payroll on health benefits. If they don't abide by the law, which was to go in effect this year, they would have to pay the difference to a state fund to subsidize Medicaid.

Of the four Maryland employers who fall into the 10,000-plus category, three of them are already paying far more than the law requires. The legislation, called the Fair Share Act, is clearly aimed at Wal-Mart, whose employees have been known to complain about its skimpy health care offerings. Wal-Mart, through the Retail Industry Leaders Association, quickly filed suit, arguing the law is preempted by the federal law known as ERISA.

ERISA stands for the Employee Retirement Income Security Act, which became law in 1974. It was designed to protect plans from fraud and mismanagement, but it covers most other types of employee benefits, including health plans. ERISA states clearly that no employer is required to provide health insurance, only that they meet certain standards if they do.

In January this year, the Fourth Circuit Court of Appeals upheld a lower court's 2006 decision that Wal-Mart's arguments were right – ERISA does preempt the Fair Share Act.

The ruling led advocates of universal health care to regroup and gird their loins for more such lawsuits.

"All it takes is one to get it started," said Fronstein of the EBRI. Employers want change as much as anyone, said Amanda Austin of the NFIB, but they want options, not mandates.

"It's always going to be controversial. Everyone has such different ideas of what's the best thing to do. You kind of get your strings pulled from all sides," said Lisa Martin, executive director of the Manufacturers Association of Maine, agreed.

"My members would like fewer mandates and more choices in what to provide their employees – such as 'this one covers infertility but not chiropractic and vice versa,'" she said.

Martin believes employers want to offer health insurance. If they don't, they're at a competitive

disadvantage in attracting the best talent," she said.

Business is determined to be heard in this latest round of health care proposals, said Martin.

"If someone would just listen to the business community for a change, they'd see we come up with some pretty good ideas," she said.

The United States is the only industrialized nation without universal health care. Our record on infant mortality and other measures of healthy society is poor, particularly for the most prosperous country on earth.

"The U.S. rate on mortality is poor, particularly for the most prosperous country on earth."

How did we get into such a desperate condition?

Frankly, everyone is at fault. The employer-based health care system was born out of the desire for companies to protect their assets, and that theme of self interest has been the soundtrack of the last six decades. Sometimes unions play the tune, insisting on maintaining benefits granted in a much different competitive climate. Sometimes governments are the players, refusing to stand up to special interests and disappearing just when strong leadership is needed. Businesses have been reluctant to give up a piece of their profits, at least without a fight. And insurance companies, the modern day bogeyman, make it as hard as possible for people to obtain and use health insurance. The truth here is all the players have been at fault.

People aren't inclined to change until a situation becomes unbearable and a dramatic shift in direction proves the only way out. The United States has finally reached that desperate place, and that's a good thing. Unlikely groups are forming alliances to solve the single most pressing domestic issue facing the nation. These alliances will either disintegrate into a whirl of lawsuits and accusations, or the key players will give up a little to create a meaningful solution to this national mess.

Let's all collectively cross our fingers .



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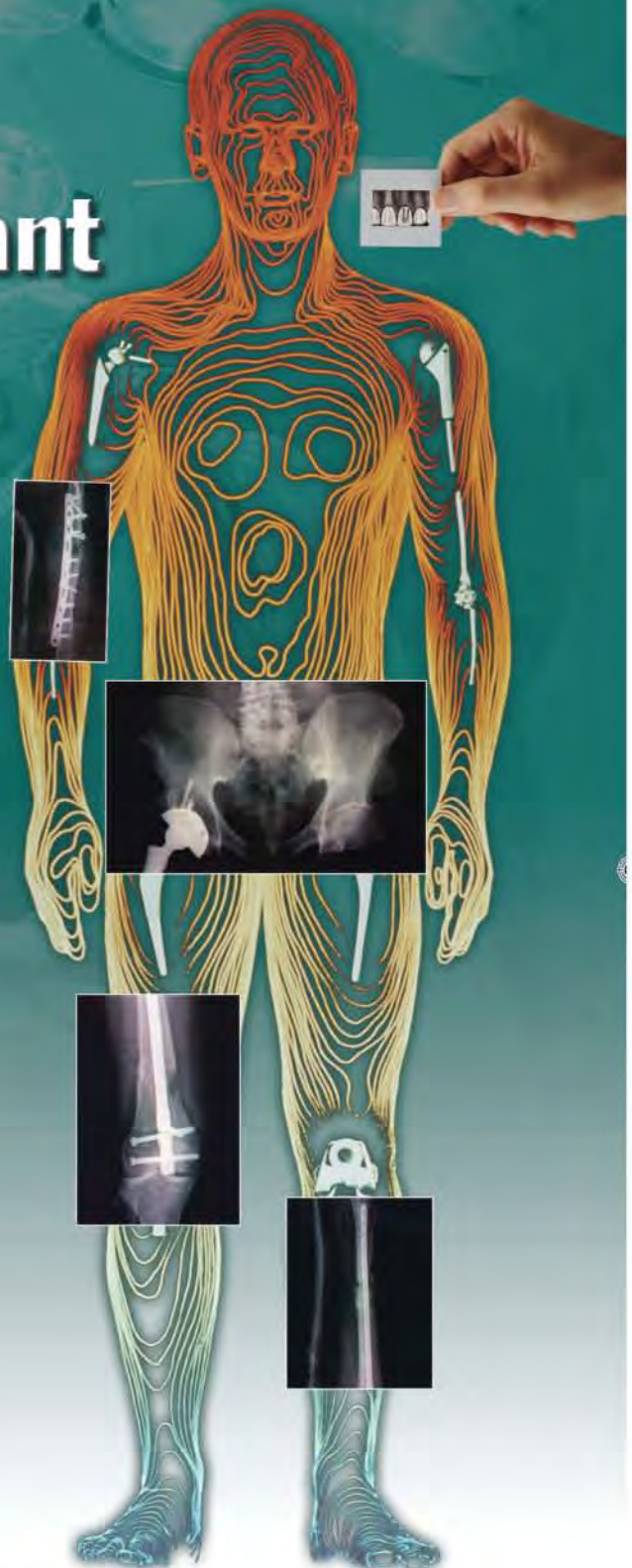
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jeff begg

He Beggs to Differ

The Eclectic Style of Jeff Begg

BY LLOYD GRAFF

When you enter a machining firm which cuts millions of pounds of brass bar each year, you expect to find a line of New Britain screw machines or Davenports – bunches of almost identical automatics methodically turning out fittings.

But at Marshall-Excelsior Corporation in Marshall, Michigan, the machinery assortment reflects the eclectic taste of its owner, Jeff Begg. A little bit of this, a little bit of that. Warner-Swaseys, New Britains, Davenports, Wickmans, National Acmes; 5-spindle; 6-spindle; 8-spindle; a menagerie of screw machines bite at the brass rod, turning out Jeff's variegated mixture of niche market non-ferrous fittings.

Begg's mixture of screw machines cannot be easily type-cast. If it's a good buy and it cuts brass with efficiency, he's usually interested. Jeff Begg has built a thriving independent fittings business in southern Michigan amidst the wreckage of automotive-land by following his instincts and his own intense personal scrutiny of the fittings marketplace. Marshall Excelsior reflects the particular style and taste of Jeff Begg, who says, "I guess people say I'm eccentric," not just because of his collection of screw machines, but because he defies the notion of the blueprint-bound engineer, even though he is an engineer by training.

Fit for a Collector

Jeff Begg makes fittings, but he also collects rare books on a variety of topics, particularly Scottish history and horticulture. He also loves car racing. He has two vintage Offenhauser Indianapolis-style race cars that he adores and rebuilds. And he's into antique glass too.

Begg's interests are overflowing. So are his books. He is constantly buying and occasionally selling out of his collections. He keeps adding bookshelves, but a lot of his books are still in boxes at his two offices in Marshall and his home in Battle Creek.

He says he spends ten hours a week buying and selling

on eBay and a bevy of other internet sites, but people who know him well say he's always got the computer trolling for the next find. His eBay credentials are impressive. He has 8,645 stars (representing feedback on items bought and sold), which is probably just a fraction of his transactions just on that trading venue alone.

Jeff Begg is an avid reader. He devours four newspapers every day. He reads many of the books he purchases. They are not merely trading vehicles. He is fascinated by his Scottish heritage and thirsts for more knowledge and more Scottish volumes.

Intersecting Loops

Begg has a roving intellect that allows him to move from his hobbies to his business in intersecting loops. Marshall-Excelsior has had to weave through the roadside bombs of Chinese competition, violent price swings in brass and copper, dying brass casting suppliers, and the chronic shortage of screw machine professionals. Yet Begg's company keeps growing. He has around 100 employees, and the firm is profitable. He says his strength has been finding the niche markets where fast service and dependable supply trump cheap foreign competition and big company muscle. His specialty fittings are especially strong in the LP gas markets. Forklift truck propane gas connectors anchor his line, but he keeps adding new pieces that his stable of distributors can sell.

Begg is self-deprecating about his own technical and managerial skills, but the Marshall-Excelsior line keeps expanding, aggressively competing with the giants like Parker and Eaton with their off-shore capability and virtually unlimited capital and reach.

Begg buys his castings and forgings exclusively from domestic suppliers. He says he hopes to continue to be able to pursue this practice, though he acknowledges the possibility he may eventually have to go to China for cost savings. His U.S. purchasing is for both patriotic and pragmatic reasons. His forte is quick turnaround on jobs, so a long off-shore supply line would hinder him in that approach, but Begg is also staunchly pro-American in business and deplores the decimation of the Michigan manufacturing economy. He sees the middle-class lifestyle of Midwestern factory workers going down the drain with the decline of the domestic Big Three and the culling of Tier One suppliers.

Begg has consciously steered clear of OEM automotive. He does some job shop work, but finds the commodity pricing arena increasingly problematic. His primary business push is toward expanding his brass fitting product line in consultation with his distributors.

Jeff's Strategy

I last caught up with Jeff Begg at the M & S Manufacturing auction sale. He needed Winter thread rolling attachments for his National Acmes. He bought the rebuilt heads, which were in as-new condition. They were the first of fifty Winters to be sold. Begg's bidding strategy was straightforward.

“Jeff says his strength has been finding the niche markets where fast service and dependable supply trump cheap foreign competition and big company muscle.”

He needed the heads. They were the best available, and he was going to buy them unless they were bid up to a stupid price.

He ended up paying two-thirds of the new price, but he got exactly what he wanted.

Begg is an extremely sophisticated auction bidder. On eBay machinery bids, his style is to hold back until the last possible moment to bid. On eBay alone he has over 2,500 positive feedbacks in the past year.

But Jeff, the canny Scotsman, saw that in the M & S situation – holding back was not going to work for him, so he played a different game.

Whether buying books or thread rollers or building his product line, Jeff is always assessing the action and plotting his next move.



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Dear Shop Doc,

We can't accurately control the depth of the tap on our CNC Swiss lathe. The type of component we are making has a blind hole that goes .200" deep. The threads are 6-32 and need to have a fully formed thread of a minimum depth of .185". The tool is a thread forming tap with a blunt point. We are using a Floating Tap Collet, and we program about 10 percent slower than the tap pitch, stop the spindle, slight dwell, then feed off at 100 percent of the tap pitch. We've tried many variations of this method with different spindle speeds, different floating collets and different tool positions, however, we still cannot accurately control the depth. One of the issues of not being able to control the depth is that we "bottom out" frequently and break the tap. Down time, tool cost and scrap material is eating into our profit margin for this job. **Tapped Out**

Dear Out,

I can relate to your pain. I know how it feels to quote a job and not be able to manufacture at the production rate you thought you would be able to achieve. Tapping on CNC Swiss Lathes used to be fairly adventurous. It appears you have done your homework in selecting the correct tap style. The problem you are having is caused by the floating collet. It's assumed that because you are machining on a CNC machine that you have absolute control of all of the dimensions, but when it comes to tapping with floating collets, you don't have as much control as you think. What is happening is that when the part engages the tap, it is not starting at the same position along the polar axis (C-axis) every time. This is critical to how many threads are produced based on the Z-axis movement. For example, if your part begins to tap at 12 o'clock, which starts to pull the collet because of the 10 percent slower feed, you'll get one depth, but if it starts 180 degrees later at 6 o'clock, you'll get a different depth. With floating

collets, this is the variable you live with and in most applications it's ok.

For this particular application I would go to Rigid Tapping. Rigid tapping is something relatively new to CNC Swiss-type machines. Some of older CNC Swiss machines are not capable of this process, but with more manufacturers offering C-axis as a standard option, rigid tapping is a great solution. Rigid tapping has been around for many years on most CNC Lathes & Milling Centers. The programming of it is fairly simple, and you don't have to worry about using any special collets. Check your machine manual to see if your machine is capable.

David Cogswell

Director, Precision Machining Operations
Bal Seal Engineering, Medical Products Group

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A continuing column in which we ask smart people to discuss their views on topics related to the future of manufacturing

next

BY NOAH GRAFF

An estimated 46 million Americans have no health insurance, yet many Americans with private insurance enjoy state of the art medical facilities and short hospital wait times.

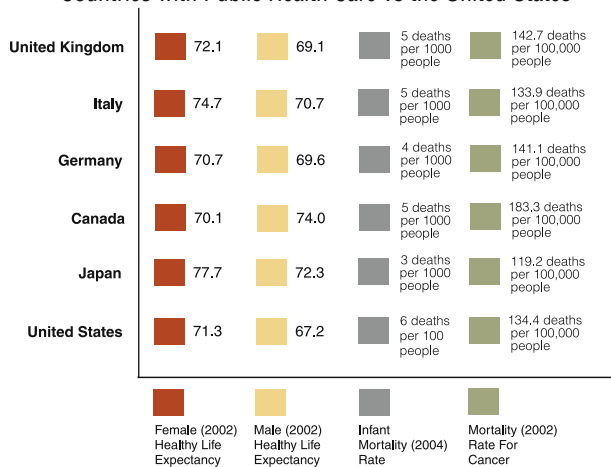
If the United States adopts a universal health care system, will the quality of care decline for those Americans already insured?

No. Quality of care would improve for a number of reasons. First, the majority of health care providers (hospitals) in our country have become overburdened with uncompensated care. By eliminating that aspect of their operations, they would have more resources to redirect towards patient quality. Second, by implementing an affordable, accessible and quality health care system for all Americans, the health care system could better coordinate and develop quality and cost containment measures, such as for chronic illnesses like asthma and diabetes. Management could improve the quality of outcomes for everyone and at the same time contain costs, putting more money back into individuals' and businesses' pockets. Lastly, by developing a private/public system partnership, greater scrutiny, assessments, increasing transparency, and quality of care reporting and monitoring would take place. Currently, consumers are faced with too few choices and limited information about the quality of care they receive.

Jim Duffett

Campaign for Better Health Care

Countries with Public Health Care vs the United States



Source: World Health Organization www.who.int

Overall quality of care would decline. Universal health care plans such as Medicaid and State Children's Health Insurance Program (SCHIPS) have failed to meet original expectations, have had to be cut back in services provided, and are financially insolvent. Universal access to care for the 45 to 46 million people presently without insurance would require enormous infrastructure to administer, and presently there is no money laying around to cover the uninsured. The overall cost of insurance wouldn't drop because of more people in the pool, it would go up because nobody would want to deny a service. To keep costs down, quality of care wouldn't necessarily be based on best practices evidenced-based medicine, and preventative services would have to be cut back. Presently some physicians opt out of accepting Medicaid and even Medicare to avoid the low reimbursement and hassles. Under a universal public health care system, people would probably still have to pay out of pocket to get the care they want.

Martin S. Levine, D.O.

American Osteopathic Association-Board of Trustees

If a universal health care system is implemented in the United States, it will provide an opportunity to improve the health care for everyone, including people who already have health insurance. Currently, with well over a thousand different insurers in the U.S., each payer sees only a small segment of the outcomes of any given provider, whether it be a physician, nurse practitioner or hospital. Each payer is only able to view the outcomes of patients for whose care they have paid. In a single payer system it would be possible to view, compare and analyze all outcomes, and recognize outliers; providers whose patients do better or worse than the average. This information would provide opportunity to improve care for everyone by pushing for the practices of providers with better outcomes and eliminating those with worse.

Dr. Claudia M. Fegan
Physicians for a National Health Program

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Dr. Claudia M. Fegan is a recent past-president of Physicians for a National Health Program (PNHP), an organization of approximately 14,000 physicians with a mission to bring about a single-payer universal health care system in the United States. Single-payer national health insurance is a system in which a single public or quasi-public agency organizes health financing, but delivery of care still remains largely private.

NG: What is the biggest problem with the present health care system in the U.S.?

DF: The biggest problem is that there is no system. Presently there is no systematic way to provide access to health care [for all Americans]. People in our penal system are guaranteed access to health care. People over the age of 65 [are guaranteed] for the most part, but not even every citizen over 65.

NG: The United States ranks poorly among other industrialized nations in life expectancy and infant mortality rate. If these statistics were based solely on Americans with private health insurance, would the U.S. rank at the top?

DF: No, because there's less uniformity [in our standards of care] than in other places. We don't have required practice guidelines for people to follow. The classic example is when someone has a heart attack. The one drug that has been shown to improve long-term survivability is a beta blocker, but if you look at discharge summaries for patients who leave the hospital following a heart attack, there's a huge percentage of patients who don't get put on beta blockers.

NG: How can the U.S. spend so much more on health care than other countries (twice the per capita of other nations according to PNHP), yet it still doesn't have a universal health care system?

DF: A lot of the money goes into profit and overhead [of private health care corporations]. You don't need people like the previous head of Aetna and his multi-billion dollar contract. That's a huge waste and a huge drain on the system.

NG: Is there a particular system in another country or a combination of systems that you want to emulate with the PNHP proposal?

DF: I think the United States could take our money we put into health care and do a far better job than anything any other country has done.

NG: Is that because we would provide medication while most other countries do not?

DF: Most countries do not pay for medication; however, many countries offer discounted or free medications to those who are disabled, to children and the elderly, or to the impoverished.

NG: What's your opinion of state health care plans like the one implemented in Massachusetts?

DF: I think they're all doomed for failure, and I think Massachusetts is collapsing now. They depend upon private insurance financing, and that's destructive to the ultimate process.

NG: Are the majority of American doctors in favor of a universal coverage system?

DF: I think so. When we talk to them they will often say "Yes," that it's the only solution, but then they also say that they don't believe it's politically feasible or that we're unlikely to get there.

NG: Will there be a single-payer system in five years?

DF: Maybe not five, but certainly ten.

NG: If you could have coffee with anybody living or dead, who would that be?

DF: Frederick Douglass. He said, "Without struggle there is no progress."

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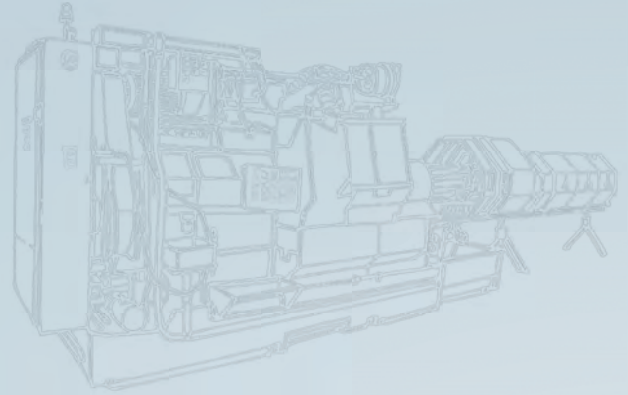
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1-3/4" 8-spindle, 1970
2-1/4" 6-spindle, 1973-79 (3)
3-1/4" 6-spindle, 1982
5-5/8" 6-spindle, 1979
6-5/8" 6-spindle, 1979

ACMES

1-1/4" RA6, 1975, 1957
1-5/8" RBN8 '94-98 (3)
1-5/8" RB8, 1980, rebuilt 1996. pickoff
2" RB6, 1979, Direct Drive Rebuild (2)
2" RB6 collet chucker, 1980
2-5/8" RB6-1977
4" RB6, 1975

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GM-16 AC '97-2000 (4)
GM-20, 1993

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Citizen M-20, 1996 (2)

Citizen L-20, Type VII, 1996-98 (2)
Citizen L-25, Type VII, 1998
Citizen L-32, 1999

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Model 52, 1-1/4" 6sp., 1979 (3) pickoff
Model 62 2-1/4" 6sp., 1975
Model 62 2-1/4" 1960, \$5750

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42 mm ABC Index 1996 (3)
MS 36E, 1993
MS 25 6-spindle, 1990
GB 30 1990 (2)

DAVENPORT

3/4" thdg., pickoff, 1985-1965 (10)
3/4" chucker, 1991 (4) Tamer
3/4" with Tamer & Logan clutches,
'91, long bed

CNC MACHINES / CNC LATHE

Okuma VQC 40, 1987
Citizen L-25, 1998
Index 42mm ABC, '97 (3)
Index GFG, 1987 (3)

MISCELLANEOUS

Kaltenback KB 455NA saw, 1998
Recess unit for Hydromat (as new)
Hydromat base for 45-12
Hydromat flanges for HW25-12
Reed B-13 thread roll
Winter 125 thread roller
Davenport chucking package \$2500
Alps bar loader for CNC Swiss \$3950
Mectron laser measuring machine mfd. 2000
Barrett 1100 chip spinner 1986
Cincy Centerless 325x12, rebuilt '94

HYDROMATS

HW25-12 1986 (3)
HB45-12 1997-1995
HB45-16 1996HS-16 2000
HB45-16 chucker, 1997

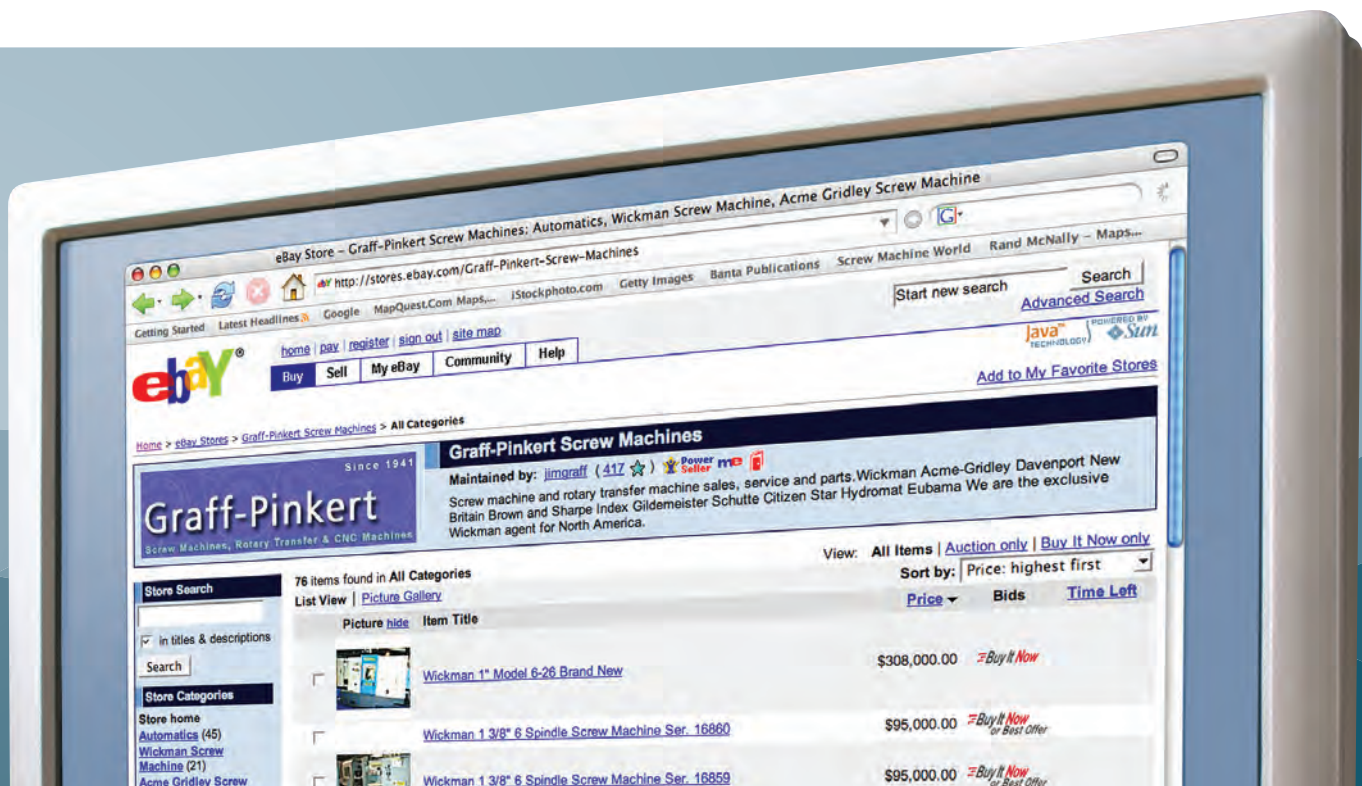
BROWN & SHARPE

#2 - 1-5/8", 1970
#3 - 2", 1973

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how it works

BY BARBARA DONOHUE



health care

Insuring your employees' Health

Medical insurance is expensive, confusing – and widely regarded as the most important employee benefit.

It's been said that the best advice about healthcare is "Don't get sick." Of course, we don't have a choice in the matter, so having medical insurance ready to help pay the bills is the next best thing. The problem is that, for years and years, now, insurance costs have been rising.

"Every year the question is not 'Is it going to go up?' but 'How much?'" said Bill Cox, president, Cox Manufacturing Company, San Antonio, Texas.

With the price of insurance soaring, during the last few decades, managed care offerings have largely replaced traditional health insurance plans. These managed plans and other options available to help consumers pay their health care deductibles have helped a little to alleviate the pain of spiraling medical insurance costs. Internal Revenue Service (IRS) rules, state programs and laws (which, of course, differ from state to state) also shape the kind of health coverage available..

We've all heard about the many millions of people in the U.S. who don't have medical insurance. You may be one of them. Like many owners and managers of businesses, you may want to offer medical insurance, but have found you can't attract and keep the kind of workers you want without offering it.

In addition to the major medical insurance programs covered here, you may also want to offer group plans for other health-related coverage categories such as dental, vision, hearing, long- and short-term disability, or long term care.

Common types of major medical coverage

Indemnity, also known as fee-for-service. This is the traditional type of insurance. You can go to any doctor and the insurance pays a portion of the bill, often 80 percent.

There is also the option for "managed care" plans, which put

some constraints on which doctors you can see, or on how much the plan pays.

HMO (Health Maintenance Organization): You receive care from doctors and other providers within the HMO. Your primary care physician is your main contact, and he or she makes referrals to other providers within the organization, as required.

PPO (Preferred-Provider Organization): You can obtain care from the preferred providers in-network (with whom the organization has negotiated discount pricing), or other providers outside the network. If you go out of network, your share of the cost will be more.

POS (Point Of Service): This is a combination of an HMO and a PPO. You have a primary care physician who arranges care within the network, but you can also go outside, at a higher cost to you.

Consumer Driven: A recent trend, "consumer driven health care," is a move toward making individuals more financially responsible for their health care choices, with the expected result that they will be more prudent about how they incur medical expenses. Federal law, including the IRS code, has created some options to encourage this.

FSA (Flexible Spending Account): This is a "use-it or lose it" account you can offer employees into which they put aside a portion of their pre-tax pay. The funds go toward reimbursing the employee for deductibles and co-pays (but not insurance premiums), as well as other IRS-approved medical expenses, such as eyeglasses and medications. The employer can also contribute. The downside for the employee is the money in the account must be used during or soon after the year it is deposited, or it is lost. The downside for the employer is that whatever amount the employee says he or she will deduct for the year, the employer is responsible for the full amount, as of January 1, even if the employee leaves the company before paying in the full amount.

HSA (Health Savings Account): This is a pre-tax account funded

how it works

by employee or employer contributions. It must be combined with a high-deductible insurance coverage, and the amount deposited cannot exceed limits that change from year to year. In 2006, the deductible had to be at least \$1,050 for a single person. Some advantages of the HSA are: lower insurance premiums; the employee doesn't pay taxes on the money set aside; and you, the employer, don't pay social security tax on the amount, either. As the employee incurs medical bills he or she can use money from the HSA to pay any expenses allowed under IRS regulations. This does not include paying insurance premiums. Funds left in the account at the end of the year remain there and can be used for future medical expenses. Also, the owner of the account can take it along when he or she changes jobs.

MSA (Medical Savings Account): This is an older program similar to an HSA, created to help self-employed persons and employees of small companies afford high deductible insurance. In many cases, a HSA might be preferable. An MSA can usually be rolled over into an HSA.

HRA (Healthcare Reimbursement Arrangement): This is something relatively new, and is always funded by the employer. The employer places funds in an account from which the employee is reimbursed for qualified medical expenses. The major difference between this and other options is that HRA funds can be used to pay insurance premiums. The employee doesn't pay taxes on the funds, and the employer doesn't have to pay payroll taxes. This opens up the possibility of employees obtaining their own insurance and paying for it with HRA funds.

Other cost-saving strategies can help keep your medical insurance costs as low as possible.

Negotiation can pay off

Though Bill Cox observed that medical coverage costs go up and up, his company recently had the pleasant experience of their health insurance carrier holding the line on cost – just this once. Their existing insurance carrier came in with another increase for the next year. In response, the Cox Manufacturing director of human resources took competitive bids and informed the existing carrier that the company was willing to change its 65 employees to a different insurer. With some hard negotiating, she convinced their current insurance company not to raise premiums that year, saving the company money and saving the employees the hassle of changing doctors.

Who pays what

Some companies fully fund employee health insurance. At Wiscon Products, Inc., in Racine, Wis., the company funds 100 percent, said Rolfe Christensen, president. “For years, before it became ridiculously expensive, we offered a top-of-the-line HMO plan. As the cost escalated, the quality de-escalated,” he said, adding that the benefits have deflated, while the plan cost has almost doubled.

“In our experience, the rates keep going up,” said Richard Binder, president of Abbott Interfast Corp. in Wheeling, Ill. His company of about 100 employees offers a choice of programs. “It

costs a lot of money, this year almost \$1000 for a family. We pay the majority of it.”

More and more companies are requiring employees to take on a significant share of the cost.

At Bilvern Products, Inc. in Mason, OH, office manager Deanna Panetta said the company pays 30 percent toward insurance for



most of the 23 employees, and those employees pay 70 percent. People who opt for dental insurance pay the whole amount, she said. “We are going to look at another plan that is a little less expensive,” she said, “and give employees the option of keeping the same plan,” or going with the new one. The company would pay according to a percentage of the lower-cost plan. The premiums for the current coverage went up almost 19 percent from 2006 to 2007.

The self-insurance option

Some businesses find that, instead of buying health coverage from an insurance company, they come out ahead by paying the employees' medical bills themselves. To the employees, the coverage looks the same – a HMO or PPO structure, for example; but the company pays the medical bills as they occur, and, as backup, also purchases an insurance policy to cover extraordinary expenses due to severe illness or injury.

It's fairly common for very large companies to self-insure, but in some cases, much smaller businesses can make self-insurance work. MKM Machine Tool Company, based in Jeffersonville, Ind., has 190 employees there, and about 30 more in the company's Sarasota, Fla., plant, according to director of human resources Marketta Elliott.

MKM carried conventional insurance, until the year when the rates almost doubled and company management investigated their options and decided to go with self-insurance. “We have been self-insured since 1994,” said Elliott. “We're self-insured because we feel we can more closely control costs.” As it turns out, this way the com-

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pany has a better health insurance plan for less money than it would pay for conventional coverage through an insurance company.

MKM designed its own plan, which is arranged through a national preferred-provider network. This allows the company to take advantage of the provider discounts negotiated by the network. Also, since the network is national, an employee who is ill or injured while on vacation in another state will likely be able to find a healthcare provider nearby.

A third-party administrator manages the plan, billing MKM periodically for the medical expenses incurred by employees and their families.

The premiums the employees pay are "based on your experience rate," the actual amount paid out the previous year, said Elliott. "Your premiums can go down. There are years when they go up and years they go down." The employees pay between 15 and 40 percent of the cost, depending upon whether they're single, have another person on the insurance, or have family coverage.

"Of course, we have a reinsurance carrier, so you don't break the bank if you have a catastrophic illness or injury. If you have catastrophic claims, that [reinsurance] rate goes up the next year."

When the company began to be self-insured, "people were very worried about it because at the time we had a very rich plan. We wanted our benefits comparable [to the existing plan], so we modeled the [new] plan after it," Elliott said, adding that employees

have been very happy with the coverage.

"The health insurance is part of the union contract," said Elliott, and "is always a concern in negotiations. But they go with it on every contract. We try ... to get pricing from fully funded plans [for comparison]. They [often] won't quote a plan as good as we have." Elliott said the last time MKM tried to get quotes from major insurance companies for the same coverage, two companies refused to quote and the third one gave a cost close to twice as much as MKM paid for self-insurance.

In addition to medical benefits, MKM offers an employee assistance program, fitness club reimbursement, and a service that includes weight loss, disease management and other support.

Taking care of your employees and your profits

When looking for a group health insurance program for your workers, look at your employee population and what they might need. Ask them which features are important to them. Then, shop around. A broker will be able to show you many options. Your professional association, chamber of commerce or regional business association may also have attractive options.

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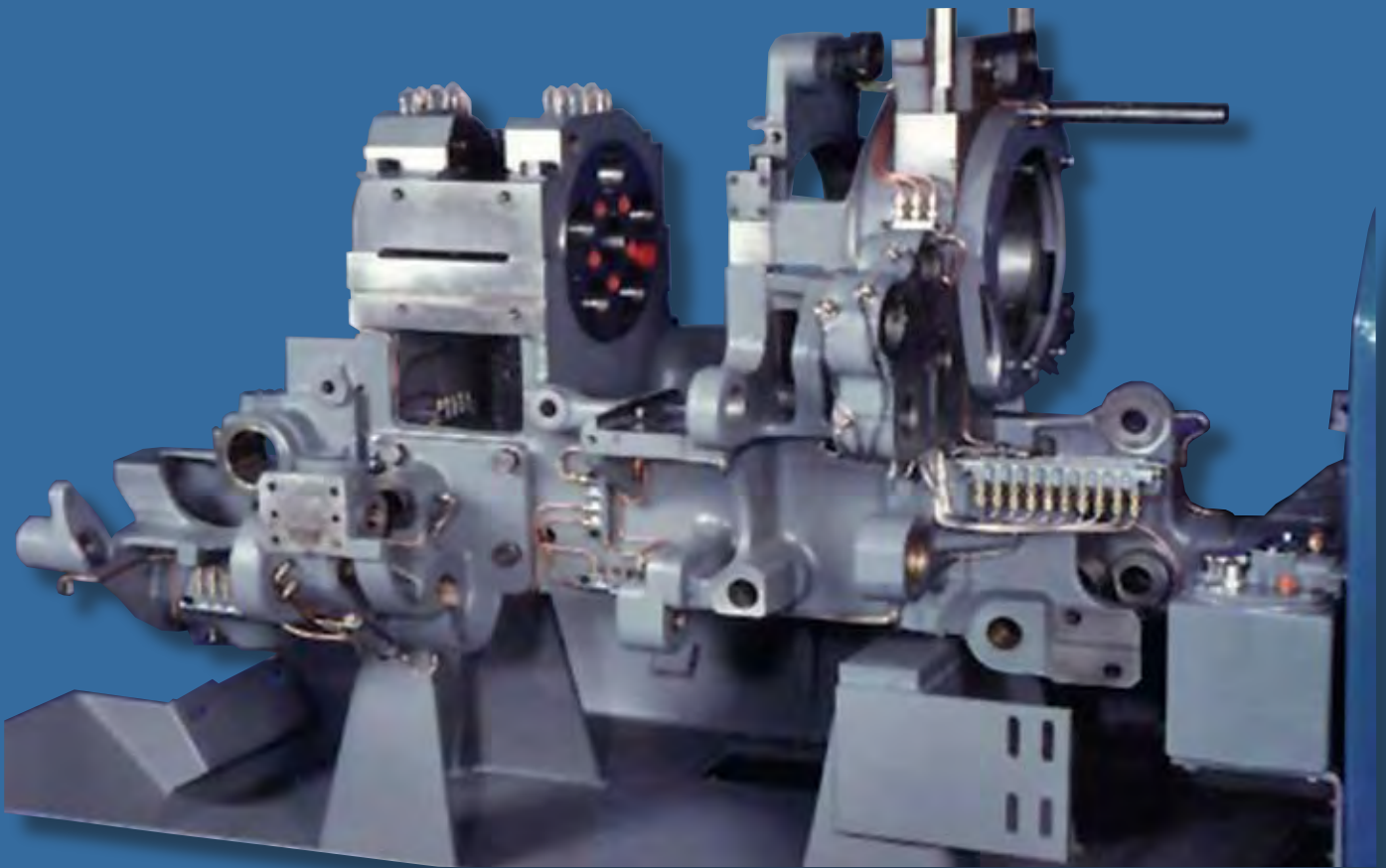


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Before you sign, be sure you understand what is and what is not covered by the insurance, the out-of-pocket maximums, lifetime limits (experts say that a \$1 million cap may not be enough these days), and other factors. Pre-existing conditions can introduce snafus into your program – in some states under certain conditions, if you change insurance companies, the new one won't necessarily cover existing problems until the person has been on the new insurance for a period of time, perhaps as long as a year.

The federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) is perhaps best known for those privacy forms everyone has to sign at the doctor's office. However, it also includes important features relating to pre-existing conditions and other important aspects of your health insurance.

In addition to providing insurance, consider doing a few things to make it as easy as possible for your employees to take good care of themselves. Smoking cessation classes, employee sports teams, lunchtime yoga, access to a 24/7 call-a-nurse service, and many other simple programs can help keep your staff healthier.

The expense and complexity of providing medical coverage to your employees, is made more complicated by IRS rules, tax implications, the HIPAA, and state laws. Company executives, your human resources manager, your accountant and maybe your lawyer should work together to come up with the right choices.

how it works

Resources:

The New Health Insurance Solution: How to Get Cheaper, Better Coverage Without a Traditional Employer Plan, by Paul Zane Pilzer

Health Care on Less Than You Think, The New York Times Guide to Getting Affordable Coverage, by Fred Brock.

Georgetown University Health Policy Institute consumer guides for getting and keeping health insurance for each state and the District of Columbia: www.healthinsuranceinfo.net

National Association of Insurance Commissioners, general information: http://www.naic.org/consumer_health_faq.htm; www.naic.org/consumer_health_types.htm

Agency for Healthcare Research and Quality (Checkup on Health Insurance Choices): www.ahrq.gov/consumer/quick.htm

IRS information about HSA, MSA, FSA and HRA: <http://www.irs.gov/publications/p969/index.html>

Agency for Healthcare Research and Quality consumer information: www.ahrq.gov/consumer/hlthpln1.htm; www.ahrq.gov/consumer/insuranc.htm

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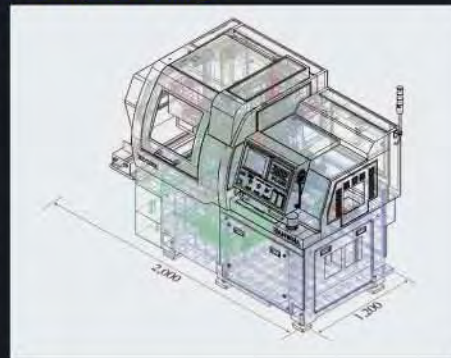
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A CLEAN LOOK AT THEIR PRODUCTS:

Each month, *Today's Machining World* works to help you understand how the precision parts marketplace works, what's available in the industry, and how you can use available resources, as well as knowledge, to run a more efficient and effective shop. In every issue, we'll feature a product category and focus on equipment key to remaining competitive in our marketplace.

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product focus

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JENFAB has introduced a streamlined version of its Lean Clean 360 series of Cellular Rotating Basket Parts Washing systems. These machines thoroughly clean parts in rotating baskets using environmentally safe aqueous cleaning solutions. The combined Spray, Immersion, and Spray-Under-Immersion action removes chips, oils and coolants. It allows extremely delicate parts, which cannot be rotated, to gently rock back and forth in the cleaning solution. Low cost operation is achieved by continually filtering and recirculating the cleaning solutions. The Jenfab Super Dryer rapidly dries parts for more cycles per hour using less energy, because all of the air is constantly recirculated. The Lean Clean Series was developed for Lean Manufacturing. Industries currently using these machines include automotive, aerospace, bearing, bio medical, machined parts, metal forming, and general manufacturing.

For further information, please contact Jensen Fabricating Engineers, Inc. at 860-828-6516 or visit the company website at www.jenfab.com.



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Product focus

AQUAMASTER

Alliance Manufacturing, Inc. has the "Aquamaster CC," designed to be configured for multi-stage processes including wash, rinse, rust inhibit and drying of machined parts. Typical contaminants removed include coolant, chips, oil and other manufacturing soils.

Pneumatically actuated hinged top-lifting spray chamber lids provide access to part loading and unloading positions. Parts are manually or "pick and place" loaded onto a fixture or parts tray located on a servo driven conveyor system. Spray and drying manifolds are positioned inside chamber lid and surround part upon closing. Conveyor systems allows for forward and reverse part oscillation. Systems are designed for single operator interface in manufacturing work cells and are available in single or multi-stage configurations.

For more information please contact Alliance Manufacturing, Inc. at 800-969-7960 or visit the company website at www.alliancemfginc.com.



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product focus

OMEGASONICS

Omegasonics presents the Omegasonics Pro Plus ultrasonic cleaning system. Omegasonics technology gives users results in their product quality and delivery schedules through quick, deep cleaning of intricate parts and assemblies onsite.

The Omegasonic Pro Plus offers 2000 watts of ultrasonic cleaning power in a 33 gallon tank. Its features include: 4" Weir; 1 phase/120 VAC/20 Amp; and 2000 Watts Ultrasonic Power. Tank dimensions are 24" length x 18" width x 14" working depth (20" Overall).

To learn more about Omegasonics, visit www.omegasonics.com or call 800-669-8227.



GENESIS ON-SITE

Genesis On-Site Recycling has introduced the ProClean Parts Cleaner (PC), which breaks the cycle of rental and service parts washer systems. The ProClean PC is a parts cleaner which utilizes distillation to recycle your parts washer solvent for continuous use. The ProClean PC takes the dirty solvent from your parts cleaner and uses patented, low temperature vacuum process to separate your solvent into two parts: clean, water-like solvent, and oil. The pure solvent is returned to your parts washer and the oil can be combined with your used oil. Delivery and installation as well as technical support and periodic service are offered.

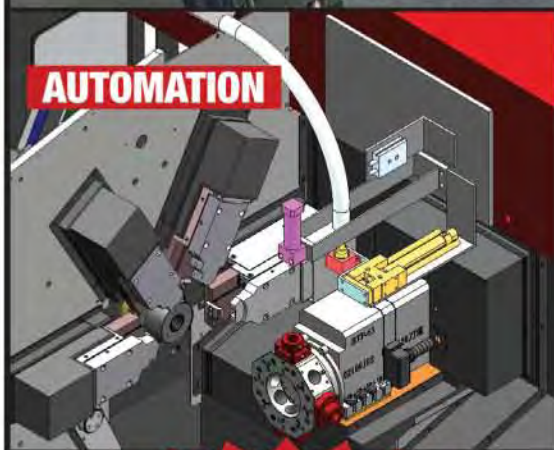
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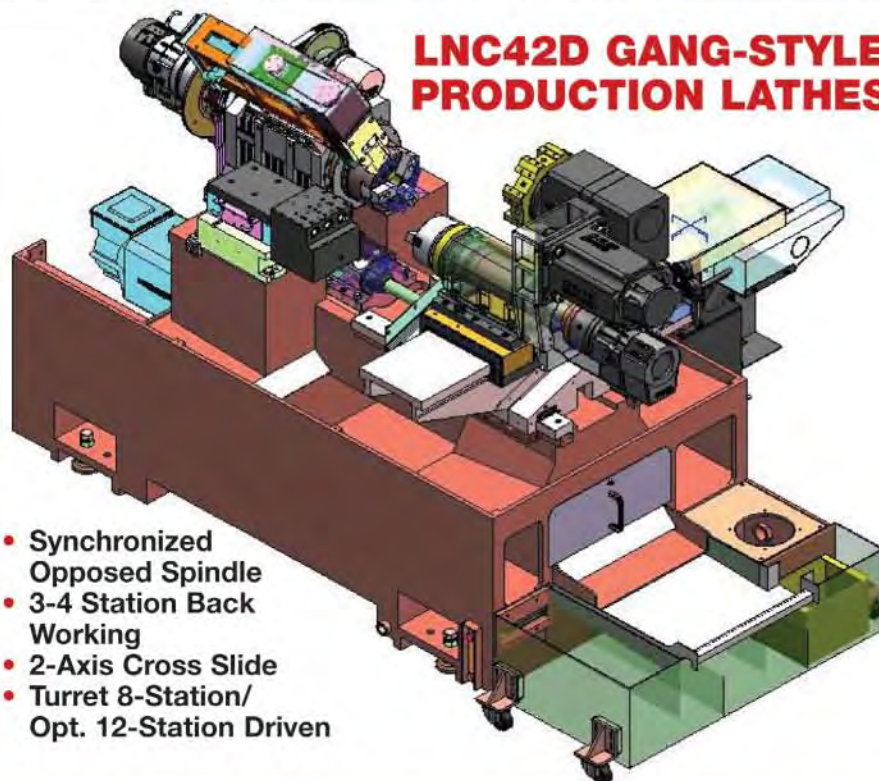
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Fruit Baskets



A market displays three fruit baskets, each with the correct price. Let's say you want just one banana, one orange and one apple. Can you work out what the price would be?

Triple Duel

Although Amos and Butch are sure shots, Cody's chances are twice as good as the other cowboys'. If Amos or Butch gets the first shot, the one who gets it will eliminate the other (since they represent the greatest threat) and take his chances with Cody. Cody then has a 50 percent chance of shooting the survivor and a 50 percent chance of missing and getting shot. If Cody draws the first shot, he'd be well advised to miss, because if he actually shoots either Amos or Butch the other could gun him down. So Cody's chances of surviving are 50 percent. Amos and Butch both have the same chances: If they lose the draw, they are shot in the first round; if they win the draw, one shoots the other and takes his chances with Cody. Since both outcomes are equally likely, the chances for either Amos or Butch turn out to be 0 percent plus 50 percent divided by two, or 25 percent.



Who shot straight?

John M. Weber, Sr. of Weber Systems, Inc. in Menomonee Falls, WI; **Mark Duppong** of RTC, Inc. in West St. Paul, MN; **Gary Sewell & Lynne Weixel** of GS Design & Machine in Tallahassee, AL; **Doug Pav** of A.M.S. in Clinton Township, MI; **Earl Jones** of Regeneration Technologies in Alachua, FL; and **Tom Edge** of Quality Manufacturing in Marysville, WA.

postings



Noteable and newsworthy
information and events for
the month of June.

Using a CMMS Certificate Program

Mazak National
Technology
Center

Florence, KY

June 6-8

www.sme.org

International Exhibition for Technology Development

Tel Aviv, Israel

June 18 thru 21

www.israel-trade-fairs.com

Western Manufacturing Technology Show

Edmonton, AB CAN

www.sme.org

June 19,
thru
June 21

Atlantic Design & Manufacturing

New York, NY

[www.devicelink.com
/expo/at L07](http://www.devicelink.com/expo/atL07)

June 12 - 14

Conference The Future of Manufacturing is Innovation

Pratt & Whitney
Air Museum

East Hartford, CT

June 20 - 21

www.sme.org

Medical Design and Manufacturing Show (MD&M East)

New York, NY
June 12-14

www.devicelink.com/expo/east07

First Baseball Game

June 4, 1838

www.wikipedia.org

Toothbrush Invented

June 26
1498

www.butlerwebs.com

Father's Day

June 17

NBA Finals Begin

June 7th

www.espn.com



Friendly Risk

I have a small manufacturing shop. We offer great health insurance, but it's expensive, and the employee's share has grown. One of my best friends was laid off from his job at a big company, but has been continuing his insurance through them by paying the premiums himself. By law, one can do this for 18 months, and he is nearing the end of that time. He asked if he could become my "employee" for the purpose of getting health insurance. He wouldn't be our employee, but he would pay the company for the insurance premiums so it wouldn't cost me anything. I know he needs the coverage, and our group rates are better than anything he can get, especially since his wife has had breast cancer. He says she's at a low risk of recurrence, but big claims affect what we pay. I want to help my friend but I'm uncomfortable misrepresenting his status just so he can get insurance.

In the United States, private insurance providers decide for the most part who they want to insure, what they want to cover, and how much to charge. Insurance companies base their rates on actuarial calculations derived from the likelihood of claims arising from the risk pools they decide to insure. With employer sponsored plans, most carriers don't require a health background questionnaire or physical exam because they rely on the law of averages to set rates. They are willing to apply the law of averages to groups of employees because they are guaranteed a pool of business that is easier to administer than individual coverage and for which the risk of non-payment of premiums is minimal. In addition, the requirement of genuine employment reduces the risk that a pool will contain a disproportionate number of less than able bodied members who might make more claims. This business model is skewed, however, when it is artificially manipulated by misrepresentations such as the one you are suggesting. In the extreme, a soft-hearted employer could

put anyone "on the payroll" just for purposes of getting insurance, and the effect on all the legitimate employees might be a hike in their deductibles, co-pays, or share of the premium. Although most plans require some minimum number of employment hours to qualify for coverage, perhaps yours doesn't, and you could avoid misrepresenting his status by simply making him legitimately "part-time." Misrepresenting his status, however, could cost you your group coverage or hike your rates if the carrier got wind of it, and you owe it to your employees to maintain the insurance they've come to rely on as best you can. You're better off helping your friend find some affordable private coverage (if there is such a thing) instead of putting your good name and your employees' health care at risk.



TMW will explore business ethics monthly. Have an ethics question? email jill@todaysmachiningworld.com.

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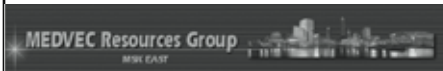
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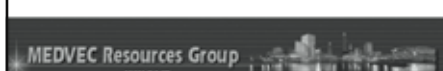
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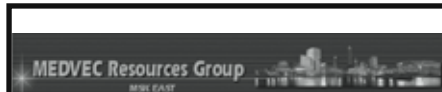
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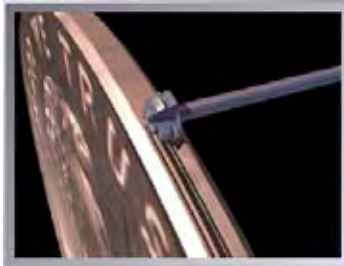


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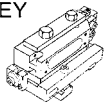


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afterthought

Switch Pitching

Pat Venditte is a very good pitcher for Creighton University in Omaha. He's a legitimate big league prospect with 91-mile per hour pop on his fastball from the right side, but what makes Venditte column-worthy is that he throws just as well from the left side.

There are a lot of switch hitters in Major League Baseball, but not switch pitchers. Mickey Mantle was probably the greatest switch hitter to ever play the game, but new guys with that ability come to the Bigs every season. It is a skill which can be learned, if not mastered, with enough effort and concentration. As a kid I practiced playing ping pong, hitting and shooting baskets with my left hand and achieved a modicum of proficiency, but it never felt "normal." I was always a righty, even if I could make a left-handed lay up.

I love Pat Venditte's story because he dared to defy

"He dared to defy the conventional wisdom and take his game where few have ever taken theirs."

conventional wisdom and take his game where few have ever taken theirs. According to a *New York Times* article, Pat's father saw him using both hands with equal dexterity when he was three years old. Pat's dad was a baseball fanatic and taught him to throw and bat lefty and righty – and they both stuck. The beauty of the story is that father nor son accepted conventional baseball stupidity that you cannot be a switch pitcher.

Another baseball dictum is that you can't be a left-handed catcher. The myth is that right-handed batters get in the way of the release of the throw to second base – an absurdity in a baseball world almost equally split between left- and right-handed batters. In a lifetime of watching Major League Baseball, I have not seen a left-handed throwing catcher.

You also see no lefty shortstops or third basemen; other no-nos of the game. I see no reason why a lefty cannot play either position. The pivot on the double play may actually be easier for a lefty shortstop. I can imagine that a left-handed second baseman would be disadvantaged on a short to second double play pivot, but not the other way around.

I look back at the great one-armed pitcher Jim Abbott, who was born with a deformed right arm. Abbott won 87 games, made the All-Star team and batted successfully in the Majors.

Pat Venditte of Creighton has put up terrific numbers, throwing heat from the right side and funky sidearm stuff from the southpaw side. He has a special glove with an extra thumb sewn in which can be successfully used on either hand.

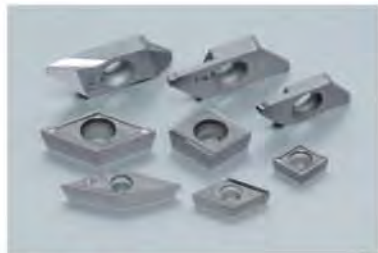
Pitchers usually have an advantage against batters who swing from the same side from which they are pitching because of the natural tendency of hitters to bail out (move the front leg away) from the breaking stuff of a pitch hurtling toward his head at 90 miles per hour. When the pitch curves, he cannot react in time to swing hard and cover the plate. This is why managers often change pitchers to get a lefty vs. lefty or righty vs. righty match-up. Pat Venditte theoretically always has that advantage, except occasionally against a switch hitter who might switch sides during an at bat.

What I love about the Venditte story is that father and son both showed the contempt for conventional wisdom. Instead of swallowing the norm, they went out and did it, knowing that being able to switch pitch affords Pat a huge edge on the field. It also enables him to pitch more frequently than mono-handed pitchers.

I often remember the business philosophy of Jake Grainger of Alpha Grainger Manufacturing in Milford, Mass. He says his quest in every job he pursues is to find the "unfair advantage" over the competition. Every setup is aimed at achieving the "unfair advantage."

Pat Venditte – keep your unfair advantage – from both sides of the mound.

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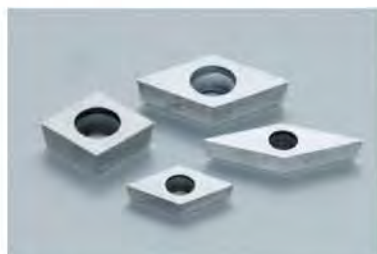


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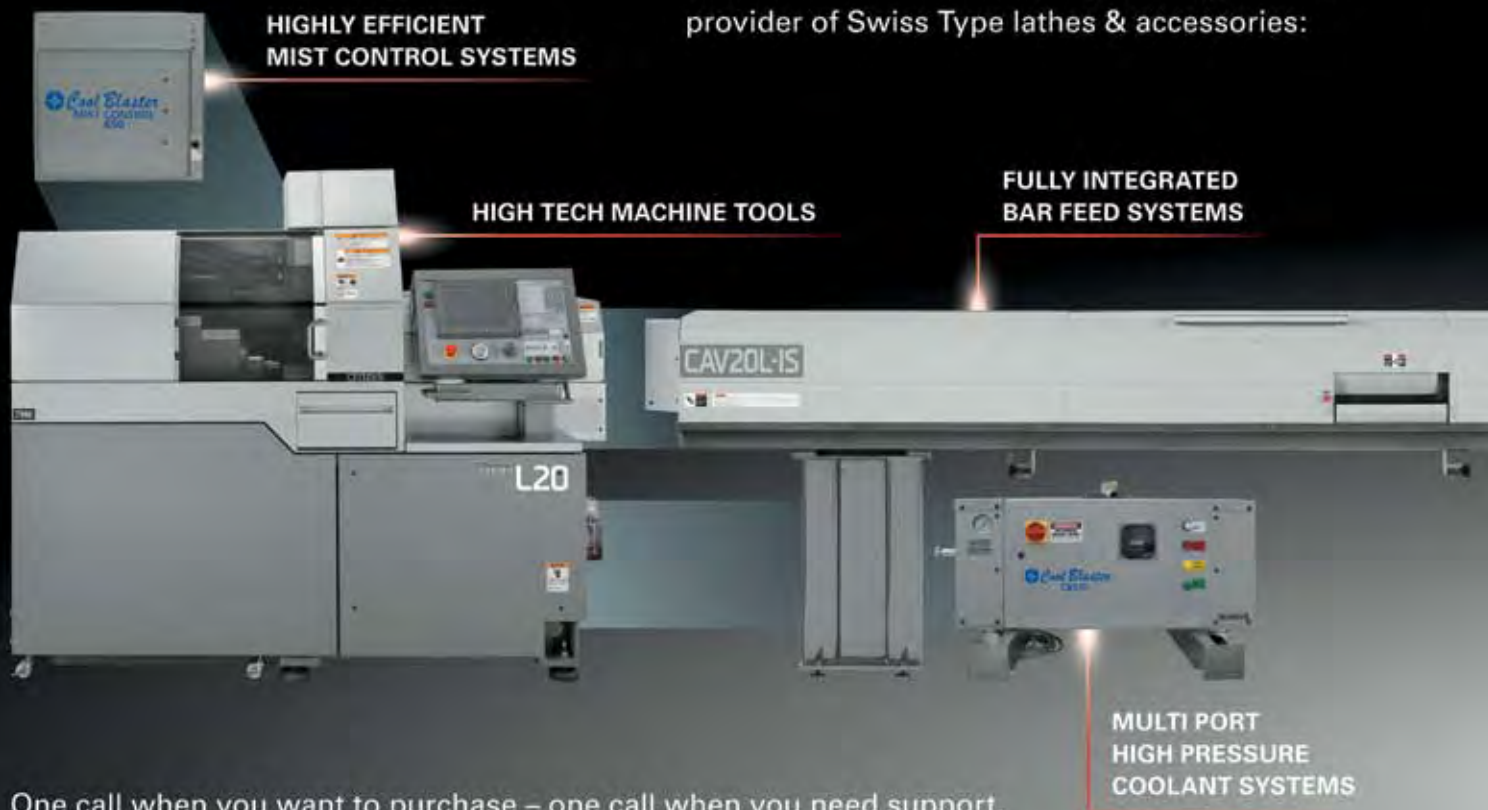
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