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DECEMBER 2022 Vol. 5, No. 6

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Magazine

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Support Your Supporters

By Gary Reichert

all is beginning and for the construction industry that translates to trade show season. With the schedule of our shows and the others we attend, I realized how easy it is to take the organizations that support our industry for granted.

We work with most of the significant trade shows, from Fabtech to METALCON and support these shows. They are competitors in many ways, but the support (both ways) helps grow and strengthen the industry. To that end I would ask that you take a minute and reflect on the benefits that the shows and magazines that service the industry provide. Without them where would you find product information/ suppliers, best practices and get inspiration to make your customers' dreams reality.

Please support all of the publications, shows and resources that support you. If you need a new product, tell the manufacturer you saw it at METALCON or read about it in *Rollforming*. If there are short surveys to gather industry data, take one or two minutes and respond. The fees to walk a trade show floor are usually minimal and our magazines are free to professionals in the industry. The manufacturers pay your way. Let them know their investment is worthwhile.

If you value the industry metrics, networking or resources the media and event companies provide, take the small steps to support the entities that serve you.

Thank you for your support. RF

Editor's Note))

How To Get Free National Exposure

By Karen Knapstein

fter so much planning, anticipation, and hard work, the Fall trade shows have come and gone. I hope you were able to take in at least one construction trade show this year. They are an invaluable source of information for both your business and your own professional development. I walked away from both of these shows knowing much more than when I went in. In this edition, you'll find postshow event coverage of the Construction

show event coverage of the Construction Rollforming Show.

It's hard to believe that 2023 is only a few weeks away. To finish off the year, I encourage you to help your customers get more recognition for their good work. If you have roofer-customers whose work you admire, encourage them to send their best roofing project to *Metal Roofing Magazine* to be published* in the Metal Roofing IDEA Book.



If they build post-frame buildings, encourage them to send the information about their completed projects to *Frame Building News* to be published* in the Buildings of the Year edition. *Rural Builder* has a special edition, too. The Source Book will be filled with outstanding building projects. We're on the lookout for all types of buildings (ag, commercial, residential — you name it!)

In addition to each of these special editions, we publish a Project of the Month in every other edition of *Metal Roofing*, *Roofing Elements, Rural Builder, Frame Building News*, and *Garage, Shed & Carport Builder*. There are literally dozens of opportunities each year to get information about your business published in nationally distributed magazines — and it doesn't cost anything.

Getting published in Shield Wall Media's trade magazines is an excellent way for your customers to be recognized among their peers and get established as an expert in the industry. As their supplier, your business will receive recognition, too. And it is <u>you</u> who will have helped them gain free positive, national recognition for their business. You are helping their business and you are helping your own business.

If you have any questions or want to help them participate, please let me know; my contact information is on page 5. RF

* Subject to selection. Submission is not a guarantee of publication.

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Hershey's Metal Meister exhibited the Slinet slitter with coil farm at the 2022 Construction Rollforming Show. Photo courtesy of Courtney Christine Photography, Milwaukee, Wisconsin.

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> Gary Reichert, Publisher, Shield Wall Media

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CRS All-Access

Attendees Take Advantage of Exhibits, Educational Sessions, and Entertainment at the Third Annual Construction Rollforming Show

By Karen Knapstein

he third annual Construction Rollforming Show was held October 26-27 in New Orleans. The new location enticed attendees from surrounding states to come check out the only trade show dedicated to the construction roll forming industry.

Tradesmen made the trip from Mexico, Montana, Texas, Missouri, and Mississippi, and some even flew in from Canada (and other locations). Attendees were able to meet with suppliers of every type of material needed, including equipment, fasteners, coil, insulation, software, and more.

At the 2022 show, for the first time, all admissions were all-access. Access to classes were included with the price of admission to the expo floor. Participants were eager to take advantage of the diverse — yet relevant — learning opportunities after partaking of the complimentary breakfast served each day.



CIDAN's Ryan King leads an educational session about bending trim and flashing. PHOTO COURTESY OF SHARON THATCHER



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AMS CONTROLS. PHOTO COURTESY OF SHARON THATCHER

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SLITTERS

Our Marxman Plus & Marxman Pro have the benefit of 8 pairs of auto slitter knives, auto nesting, scrap minimization and a huge range of flexible operation modes. Marxman machines can import data from a range of SQL-based softwares. Both machines have the ability to print barcoded labels that can be scanned at the SWI folder to upload job details direct from the production database.



LIVE MUSIC AT THE SOCIAL HOUR. PHOTO COURTESY OF SHARON THATCHER

A few of the class highlights include, but are not limited to:

Leading off the sessions, software developer Royden Wagler and Brendon Studholme from SmartBuild Systems performed a mock sales presentation to illustrate how 3-D design/bid software can be adopted to evolve the sales process. Company CEO Keith Dietzen was also on hand to answer questions.

CIDAN Machinery's National Sales Manager, Ryan King, lead a fast-paced, informative session about bending trim and flashing. He discussed forming options, typical shop configurations, processes to reduce waste, best practices for safely operating a folder, and more.

Freudenberg's Chris Davis (DripStop) gave a presentation about natural ventilation, condensation, and moisture control in metal buildings.



SMARTBUILD SYSTEMS. PHOTO COURTESY OF SHARON THATCHER

Randy Chaffee of Source One Marketing shared a wealth of sales knowledge that he's earned over his last four decades in the construction industry. Randy doubled up on his teaching duties; he addressed one group on Wednesday about the Sales Process, and another group on Thursday about Closing A Sale. "I want people to know who I am before they know they need me," he explains. "Relationship-building is critical."

Beck Automation's Shawn Huffman spoke to his group about how software can be used to improve quality, reduce waste (improve yields), track jobs and more. Sometimes a general business software will suffice, but programs that are specialized for metal forming will do much more than what you need to get by.

Two of the presentations were given in the demonstration area on the show floor. On Wednesday afternoon, Adam Buck, Territory Manager with 3GM Steel, gave a talk on coil gauges and



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DYNAMIC FASTENER. PHOTO COURTESY OF SHARON THATCHER



BECK AUTOMATION. PHOTO COURTESY OF SHARON THATCHER

specifications. He explained the gauge and dimension variances that can occur.

On Thursday afternoon, Tom Laird, the National Sales Manager at New Tech Machinery, spoke about some of the best practices for setting up a portable roll forming trailer. New Tech had abundant representation at the show; Formwright and Karr's Building Supply & Service are both New Tech distributors.

EQUIPMENT & SOFTWARE

Hershey's Metal Meister always has a commanding presence on the trade show floor. It was no exception at the 2022 Construction Rollforming Show. The Mattoon, Illinois-based company exhibited two of their folders - the Single-Fold Variobend and the Double-Fold Variobend — as well as their Slinet Slitter with coil farm.

CIDAN Machinery exhibited an FX32 Omnifolder, while SWI Machinery exhibited its Marxman Plus slitter. Star-1 Products of McBain, Michigan, brought its Felt Applicator, which it demonstrated throughout show hours.

Formwright of LaGrange, Indiana, exhibited a portable New Tech machine in one if the company's enclosed trailers.

Technology solutions were abundant on the expo floor. AMS



METAL ROLLFORMING SYSTEMS, PHOTO COURTESY OF SHARON THATCHEF



PROGRESSIVE METALS. PHOTO COURTESY OF SHARON THATCHER



Controls, Beck Automation, Paragon Computing Solutions, SmartBuild Systems and QB Metal Shop are among the companies that showed how software and controls can help metal formers increase quality and productivity and reduce waste. AMS recently introduced its HyperDrive double folder system upgrade, which speeds production on and extends the life of older machines.



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Trade Shows))

GREAT EATS & LIVE MUSIC

As the action on the exhibit floor wound down on Wednesday afternoon, the live music began and complimentary "dinner" and drinks were served. Everyone — attendees and exhibitors alike — enjoyed food stations serving up tasty treats unique to New Orleans. Charcuterie, crawfish étouffée, shrimp shooters, chicken and sausage gumbo, and white chocolate bread pudding were just a few of the gourmet items on the menu.



RANDY CHAFFEE, SOURCE 1 MARKETING, SHARES INSIGHTS HE'S LEARNED OVER THE COURSE OF HIS FOUR-DECADE CAREER IN SALES. PHOTO COURTESY OF COURTNEY CHRISTINE PHOTOGRAPHY, MILWAUKEE, WISCONSIN.



HIXWOOD. PHOTO COURTESY OF SHARON THATCHER



MCELROY METAL. PHOTO COURTESY OF COURTNEY CHRISTINE PHOTOGRAPHY, MILWAUKEE, WISCONSIN.

2023 CONSTRUCTION ROLLFORMING SHOW

On September 27-28, 2023, the Construction Rollforming Show will return to its original location — Cincinnati, Ohio. It will be held at the same venue as the first two rollforming shows: The Duke Energy Center.

Watch *Rollforming Magazine* and constructionrollformingshow. com to learn about show details as they develop. RF



NEW TECH MACHINERY'S TOM LAIRD SPEAKS ABOUT BEST PRACTICES FOR SETTING UP A PORTABLE ROLL FORMING TRAILER. PHOTO COURTESY OF COURTNEY CHRISTINE PHOTOGRAPHY, MILWAUKEE, WISCONSIN.



HERSHEY'S THE METAL MEISTER. PHOTO COURTESY OF COURTNEY CHRISTINE PHOTOGRAPHY,



UNITED STEEL SUPPLY. PHOTO COURTESY OF SHARON THATCHER





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Roll Former Problem Solvers

Machine manufacturers respond to market needs and demands By Sharon Thatcher

oll former manufacturers routinely research ways to keep equipment designs competitive. This means responding to market changes, as well as looking for ways to help its roll-forming customers avoid problems arising during equipment operations.



A minimum clearance positive stop device on calibration nuts for MRS machines is helping operators avoid adjustment errors. MRS PHOTO

COMBATTING IMPROPER ADJUSTMENTS

A common problem Metal Rollforming Systems (MRS) identified was when operators made improper adjustments to tooling. It can result in the premature wearing or damage to tooling which is expensive to replace or rebuild. If your machine uses modular tooling, you may only need to replace the affected die, but tooling sets where both the shafts and dies are tooled from one solid piece of steel require the entire shaft and dies to be replaced. In either case, MRS President Bill Griffin said an adjustment error is "costing the operator more money and increasing downtime."

MRS came up with a solution that prevents operators from making such critical errors. "We have gone to a minimum clearance positive stop device on our calibration nuts, preventing the operator from going below the minimum adjustment range and causing the dies to touch," he explained. "We've found this greatly reduces the possibility of damage."

NEW MACHINES FOR NEW STYLES

Styles change, even in panel lines, often cultivated by larger roll-forming operations looking to distinguish themselves with profiles only they can provide. Two trends MRS has identified is board and batten, and quad rib panel.

We have been working closely with our customers over the last few years to identify and fill needs within the metal industry," Griffin said.

Out of that collaboration two years ago they introduced one of the few board and batten machines on the market. It comes optioned as either a manual fed or an automatic feed line and typically appeals to larger panel providers who can justify a dedicated machine in their service area.

Griffin said the machine has been a very popular profile since the machine's release two years ago. "The clean lines of the



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Board and batten is a popular panel design, and conducive to many different paint and print textures. MRS PHOTO



A building with quad rib panel. MRS PHOTO

profile coupled with some of the new paint and print textures such as wood grains, and rustic colors has been a real win for our customers, driving an increase in business across all product lines," he said.

The MRS custom tooling design team also came up with a through-fastened quad rib panel. "It mimics the look of standing seam but has 36" coverage, runs 40.875"-41", 29-gauge material, and nests for shipment," Griffin added.

He explained that the quad-rib profile "allows end users to have the aesthetics of a concealed fastener roof with sharper and narrower ribs as found on a snap lock profile, while maintaining the price point of a typical through-fastened roof all while



A close-up view of an installed board and batten panel. MRS PHOTO



An Espresso stand featuring the quad rib panel. MRS PHOTO

keeping a ¾" tall rib and utilizing existing trim."

Yet another newer profile from MRS is a bit of a hybrid between the standard board and batten and the quad rib: a through-fastened board and batten. "It offers the contrast of a wide pan with sharp batten ribs," Griffin said, and is a "costconscious alternative to end users who want the board and batten look but with a quicker and less laborious install."

ELIMINATING WAVY EDGE CURL

Wavy edge curl is one problem the Bradbury Group was able to correct by listening to its customers.

Wavy edge curl was increasingly showing up with the popularity of ag panel, which is more susceptible to wavy edge problems because of its lighter weight. The condition occurs during the slitting and recoiling of master coils, and while it's a problem quality-conscious steel makers have resolved on their

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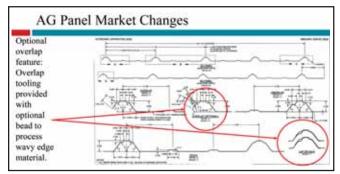


Diagram of Bradbury's bead feature on tooling to control wavy edge problems. Bradbury PHOTO



A loose overlap between two connecting panels resulting from wavy edges can result in installation and performance issues. BRADBURY PHOTO

end, it still shows up on the market through various national and international coil-sourcing streams from companies selling cheap or secondary-quality steel.

Roll-forming operations that routinely use variable coil sources are the ones most likely to confront the condition. If left unchecked, wavy edged panels can affect installation and result in a loose overlap between panels, and consequently poor panel performance.

The problem started showing up around 15 years ago, coinciding with the popularity of ag panel, noted Ben Schmidt, Industry Sales Leader for the Bradbury Group.

"Customers came to us and asked: What can I do about this wavy edge so I can process this steel and not have to send it back," he said.

It can be corrected during the roll-forming process through setting adjustments, but a solution created by the Bradbury technical team was to develop special tooling. It depends on a simple bead in the overlap that forms out a wavy edge. It is an optional tool set for your Bradbury roll former, so one you can investigate if routinely using steel stock that tends to create wavy edge.

FLATTENING SMILEY-FACED FELT UNDERLAYMENT PANELS

Bradbury dealt with another panel issue rollformers were facing with the popularity of ag panel: curved or 'smiley-faced' panels showing up with the increasing use of felt underlayment. Applied on the bottom side of metal roofing panel, felt underlayment is great at controlling heat, cold and condensation issues. But an issue arose when the panels didn't lie flat after application. As Schmidt noted, "When felt underlayment became popular 10-12 years ago, we had customers coming to us and saying, 'we're running this stuff on the bottom of our sheet and it's smiling at me; I want to run a flat sheet."

There were ways of controlling the problem through adjustments such as adding roller stands to allow more time for the edges to form, but Bradbury developed another solution by engineering a specific tool set that can run panel with or without felt underlayment.



Felt underlayment when applied to ag panels can create a curved or "smiley faced" panel. Bradbury has developed tooling specific for this application. BRADBURY PHOTO

The tool set includes additional forming passes dedicated to felt and non-felt steel. The additional forming passes provide more control of the panel which generates a flat panel when running with or without felt.

The tool set also includes side roll fixtures to finish form the overlap. Fixtures are required because the felt stops short of the overlap rib.

Schmidt noted that: "Most recently, Bradbury has provided tool sets dedicated to felt underlayment only. This application was developed for customers running high volumes of felt underlayment panels that do not want to make tooling adjustments."

ON DEMAND TECHNICAL ASSISTANCE

When a machine goes down, or starts acting up, the speed in getting it fixed is critical. Over 10 years ago, ASC Machine Tools began offering its EWON Remote Access option for service. The popularity of that option has noticeably increased since the pandemic.

"Basically, all of our roll forming lines (small or large) are now sold with the EWON Remote Access option," said Thomas

Cover Story))

Schwarzer, Regional Sales Manager, Northeast. "This service allows us to instantly troubleshoot lines remotely and saves our customers valuable time and money compared to a technician's visit at their plant."

It was the pandemic that opened customers' eyes to the value of the service.

"When travel restrictions basically made it impossible to send technicians to customers' plants, we right away started the EWON Expedite Service. Customers who didn't have Remote Access could simply contact the ASC Service Team and request the ASC EWON Expedite Service. Once confirmed we sent an EWON kit with instructions on how to link our EWON to their ASC equipment. This was a great help for our customers and us!" said Schwarzer.

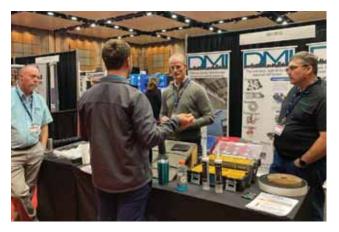
Some customers later retrofitted their machines with the EWON built-in unit after having a great experience with the expedite kit.

EWON service is firewall friendly because there is no incoming connection made to the device. There is no need to change firewall settings, routing policies, open ports or to add exceptions.



During the pandemic, an "EWON Expedite Kit" was available to customers who didn't have an EWON built into the panel on their machine. ASC MACHINE PHOTO







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The typical EWON unit is located inside the Motor Control Center of a roll-forming line. ASC MACHINE PHOTO

"One of the main advantages of the EWON units is that it balances both security and ease of use," Schwarzer said. "Little to no IT involvement is required on the customer side. EWON devices initiate a VPN tunnel to the Industrial Cloud VPN Servers by making an outbound connection across the factory LAN using ports that are commonly enabled. And the Key Switch or HMI Button on the EWON devices leaves our customers in full local control of whether the device is remotely accessible or not. Simply turn it on when you need us!"

COMBATTING HIGHER PRICES THROUGH TIGHTER TOLERANCE

What a difference 1/32 of an inch can make! That's what Acu-Form has discovered with its popular servo drive which controls cutting tolerance for panel. According to Wayne Troyer at



Every fraction of an inch counts when rolling steel. To avoid any waste, Acu-Form offers servo drive controls that can assure no more than a 1/32 of an inch cutting variable. ACU-FORM PHOTO

Acu-Form, the old standard of 1/8 of an inch tolerance has gone by the wayside due to the fluctuating price and supply issues of steel. "If [steel is going to cost] that much, [shop owners want measurements] to be right-on," Troyer said.

While the company claims a 98% accuracy rate on tolerance from the start, Troyer said "we haven't had any people complain about a 1/32 of an inch variable."

SWITCHING TO D2

Acu-Form is known for its willingness to listen to its customers, whether they are an Acu-Form machine user, or someone needing to upgrade a 'Brand X' machine. One particular case serves as affirmation for Acu-Form's original decision only to use D-2 steel for tooling.

Troyer said several years ago a rollformer ordered Acu-Form's D-2 steel dies for a machine made by another company. Because the other company used steel of lesser strength, his dies were wearing out after five years of use. Troyer recently talked to the customer, who has been using the Acu-Form D2 dies since the order more than four years ago, and he reported: "He hasn't seen any wear at all on those dies." RF



True Metal Supply

New Tennessee company eyes metal transformation in Knoxville area By Sharon Thatcher

ometimes you have an itch that's just gotta' get scratched. That's what Adam Clark and Mason Burchette discovered while developing successful careers for another company in an industry for which they had a growing passion. As they helped build the success of a southern Tennessee roll-forming business, they looked out over the rooftops and the miles of asphalt shingles seeing opportunities laid out before them. Metal roofing was still an unexplored option for many homeowners in the state and the energetic under-40-year-olds wanted to be pioneers in the transformation. They recently set up shop in Knoxville as True Metal Supply.

Adam is the CEO and Mason is the COO for the company. Adam spoke to *Rollforming Magazine* about the company's establishment and goals.

Adam said he left his old job last April to begin "putting the pieces together" for the new company; that included building a 14,000 sq. ft. building, ordering equipment, establishing suppliers, and interacting with homeowners and contractors to both explain what products and services would be offered as well as to gauge the needs and expectations of future customers. At the time of this interview in early September, the first roll former was scheduled to arrive later that day. It would be a New Tech machine for standing seam that would be shopbased. A CIDAN brake and shear was expected later the same week. Material handling equipment from Heartland was



Pictured (left to right) are True Metal Supply owners Mason Burchette and Adam Clark with partner and manager Blake Gibson.

already in place. The late-October arrival of a Metal Rollforming Systems (MRS) Signature roll former was anticipated.

"We're just getting our legs underneath us," Adam said, adding: "Obviously these things don't come together overnight."

Even before the new building was built, and the first machines purchased, however, Adam and Mason started the pre-planning process to determine if Knoxville was in fact a willing consumer base for metal. "It's surprising that Knoxville is a little bit of an untapped market," Adam noted.

Surprising because regional roll forming has its roots in the South and Southeast.

Adam said part of the reason is likely due to the region's milder climate. "I'm originally from New England so I know the quality of the roofing systems that need to be installed in climates that are a little bit more severe in terms of snow and high winds," he said. By contrast, in milder states like Tennessee, roll-formed products have traditionally been used for non-residential buildings and thus not created to meet the more stringent requirements of residential roofing.

But things are changing. Homeowners are talking to friends and family members in states where metal roofing is more popular, and they increasingly press asphalt installers for answers about metal options. Adam sees this as the perfect opportunity for True Metal Supply to step in and help educate consumers, and to aid roofing contractors in training and product.

We are a customer service company that happens to sell metal roofing, is the company's philosophy. Adam noted: "We're really advocating for the customer, educating them on a product and connecting them with a contractor ... to



make sure they are getting a competent installer."

Practice breeds familiarity so many installers are reluctant to make the change to metal, yet they are getting the hint that metal roofing is increasingly their competition and one that is likely to grow in popularity.

"I think the number of inquiries contractors are getting from homeowners on metal roofing has kind of piqued their interest. To become relevant to the customer base they really need to learn more about metal roofing,"



The Way We Roll)



Adam said. "We've had some really great conversations ... with contractors who want to sit down and want to learn, want to get educated on how to present the value of metal roofing to their customers I perceive this as exciting because that's what we really like to do; we like to create training content and we like having people come to our facility and help them to understand the right way to install, to create different systems, and to help the overall industry."

Training at True Metal Supply for installers is designed not only to offer tips on proper installation, but lessons in how to sell metal, understanding the basic components of metal roofing, busting myths and misconceptions about metal, as well as handling customer objections.

They use blogs, podcasts, shopbased training sessions, and a metal roofing university called Through the Roof to meet potential consumers and installers by whichever platform is most comfortable.

"We believe that Knoxville really needed metal manufacturing for the residential market and that's really the core of our business," Adam continued. "That's the market where we feel we can have the most healthy and positive impact."

It coincides with a shift in weather

trends. "Tornado Alley is starting to shift a little bit further east," Adam said. "We see tornadoes not every year but every other year, so a higher quality roofing system is a little more front and center."

There is still the stigma of quality to overcome. "We're trying to get the contractors and homeowners out of the mindset that: I don't want to go with a metal roof because it's going to fade, it's going to be too thin, or we're going to run into some quality issues."

These arguments are being met by offering only American-made products, including steel from United Steel Supply, owned by Steel Dynamics. "I think [USAmade] is what people are really interested in, it's very valuable to them. And one of the byproducts of that is we do believe we're presenting a really, really good quality product," Adam said.

SPREADING THE WORD

True Metal has seen great value in attending home and garden shows in the Knoxville area to listen to homeowners and contractors, and to advertise their up-and-coming company. Even before roll-forming machines were in place and steel was rolling off the line, they were taking orders. They partnered with a national company – Central States – to fill in the gaps until they could come online. They plan to continue that partnership to offer a wider range of products than they would ever be able to offer alone.

Another partnership is with Isaiah Industries to offer steel shingles. It's not a product True Metal ever plans to make because of its labor-intensive production, but it's a product that attracts consumers. At home and garden shows, Adam said, "we have those products out on display and that's certainly the product that attracts the most people to our booth. People are shocked to see that metal is available in more than just a linear panel. It's a premium product ... so I think the price for the majority of our customers makes that a less feasible option, but it's a great segue into explaining the through-fastened panel system, then they can make a decision based on their own budget, their own preferences."

True Metal offers two of Isaiah Industries' steel shingles: The Great American Shake which has a more threedimensional wood shake appearance, and Centura Steel Shingle that feigns the look of an asphalt shingle.

"Isaiah Industries has done a really good job of developing a four-way locking system. It has a J channel on all sides, so you don't have to treat the roof any different than you would with a standing seam system. That's why we chose to go with Isaiah," Adam said. "There are some systems out there that require extra waterproofing under the shingles, and that only adds to the overall cost."

WHAT THEY MAKE

Adam said True Metal Supply will focus its own production on two popular residential styles: tuff-rib through-fastened panels and standing seam.

"There are more residential lines we may introduce further down the road as our company grows but we're really going to lean on ... some of our other partners to help capture products that we really don't intend to manufacture," he said.

The new building includes a 2,200 sq. ft. showroom featuring products in natural light from the windowed storefront. Covid was a reason to make the showroom so large: "We discovered that smaller showrooms are really hard to manage," Adam said. "During Covid it was hard to offer a space that wasn't crammed."

Their MRS machine is from the Signature line. "I think that machine will get us to our revenue goal and to be able to achieve the things we want to achieve without having made the investment we would have needed with the Titan line," he said. If (or when) orders begin to stack up, they can always move forward to the higher-speed machine.

In addition to metal roofing, True Metal Supply offers post-frame packages and steel trusses, plus all the necessary metal roofing components. They have three delivery trucks to get product from warehouse to jobsite.

Because of Adam and Mason's shared history in the roll-forming industry, they feel confident in their move to establish their own company. Personally, Adam has handled every aspect of roll-forming in the past from machine operation to management positions, so "it's not like we're starting from scratch, not like we're coming in blind; we have a good



Mason (left) and Adam (right) use a touch screen interactive learning center at True Metal Supply to build a post-frame kit for a customer in the company's showroom.

understanding of how to interact with customers who are experiencing metal roofing for the first time," he said.

WHAT'S IN THE NAME

When deciding upon a name, Adam said the partners "wanted to build a name that reflected upon some of our core principles, our core pillars: trust, respect, uprightness and excellence." They wanted their Christian faith to be reflected in their operation. "The uprightness aspect is simply allowing us to exercise our faith in a caring and loving way," Adam explained. "Everybody that we interact with, we want them to come to expect that there's something different about us: in the way that we treat people, in the way that we talk to each other, in the way that we do our work."

In the beginning they were also get-

ting accustomed to the lack of sounds: "Going from a company where the phone was ringing off the hook, to everyone jumping when the phone rings," Adam explained.

But they are confident the relative quiet is only temporary. Even with signs of an economic slowdown nationwide, Knoxville continues to grow as a popular place to live. "Knoxville is very popular because of I-75 going through it, it's a really attractive place for people to go. We're very optimistic," Adam concluded.

Stay tuned for updates as *Rollforming Magazine* follows the journey of True Metal Supply. RF

Sharon Thatcher *is the former managing editor of* Rollforming Magazine. *She is now an independent writer living in Ohio.*

Time to Celebrate

Hixwood Hosts Festive Open House

By Karen Knapstein

from 2-7 p.m. October 5 to celebrate the completion of its most recent expansion in Stanley, Wisconsin.

A thousand people attended and had a first-hand look at the new 20,000-square foot building. To build awareness for the event, the company advertised in the local shopper and on Facebook. "But by far what brought in the most was inviting people that came in to Hixwood in the month leading up to open house and then letting word of mouth do its thing," reveals general manager Paul Zimmerman.

"The support for Hixwood and Hixwood's product is tremendous in the community," Paul says, "We wanted to give back by having a fun-filled open house. We have many customers, neighbors, and friends that have never been in our manufacturing plant and we were getting a lot of questions about what we will do in our latest expansion." (The company's existing roll-forming equipment will be relocated to the new building. Plus, a new Metal Rollforming Systems (MRS) roll former for making R panel will be added. A detailed report about the expansion will be featured in an upcoming edition.)

Many members of the Eau Claire Chamber of Commerce were on hand to help celebrate. Harvey Zimmerman had the honor of cutting the ribbon for the new building, after which Paul gave a brief speech.

In addition to being entertaining, the event was also educational. "After 24 years, it would seem like all our crews



The open house was held to celebrate the completion of Hixwood's 20,000-sq. ft. expansion in Stanley, Wisconsin.



The Eau Claire Chamber of Commerce helped the company celebrate with a ribbon-cutting ceremony. Harvey Zimmerman had the honor of cutting the ribbon.

and customers [would] know what we carry, but they don't. The open house gave us a chance to show our products and have company representatives there to talk about products. The one I was most amazed about was how many didn't know we have printed panel that looks like stacked stone."

Attendees visited with the 22 vendors who set up booths, which resulted in a mini-trade show atmosphere. The vendor roster included: Precoat Metals, Plyco/ East Coast Fasteners, DripStop, Novagard, Snap-Z, Beckers, Maze Nails, and many others.

It was also a celebration of community and family; all were welcome to partake of the catered meal and activities. More than 75 door prizes were given away, which were donated by sponsoring and exhibiting companies. Prizes included, but are not limited to, power tools from

Special Events))



Guided tours of the Stanley, Wisconsin facility were part of the openhouse festivities.

Milwaukee and DeWalt, tape measures, hammers, a digital level, a digital torque wrench, a large assortment of caps and T-shirts, and more than \$1,500 worth of gift cards and gift certificates. It proved to be Clyde Nolt's lucky day; the M&Z Builders employee took home the grand prize: A Radix free-standing blind, which



Hixwood introduced its new building visualizer at the open house.

was set up on the floor.

Visitors could also observe the company's equipment at work through guided tours. Operators ran the machines while employees answered questions. Some of the equipment running for the exhibition were Hayes decoilers, a Bradbury roll

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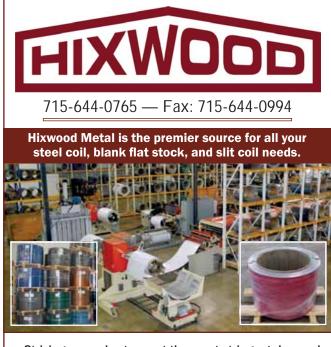
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Special Events)



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East Coast Fasteners sponsored the screw-driving contest at the Hixwood open house October 5. The winner took home two powered screw drivers.

former and pre-cut shear (with Beck Automation controls), and Thalmann folders.

Staff also took the opportunity to show off the company's brand-new building visualizer tool.

East Coast Fasteners sponsored a screw-driving contest. Contestants each drove 10 screws with a power driver. Jay Zeiset of M&Z Builders won the contest with a time of 18.23 seconds; his prize was two DeWalt screw guns.

The finale of the event was a nail-driving contest sponsored by Maze Nails. The contest at the open house proved to be every bit as popular as it is at the Frame Building Expo; 25 contestants stepped up to drive nails. (That number doesn't include Paul Zimmerman, who was a good sport and participated when someone else added his name to the list of competitors. Finishing just a few seconds out of the lead, he proved he could drive nails.) After the last nail was driven and the times were compared, Atlee Keim had the fastest time of 10.01 seconds. Maze Nails representative Andy Gitter presented Atlee with a \$75 gift card for his efforts.

The open house was a splendid event. It had the feeling of a trade show combined with a family picnic. There was even a children's area with games and treats to keep the young ones entertained. "You could feel the energy in the building," says Paul. "I had a lot of people as well as vendors take extra time to thank the staff at Hixwood and let us know how much they enjoyed it."

Paul is appreciative of the industry and is very happy to celebrate the people who keep it going. "I love this industry!" he says enthusiastically. "It is amazing how many good-looking, long-lasting buildings can be produced every day with the mix of steel and lumber. And how many hard-working, Christian people are in this industry that are making a difference in their respective communities and churches. The kind of people that navigate thru challenges of volatile pricing, supply chain disruptions, and still perform at a high level." RF

Kaizen: Pursuing the Ideal State

By Kenneth P. Lambert, Jr.

Standardized

Work

Kaizen

Determine

Root Cause

Hypothesize

Solution

he Greek philosopher Heraclitus of Ephesus is quoted as having coined the phrase "The only constant in life is change." Change is always happening, whether or not we want it. In the manufacturing realm, as with nearly every facet of the business world, we hustle to stay ahead of changes in markets, economic conditions, and other forces beyond our control.

However, there is a form of control that we can, and should, assert. This is self-directed change for the better within our organizations. How do we spark and steer positive change in a deliberate, thoughtful manner? There is a term that may be familiar to some manufacturing profes-Implement sionals: kaizen. This term is Solution based on the Japanese words "kai" (change) and "zen" (for the better), yielding "change for the better," sometimes interpreted as "continuous improvement" or "working Test every day towards an ideal Hypothesis state."

Naturally, this is the kind of change that we all hope for, but there is more to the term "kaizen" than wishful thinking. It has come to mean "a systematic approach for business improvement" and it requires leadership, commitment, and self-discipline. Gemba Academy, a training organization focused on continuous

improvement, states that it is essential for organizations to develop a "culture of kaizen" if they expect to achieve longterm success in their continuous improvement efforts. In the words of Kaizen Institute founder, Masaaki Imai, "Everyday Improvement. Everybody improvement. Everywhere improvement."

The concept of kaizen emerged in the years following World War II as U.S. forces assisted with the rebuilding of Japanese industry. Given the shortage of time and material resources, immediate, drastic improvements were not feasible. Instead, they took an approach that emphasized incremental, continuous change. A key element was to engage the existing workforce, capitalizing on the hands-on, problem-solving knowledge those workers possessed.

There were lessons to be learned from this moment in history. Can an organization make significant improvements in their operations, despite having limited resources? Toyota found that the answer was a resounding "Yes!" In fact, the idea of kaizen became closely associated with the "Toyota Production System" — a set Make Problems of management philoso-Visible phies developed by Toyota to eliminate waste. This set of principles, which place great value upon engagement from individuals throughout the organization, is Develop outlined by Jeffrey Liker Countermeasure in his book "The Toyota Way - 14 Management Principles from the World's Greatest Manufacturer."

JIKODA

A mindset which entrusts and expects employees to become confident problem-solvers has concrete and immediate applications for the small

manufacturer. The Toyota principle of jikoda — stopping the process to correct problems — illustrates this mindset. Jikoda not only empowers, but in fact requires, employees to halt the production process the moment they see a problem. The problem might be a defect in a part or a deviation from the standard. It seems counter-intuitive to regard a production shutdown as a key to reducing waste. However, if production continues while a problem goes overlooked, or concealed,

Business Building))

then the problem is compounded down the line in the form of failures, unscheduled maintenance, wasted material, or a damaged reputation. Encouraging employees to halt production when a flaw is detected yields long-term rewards. It prevents defects from becoming inherent in the end product. It also gives the employees a sense of responsibility, truly engaging them in their primary activity: delivering value to the customer.

HEIJUNKA

Similarly, Toyota's concept of *heijunka* seems counterintuitive at first. In an environment where just-in-time delivery of products is deemed the ultimate "lean" approach, heijunka suggests that leveling production volume and product mix is preferable to wild, reactive swings in production flow. Systems that react strongly to peaks and valleys in demand tend to cause intervals of under-utilization and over-utilization of equipment and human resources. The last thing a manufacturer wants is idle equipment, but they also do not want the failure of over-stressed equipment to cause unplanned shutdowns. Firms seeking to create a "culture of kaizen" should also minimize circumstances that lead to over-stressed, disengaged



employees who no longer seek improvement, or call attention to production defects. A moderated volume flow may at times require customers to wait for product, but also guards against unplanned shutdowns and unwanted quality shortcomings. These outcomes both add value for your customers.

KAIZEN EVENT OR WORKOUT

Another way to view kaizen is in the form of a "kaizen event" or a "workout" — a 1-5 day process designed to capitalize on the hands-on experience of the participants. Dr. Richard Chua, professor, and certified Lean Six Sigma trainer, defines a kaizen event as a "well-organized, structured, and facilitated event to improve a work area, a department, a process, or an entire value stream." With a "culture of kaizen" as a foundation, a kaizen "event" seeks to engage stakeholders across the organization.

A kaizen event makes sense when a quick analysis of the problem is possible and immediate improvements can be made using simple tools, without requiring rigorous data analysis. To get the most out of this time investment, a kaizen event should take place under the guidance of a facilitator trained in operational excellence tools. The facilitator guides the process so that the right questions are asked, and the time is well-spent. First, the objective and the scope of the event must be defined. For instance:

• Introducing quality checks and accountability into the process (Jikoda)

• Refining workflow (such as applying the principle of Heijunka)

- Identifying the root cause of a recurring quality problem
- Streamlining equipment setup
- Re-organizing a work area to improve efficiency.

It cannot be emphasized too strongly that such an event hinges upon people. It is a people-driven and people-focused exercise, so the right individuals must be invited to participate. This includes the operators, shop-floor workers, and other stakeholders who can supply unique insights. Others in the value stream can bring a variety of perspective. Even customers may be involved. These are the very people who rely on the value created by the process in question, so their participation can be extraordinarily powerful.

Once a desired business outcome is defined, then a variety of problem solving techniques may be employed. For example:

• Mapping the flow of parts or transactions throughout a facility to understand what is actually happening

• A "Gemba Walk" — walking the production floor (Gemba = "the place where value is created")

• Process and value-add analyses to determine what steps do or do not add value

Developing cause/effect diagrams

• "5 Why's"— asking "why" a succession of 5 times to uncover the root cause of an issue

• 5S exercises to sort and organize items, following the

premise that there is a place for everything, and everything should be in its place.

Once the event has concluded, the participants should emerge with a list of recommendations for concrete, actionable solutions that can be put into practice right away. Since it is the stakeholders themselves who developed these solutions, there is typically a greater degree of acceptance for implementation.

PUTTING "CONTINUOUS IMPROVEMENT" INTO PRACTICE

While large manufacturers often employ experts to lead continuous improvement efforts, such as kaizen events, smaller manufacturers often do not have the background in that set of disciplines, or the capacity to employ dedicated staff with that skill set.

Fortunately, there are plenty of resources available. There are training programs, seminars, video series, and books specializing in these techniques. Many universities offer manufacturing extensions that provide low-cost consulting and training services to local businesses. Of course, there are skilled consultants eager to partner with manufacturers who are ready to begin their continuous improvement journey.

CONCLUSION

Many of these precepts can be implemented right away to yield positive effects, but it is helpful to view Continuous Improvement as a marathon. Committing to a marathon requires a marathon mindset. Anyone who has completed one knows that it is a life-changing experience. The hardwork required to achieve that long-term goal ultimately proves its worth. Similarly, there is more to kaizen than just the kaizen event or "workout." A kaizen workout is just that... a workout. It is good for you. It will yield practical solutions to problems. But it is not the entire marathon. As one continuous improvement professional explains it, kaizen events solve specific problems, but more importantly, they teach employees how to become problem solvers. They help to nurture a passion for continuous improvement within your team. Teams who participate in a "culture of kaizen" will take ownership of their jobs with a mind toward creating value for the customer. That is what it is all about: developing a culture in which people — everybody in the organization — is trusted, empowered, and encouraged to play an active role in positive change. Everyone is fully engaged in bringing about an ideal state: maximum value for the customer. RF

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Navigating Through a Recession Like It Never Happened

By Todd E. Miller, President, Isaiah Industries

hen times are difficult, people say, "Tough times never last." But when times are good, people never say, "Good times never last." The hard truth is that while tough times never last, neither do good times. Businesses that operate with this in mind will stand the test of time.

The last few years have been robust for remodeling and new construction. However, recent statistics show a reversing of fortunes. The good times that brought prosperity to virtually all construction businesses are starting to change.

Over forty years of industry experience, I have seen ups and downs. I have seen catastrophic failures and huge successes. So, I want to look at what separates the businesses that survive economic downturns from the ones that fail. Hopefully this advice can help you with your business.

KNOW YOUR CORE COMPETENCIES

One of my favorite metaphors is a business as a river. Knowing your "banks" or limits will keep you on the path to success. My rule during tough times is to know your core competencies. Know what your company is good at and continue to excel there. However, tough times may create opportunities outside your regular offerings which are often worth taking.

As an example, tough times may be the right occasion to release a new product. Paying strong attention to your competitors and to market conditions can cause significant opportunities to surface. You may find a chance to reach an underserved market or target past customers with something new, expanding the banks of your river.

Above all, do not neglect your core competencies, even to save a few dollars. For example, if you're known for excellent customer service, don't shut down your appointment center. If you run a smooth operation, don't lay off experienced and skilled team members. Keep doing the things you're good at and retain them as a critical focus.

BUILD YOUR KEY RELATIONSHIPS

A recession heightens the importance of trusted advisors.

Form an inner circle with a quality accountant, attorney, insurance expert, and trusted banker. Let their experience and training provide solid guidance for your business. In particular, make sure that you have the right banker. Building a relationship with a community bank fosters empathy with someone who can see you through economic stresses.

Pay close attention to relationships with your material suppliers. Seek out vendors and products that bring the greatest profitability into your company. Stop selling products with high price competition. A recession only increases the competitors willing to engage in a race to the bottom of the pricing barrel.

RETAIN CASH AND LIMIT DEBT

Retaining cash is always critical for a business. One of the first things I was told in business was, "Cash is king, and there ain't no queen!" Business bankruptcy sales are often full of toys — boats, motorcycles, RVs, big trucks, and sports cars. You can tell for yourself what happened.

Retain cash and don't take on any long-term debt, even secured debt. Assets are hard to sell during tough times, and their values will drop. Before the recession hits, talk with your banking partner about establishing a line of credit to help you with cash flow during bigger projects. Above all, remember that you will need cash to endure difficult times and regain momentum quickly on the other side of an economic downturn.

KNOW YOUR NUMBERS

Maintain monthly profit and loss statements and annual reviews or audits, despite their cost. Numbers are your friend and should guide your business decisions. Know your lead generation costs so that you charge customers appropriately. Knowing your job costing is also critical, considering the increasing labor costs in recent years. Finally, watch your closing ratios closely to know your marketing cost per dollar of sales. Whatever you do, don't engage in the idea that "we'll make up for lower margins with volume." That will only drive your ship underwater faster.

Business Success))

REFINE YOUR SALES PRESENTATION

Changing economic conditions can alter what your prospects care about and what motivates them to buy. Your sales presentation must respond to that. While successful businesses constantly improve their sales presentations, this is key during economic downturns. Your presentation should evoke emotion and encourage customers to make the best decisions possible.

Beyond refining your presentation, constantly train and quiz your salespeople on it. Ensure they are following your prescribed system for success.

Have your sales presentation focus on making the customer the hero of the story. Find their needs and present options that make sense for them. Guide them to a solution they want. Make them feel good about working with your company.

WORK PAST CUSTOMERS FOR REFERRALS

Every business owner appreciates the value of referrals. Closing ratios on leads from past customers are typically much higher than other leads because you enter the new relationship with implied trust carried over from the person who referred them to you. Dedicate part of your marketing budget to connecting with past customers and asking them for referrals. Tough economic times increase competition, so use efforts like this to generate leads with less competition.

LOOK FOR MARKETING DEALS

Advertising costs can decline when sales are down. Media will often make "pay for performance" deals. Use your numbers to know what advertising is resulting in the most sales for your company and then negotiate deals to reduce your ongoing advertising costs. Do not give up on advertising but rather ensure its return on investment.

BUILD SYSTEMS

Creating systems for your operation is key. Systems create procedures and erase uncertainty. As the leader of your business during a recession, avoid "putting out fires" all the time but focus on the overall performance of your business. Make sure you have time to spend developing your team and building culture. Tight times, more than ever, are when you need the engagement, commitment, and loyalty of your team – so don't forget about them!

Micromanaging is an easy path to go down during challenging times, but it will kill morale. Of course, you must still be engaged and involved with your business and able to recognize quickly when adjustments are necessary, but let your team do what they do best.

In conclusion, tough times never last. Lead well and follow these steps for success and you'll navigate a recession like it never happened. RF



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Cutting Edge

Company Looks to Improve Shearing Metal

By Karen Knapstein

hile Integrity Sales & Service as a company hasn't been around long, its owners and signature product have been. And they've also been closely connected since the beginning. Owner Wil Hochstetler said the Millington, Michigan, startup filed for the name in late 2020. The business didn't take off right away; "We started by dealing in some other equipment like post drivers and skid steer attachments. We were anticipating doing some contract work for a large post-driver manufacturer. That didn't develop like we anticipated." But when the opportunity to purchase and manufacture the Dyna-Cut Shear came up, they "hit the ground running."

The metal shear is the new company's star performer, but it has been around for more than 20 years.

Wil relays that in the early 2000s a customer came to his brothers-in-law Nathan and Norman Miller, who owned fabrication shop Dyna Products, and asked if they would consider making a better shear since he was dissatisfied with the metal shears that were on the market. "It worked, but the shear would pull the metal or leave a burr." He really needed one that would make a clean cut.

"We sat down together and came up with some designs. The first shear had a fixed blade. That worked ok, but as we got into it, we thought, 'What if the blade gets dull?' So we came up with a design that has a replaceable blade."

Dyna Products began manufacturing the shears and sold them at big box retailers. After the manual shear was out for a while, demand grew for a power shear so they developed an air-powered shear. "It worked fine but was noisy and a little bit cumbersome," Wil says.

After a time, the Dyna Products shop got busy with other products and the Dyna-Cut fell by the wayside. So they decided to sell the rights.

Dyna Products sold the manufacturing rights to Reuben Hostetler, who further developed the shears. "When Reuben Hostetler bought it," recalls Wil, "he took the power shear to the next level. He focused on a very precise cut. He redesigned the power shear so it was a smooth, quiet operation. He also developed an electric shear."

In early 2022 Reuben decided to sell his business; Integrity Sales & Service bought the rights to the shears and brought the Dyna-Cut "back to the family where it started."

Wil's son Jeff has a lot of experience with the shears; he was



ABOVE: The Dyna-Cut Metal Muncher ready for blades custom made to fit the panel profile. BELOW: With custom blades installed.



just out of school and working at the Dyna Products shop when the shears were first developed. Jeff now manages the business with his father and younger brother, Justin, at Integrity.

New businesses can be faced with unknown challenges from the outset. One challenge the Hochstetlers experienced was difficulty finding someone who could provide them with needed surface grinding services. Rather than let that impact the quality of their shears, they acquired the equipment to do the grinding themselves. "We can sharpen our own blades in house now," says Wil. "And now we offer that service. Doing it ourselves gives us control over the quality. We turned that

Business Profile))



The Dyna-Cut manual shear is a solid seller for Integrity Sales & Service. PHOTO BY KAREN KNAPSTEI

challenge into an opportunity."

Speaking of opportunities, the company continues to develop more metalworking tools. "We have a sample cutter in the works," Wil reveals. "It will cut a small 2 1/2" x 4" sample piece that metal shops and mini-barn shops can give out to their customers. Samples will have rounded edges and a hole in one side so they can be put on a keychain."

The company also offers manual or power-driven flat-stock shears. The blade can be changed out to cut shingles, vinyl siding, or flat stock.

The family is focused on developing shear solutions to meet the needs of manufacturers and roofers. For example, the airpowered shear now has a camshaft design versus a guillotine design. "The cam shaft takes less air to cut the same amount of material in the same amount of time," explains Wil. "It's smoother and quieter, too." If you don't have a camshaft design, the shear needs a larger air cylinder, which causes more vibration and force and results in more wear and tear, and more noise.

Although power options are available, Wil doesn't see the demand for manual shears waning. "We actually produce quite a lot of those. Sales have picked up and are increasing on that end of the spectrum. The main reason metal shop owners buy manual shears is they can rent them out to their customers."

Three Keys to Good Business

- Top priority is to practice integrity in all business practices.
- Quality and service. If you don't have those two
- 2 Quality and service. If you don't have the things, it doesn't matter what you make you don't have anything.
- Kingdom-focused. Our goal is to advance God's or Christ's kingdom through our business interactions.

And, of course, they will always have them on hand when they need them.

"It saves a lot of time," he continues. "Oftentimes, contractors use the shears on the jobsite. You can cut the entire sheet with one swipe. It minimizes the time it takes to cut metal and you can cut angles quickly. You can set the shears to cut gabled angles and cut panels as opposed to using tin snips or nippers. The best part is you get a factory cut edge and it's not jagged. It gives the work a much higher quality."

He also adds that standalone shears fix a problem that precut shears can't: "A pre-cut shear can't cut panels shorter than 3 feet," Wil explains. "If customers order panels shorter than 3 feet, a standalone shear can come into play. With a standalone shear you can cut the panels to whatever size the customer orders."

Integrity Sales & Service is a family owned and operated business; Wil and his sons Jeff and Justin work hard to develop the tools metal panel manufacturers and roofers need and also to grow the business. "It's relatively small, but we do things together," Wil says. Working as a family has its challenges and rewards, but it's not all work. "We like to do fishing and hunting together, as well. But we work together outside of work, too," he adds. RF



Problem Solvers)



Tips and Tricks for Successful Application of Dr!pStop

By Sharon Thatcher

hen Dr!pStop arrived on the scene it was a gamechanger in the battle against condensation in non-climate-controlled metal buildings. It remains a tried-and-true remedy for condensation in storage buildings, ag buildings, airport hangars, and other open-wall structures. If you are a rollformer who applies Dr!pStop to ag panel for your customers, there are some important tips and tricks that can help assure successful application.

AVOIDING SMILEY-FACED PANELS

When Dr!pStop is applied to metal panels, it can bow or curve the metal and create a smiley-face effect. This does not affect the installation or integrity of the Dr!pStop panel, but some customers are concerned when it doesn't lie flat on the delivery pallet.

Tony DelGhingaro, Vice President, Filc USA which produces Dr!pStop, explains why there is this natural tendency for bowed panel: "Dr!pStop will curl a little more ... because of the way it's constructed," he said. During the manufacturing process, he said, "I compare it to a barber's shear: the needles all have little notches, and it pulls the fibers in all directions."

The result is a stronger and thicker material.

However, roll-forming machines are not traditionally designed with condensation felt in mind. As Bill Griffin, President of Metal Rollforming Systems, noted: "The tooling is designed for a thin, rigid steel material with minimal clearances."

The consequences when felt is applied to the underside of the standard 28- or 29-gauge ag panel is the smiley-face curvature. But "once it's screwed down," DelGhingaro noted, "you never know there's been a bow in it; it's all an aesthetic thing."

In most instances, rollformers are not overly concerned with the aesthetics of felt-backed ag panel. "I think most of the issue is a perceived cosmetic issue that goes away after proper installation," Griffin said. "The advantage of the Dr!pStop in reducing building sweat typically outweighs any mild aesthetic issues."

Performance aside, if you or your customers just want to avoid the smiley-face issue altogether, there are ways of doing so. "Gap adjustments can be made to mitigate the smiling, but there is a limit to what can be accomplished," Griffin said. And there is no magic formula. "Solutions are dictated on a case-by-case basis and dependent on your manufacturer's recommendations."

Griffin also said there are more challenges in getting Dr!pStop to line up on a post-cut roll former versus a pre-cut roll former. "The winging of the panel during the forming process can cause the panel not to line up correctly with the profiled shear blades [on a post-cut line] and cause it to increase deformation or burring of the sheet edge," he said, adding: "These are non-issues when ran on a pre-cut line and the sheet is cut flat prior to being formed."

It appears that machines with the best performance for Dr!pStop application are those that have a particular order of placement of minors and majors in the bending process. "Some will put minors before some majors," DelGhingaro said. "Why it affects it I don't know, but it does. Some machines are worse than others and I think it's because of the order of those bends."

Thomas Schwarzer, Regional Sales Manager NE, ASC Machine Tools, said the 'smile' is most noticeable when the finished panel is stacked on a pallet for delivery, but goes away upon installation. He added that adjustments to certain roll-forming passes are needed to reduce the smile effect and bring the panel back. "No matter if you run an AG panel profile on a pre-cut or post-cut line, I would recommend raising up the overbend passes for the bottom corners of the major ribs, and at the same time tighten the overbend passes for the corners on top of the major ribs."

If shop owners are running a lot of Dr!pStop, it may pay to add more passes, he noted. "It would be great to add more rollforming passes to isolate overbend passes and give more control over the panel," he said. The addition of overbend passes, however, costs money outside of what many rollformers can justify. As Schwarzer noted: "Unfortunately most of the time the budget doesn't allow it."

LOW-VOLUME VS. HIGH-VOLUME USERS

If you are like most regional rollformers without a dedicated machine for fiber-backed panel, always be mindful to re-adjust the settings if using the same equipment for panel with and without felt backer. Improper adjustments open the risk for aesthetic damage to panels not running felt, and if used as side panels, those aesthetic blemishes are significantly more noticeable and open you up to end-user dissatisfaction. At the other end of the spectrum, customers running high volumes of felt underlayment panels with a dedicated machine may look to Bradbury for a solution. The company has patented a process for the order of major and minor bends in the profile, developing a tool set dedicated to felt underlayment.

One user of the system is Higgins Steel Roofing of Hillsboro and Jackson, Ohio. The company is one of the top sellers of Dr!pStop in the Buckeye State and uses Bradbury roll formers.

Owner Dave Higgins (featured in *Rollforming* Oct./Nov. '22 issue] carefully observed the application process long before committing to becoming a Dr!pStop panel supplier. Even for aesthetics he didn't want curved panel to be an issue with customers. Adding extra stands to allow additional minor and major bends is the solution that works best for him. "With equipment, when you put on Dr!pStop, if you bend things too fast, that's where that flare occurs," he said. "Our roll former that does Dr!pStop has 19 stands on it, instead of 14, so we could eliminate that problem."

GHOSTING

Some of the challenge when installing condensation felt is with the metal itself. As mentioned above, the panel used for felt



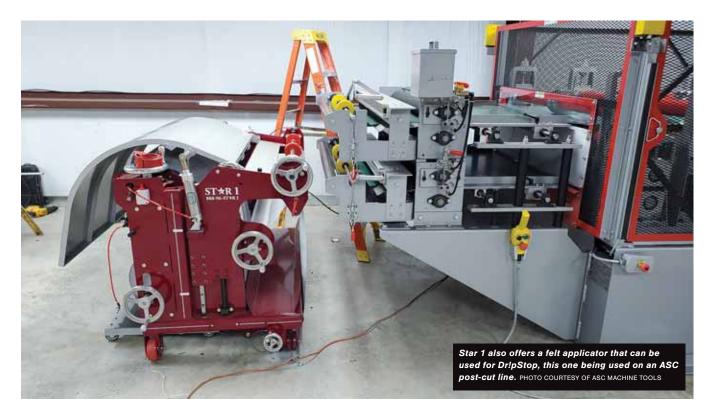
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application is a higher gauge (28, 29), but gauge does not tell the full story. More precisely, all gauges come in a range of thickness and if the metal is on the lighter side of the range, it may result in what might be termed as a 'ghosting' effect. DelGhingaro said the random pattern of Dr!pStop as it's pressed against the metal "can more easily appear on thinner metals due to the force that presses together the metal and DS" causing this effect.

Schwarzer thinks the combination of panel profile and material thickness can help avoid this situation. "On thin panels with less ribs and wide flat spots, it's more likely to show through, whereas, if you use a more "ribbed" profile and thicker metal, it's not really noticeable."

U-SHAPED PANELS

DelGhingaro said every roll-former brand has its own ways of reacting to Dr!pStop application, with some brands doing better than others. He has seen some machines creating a U-shaped panel, with sides coming up several inches. Again, DelGhingaro said, it has "no effect on how the Dr!pStop performs and it has no effect on the metal panel once it's installed," but in this case, it does affect how the contractor installs the panel. With a U-shaped panel, "The challenge is they have to step on the panel almost everywhere they want to put on a screw," he explained, "so instead of possibly leaning over and putting maybe two or three screws down, then taking another two or three steps and putting two or three screws down, they have to step and screw, step and screw, step and screw."

FELT APPLICATORS

Small, free-standing machines that help with the application of felt from coil to roll former have become popular additions for companies running felt underlayment. The Star 1 applicator has been featured before in this magazine and helps relieve much of the former burden of feeding the felt through to the application start point. Dr!pStop does offer its own applicator and is currently testing an improved system that is expected to be made available commercially soon.

CONTROLLING STATIC ELECTRICITY

One problem that machine operators dread most is the static electricity that condensation felt emits as it runs through the machine at high speed. "In the wintertime, it's like walking across miles of carpet," Higgins said.

Anti-static bars are a readily available and inexpensive solution, but due to the volume of Dr!pStop panel Higgins Steel Roofing produces, the company adds a couple more steps. As Higgins noted, the static bar built into his applicator unit is helpful, but only affects the felt as it runs from the applicator unit into the roll former. He adds another static bar as the metal enters the shaping stands, and then grounds that bar off to help exit the static. The result: happier machine operators! RF

Sharon Thatcher *is the former managing editor of* Rollforming Magazine. *She is now an independent writer living in Ohio.*

DREXEL METALS EXTENDS SERVICE TO THE NEW ENGLAND REGION

Drexel Metals, a provider of superiorquality, engineered metal roofing equipment and custom systems, fabrication services, announces the opening of a facility in Manchester, New Hampshire. One of four new facilities opened in the nation last year, the Manchester location will extend American materials to local roofing professionals - 100 percent of the company's steel and more than 95 percent of its aluminum is purchased domestically.

"We're excited to better serve existing customers and support new ones with outstanding materials and services. At the new facility, our knowledgeable and experienced staff of full-time

employees can answer questions about difficult builds and assist with in-house fabrication," says Brian Partyka, Vice President of Carlisle Architectural Metals. "Plus, by extending our reach to the Northeast corner of the country, local professionals can expect metal roofing products that are consistently durable, beautiful and delivered on time."

The new location will also serve local fabricators with large manufacturing floors, storage space for works-inprogress and production services like cutting to length and coil slitting. Able to warehouse and distribute 9 million pounds of American steel and aluminum, Drexel's Manchester location will also be furnished with a full range of fabrication equipment, such as portable rollforming machines, decoilers and more.

STEEL DYNAMICS COMPLETES ACOUISITION OF METALS **RECYCLING COMPANY**

Steel Dynamics, Inc. has announced the completion of its acquisition of ROCA ACERO, S.A. de C.V. ("ROCA"), as part of its North American raw material procurement strategy.

ROCA, headquartered in Monterrey, Mexico, operates a ferrous and nonferrous scrap metals recycling business comprised of five scrap processing facilities strategically positioned near high-volume industrial scrap sources located throughout Central and Northern Mexico. Roca currently ships approximately 575,000 gross tons of scrap annually and has an estimated annual processing capability of approximately 850,000 gross tons. When combined with the company's existing Mexican metals

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recycling business, the total estimated annual ferrous and nonferrous scrap processing capability within Mexico will be over 2.5 million gross tons.

"We sincerely welcome the ROCA team into the Steel Dynamics and OmniSource Mexico families to further solidify our growth strategy," said Mark D. Millett, Chairman, President, and Chief Executive Officer. "Combined with our existing metals recycling facilities in Mexico, the addition of ROCA significantly strengthens our ferrous and nonferrous raw material procurement strategy in the region. We believe our Mexican metals recycling facilities will provide a meaningful advantage to our electric-arc-furnace steel operations and planned aluminum flat rolled products operations, while also providing a high-quality, customer-centric option for our customers in Mexico and the United States. We are very excited to welcome and learn from the entire ROCA team."

AKZONOBEL WHITEPAPER INVESTIGATES PVDF ALTERNATIVES

Coil and extruded metal manufacturers concerned about challenges in the PVDF supply chain can achieve a comparable finish and performance using non-PVDF alternatives in most applications, advises a new whitepaper from coatings and paints manufacturer AkzoNobel.

Changes in global market dynamics, including increased demand from markets such as electric vehicle batteries and solar panels, have led to volatility in the cost and supply of PVDF resin commonly used in coil coatings. This, in turn, has affected the availability of some PVDFcontaining products.

But AkzoNobel's whitepaper, "Navigating the PVDF landscape: A market in transition," explains how coatings based on alternative technologies, such as silicone modified polyester (SMP), can often provide a comparable performance, without the drawbacks of PVDF coatings.

"PVDF coatings are particularly suited to environments, such as those that experience saltwater spray, extreme moisture or extreme humidity," explains Brent Fletcher, Product Marketing Manager Americas, Coil and Extrusion Coatings at AkzoNobel. "However, the vast majority of the Northern Hemisphere does not have such extremes, so PVDF coatings may not be necessary. SMPs, for example, would be a good substitute for most locations in Central and Northern U.S., Canada, and North Asia."

AkzoNobel's whitepaper is part of the company's ongoing campaign to help its partners and coatings customers navigate the volatile PVDF situation and make more informed decisions about the best solutions for their specific circumstances.



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LAKESIDE POLY MANUFACTURING ACQUIRES VENTCO

Lakeside Poly Manufacturing CEO Kyle Lane has announced the acquisition of Ventco. "Today is an exciting day as our Lakeside Group of companies is once again expanding. Lakeside Poly Manufacturing, a Lakeside Group Company, has acquired Ventco, a manufacturer of commercial and residential ventilation products."

This acquisition further enhances Ventco's sales and service offering by adding additional resources and scale to expand customer reach. Ventco's management team is led by Ben Oskarsson, Vice President of Sales & Marketing, a 27-year veteran of the engineered building products manufacturing industry.

Lakeside Poly Manufacturing will continue manufacturing operations at its plant in Wrens, Georgia, and all current employees have been retained.

Ventco will contribute positively to the growth strategy of Lakeside Group of Companies. "The acquisition of Ventco will strengthen our brand and will allow us to accelerate growth possibilities. It will allow us to expand with our existing customers, as well as allow us to service new markets outside the construction industry," said Lane.

REIBUS INTERNATIONAL WINS THE 2022 PLATTS GLOBAL METALS RISING STAR AWARD

Reibus International, an independent digital marketplace for industrial metals, was named the Rising Star Company at the 2022 Platts Global Metals Awards, held in London UK on October 27. In its 10th year, the Awards program recognizes exemplary performance across the metals and mining arenas.

"Stakeholders in the metals industry need different and better methods of solving problems so that they can grow and succeed despite today's volatile global supply chain," said John Armstrong, Founder & CEO at Reibus. "That is why we're bringing together the best and brightest technologists with industry experts, to help solve long-standing challenges in the metals supply chain."

ABC REPORTS OCTOBER CONSTRUCTION EMPLOYMENT UP BY 1,000

The construction industry added 1,000 jobs on net in October, according to an Associated Builders and Contractors analysis of data released by the U.S. Bureau of Labor Statistics. On a year-over-year basis, industry employment has risen by 266,000 jobs, an increase of 3.6%.

Nonresidential construction employment increased by 300 positions on net, with growth in only one of the three subcategories. Nonresidential building added 3,200 net new jobs, while nonresidential specialty trade and heavy and civil engineering lost 2,500 and 400 jobs, respectively.

The construction unemployment rate rose to 4.1% in October. Unemployment across all industries rose from 3.5% in September to 3.7% last month.

"The country's job market remains strong, and that means we remain in a bad place because, in this economic environment, good news is bad news and vice versa," said ABC Chief Economist Anirban Basu. "We can expect to hear many such ironic statements during the months ahead. A few days ago, we learned that America had 10.7 million available, unfilled jobs in September. More than 400,000 of these are construction industry job openings. Today we learned that employers continue to hire, with the overall economy adding 261,000 jobs in October.

"For inflation to return to its 2% target, the demand for labor needs to weaken," said Basu. "We're not there yet, which means that the current cycle of raising interest rates will continue. Among other things, that stands to weaken demand for construction services as borrowing costs ramp higher amid ongoing labor shortages and elevated materials prices. Due to those factors, the construction industry added just 1,000 net new jobs last month, the slowest growth since April.

"The good news is that bad news will eventually arrive," said Basu. "As the economy slows further and recessionary conditions take hold, inflation will dissipate as demand for goods and services weakens. While it is unfortunate that economic stakeholders have to wait for bad news before good news arrives, contractors still have healthy backlogs, according to ABC's Construction Backlog Indicator, and that will carry many through 2023 even if a recession arrives in America next year." RF







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Folding Machine Sequencing

What makes sequencing so complex and why the fold sequence is important

By AMS Controls, www.amscontrols.com

eet Joe. He has been a folding machine operator at ACME Buildings for over 15 years. ACME Buildings has relied on Joe to run the folding machine and fulfill their trim orders. Joe seems to magically and effortlessly pull off amazing profiles. Joe is fantastic. ACME Buildings has full confidence in Joe. But there is one thing that makes Joe's manager reach for the bottle of antacid: whenever Joe requests time off.

ACME Buildings is not unique. Countless manufacturers face the same dilemma of not having enough skilled and seasoned folding machine operators. Unfortunately for ACME Buildings, the situation is not getting any better. The 2022 Union Craft Labor Supply Study, conducted by The Association of Union Constructors (TAUC) in conjunction with the Construction Labor Research Council (CLRC), found that there is an increasing shortage of sheet metal workers. This increase has grown from 30% in 2015 to 53% in 2021. Apprenticeship is also suffering, reporting an increase in shortage growing from 29% in 2015 to 40% in 2021. All this shortage spells trouble for ACME Buildings.

Joe's knowledge of folding machine sequencing is the valuable piece that manufacturers like ACME Buildings are trying to replicate. The situation is compounded further because Joe's knowledge and expertise is limited to the specific folding machine at ACME Buildings. Since every folding machine has its own unique shape and geometry, the sequence Joe uses at ACME Buildings to bend a profile may not necessarily translate to any other folding machine.

FOLDING MACHINE SEQUENCING IS A COMPLEX PROBLEM

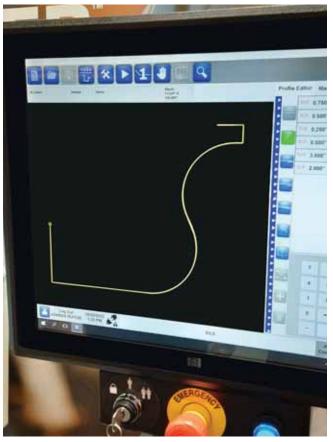
Think of it this way: A simple L-shape profile can be created two ways. Add a bend to the profile, and the number of probable ways to create the profile jumps to eight different possibilities. As more and more bends are added to a profile, the number of probable ways to create a profile grows exponentially. To complicate things for Joe the operator even more, each added bend increases the risk of the profile interfering or colliding with the clamp or other component of the folding machine, which can result in a lot of wasted material, labor and machine time.

Number of Potential Bend Sequences -Single-Bend Folding Machine

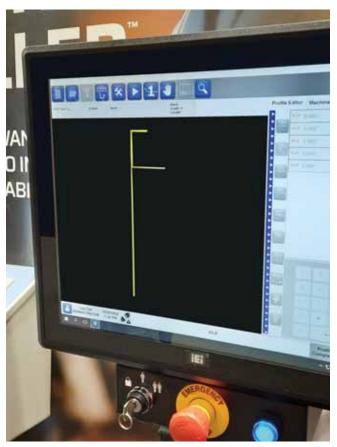
Operations	Potential Solutions
1	2
2	8
3	48
4	384
5	3,840
6	46,080
7	645,120
8	10,321,920
9	185,794,560
10	3,715,891,200
11	81,749,606,400
12	1,961,990,553,600
13	51,011,754,393,600
14	1,428,329,123,020,800
15	42,849,873,690,624,000
16	1,371,195,958,099,970,000
17	46,620,662,575,398,900,000
18	1,678,343,852,714,360,000,000
19	63,777,066,403,145,700,000,000
20	2,551,082,656,125,830,000,000,000

Note, with 17 bends, the number of potential sequences equals six times the number of grains of sand on earth.

Since Joe has years of experience under his belt, Joe has the bend sequence for many commonly used profiles memorized. But as we all know, even with a common profile, there may be



5K gutter profile shown on the Pathfinder Control screen.



Door trim profile on the Pathfinder Control screen.

customization requested like a longer or shorter segment within the profile, or a different bend radius. These simple requests seem benign, but a small profile change like this is often enough to result in an interference, requiring Joe to rework the bend sequence.

GROWING TREND TOWARDS CUSTOMIZATION ADDS TO COMPLEXITY

ACME Buildings services an area that has a mix of the old and the new. Their products are used in historical building restorations, older building remodels or additions, and also in the new construction market. ACME Buildings is seeing an increase in the number of custom trim requests. The requests are not just coming from new constructions, but also on the older remodels or restorations as builders seek innovative ways to create solutions for their building problems.

As good as Joe is at his job, it's impossible and unrealistic for Joe to efficiently sequence all the custom profile requests that will only grow in time. Considering a profile with 18 bends can have as many probable sequences as there are stars in the universe, it's safe to say that profile sequencing is time consuming, and requires specific expertise.

Relying solely on Joe for their sequencing opens ACME Buildings to some potentially disastrous problems. There will be times when Joe needs time off work: vacations, sick time or family time are all very valid reasons and instances when Joe will be away from his station.

REALITY CHECK #1: By relying heavily on Joe, ACME Buildings had to come to terms with the fact that they will experience job delays stemming from operator availability. In today's competitive climate, these delays cost ACME Buildings lost opportunities, sales revenue and customer loyalty.

SOME SEQUENCES ARE BETTER THAN OTHERS

As discussed earlier, there may be many sequences that can be used to create a single profile. Some sequences work better than others, while some are just more difficult than they need to be.

Every time a part is handled or manipulated during the folding process, be it a flip, rotate or turn, stress is potentially being placed on the part. We all know some handling is required and

Problem Solvers))

unavoidable as part of the folding process. Oftentimes, the stress is minor and does not affect the accuracy of the part.

However, this is not always the case. Minor inaccuracies that happen along the process could stack up and result in a bad dimension within a profile. In short, picking a bad sequence could result in a part that roughly looks like the right part, but the dimensions will not be correct.

REALITY CHECK #2: While custom trim orders are very profitable, any errors and resulting remakes can cause profits to shrink very quickly. The wise move is to ensure trim work is completed accurately and efficiently to maximize profits.

FOLDING MACHINE AUTO SEQUENCING PROVIDES OPTIONS FOR MANUFACTURERS

Enter folding machine auto sequencing, which can be found on most new folding machines or as retrofit packages for existing folding machines. Auto sequencers use modern day computers and complicated algorithms to analyze the millions of possible sequences for a profile and determine the best sequences. What would normally take a human operator hours to configure can now be generated in mere seconds, all done without the need for any trial and error.

Auto sequencing tools can help identify folding sequences in less time than the conventional way. Equipped with graphic user interfaces and touch screens, these controllers allow operators to simply trace an outline of the profile on the screen with their finger. Novice operators benefit when using auto sequencing capabilities that creates a list of viable sequences based on the profile entered. The operator can then select the sequence that works best for them and follow the step-by-step directions outlined to successfully fabricate a profile. This functionality enables novice operators to gain experience with a folding machine and generate parts all while learning from veteran operators like Joe.

"Auto sequencing tools can help identify folding sequences in less time than the conventional way."

Auto sequencing includes parameters that take into account the unique geometry of each folding machine. These parameters are used to eliminate sequences that can cause an interference. By reducing the opportunity for error, auto sequencing will reduce waste and scrap, reduce guesswork and machine time, and improve efficiency and quality.

A SUSTAINABLE WAY TO CREATE RELIABLE SEQUENCES IS IMPORTANT

Folding machines are revenue generators for manufacturers. It's therefore important to keep them running as much as possible, and as efficiently as possible.

Ensuring there is a reliable way to develop folding machine sequences when creating profiles will help manufacturers improve efficiency by reducing waste, machine time and improving quality. With a reliable solution for generating sequences that is sustainable and not solely dependent on an experienced folding machine operator, manufacturers will have peace of mind that there will be no disruption in the quality of their product and in their ability to handle any custom profile requests from their customers. RF



Auto sequencing tools help identify bend sequences efficiently. PHOTO COURTESY OF AMS CONTROLS

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New Products))

S-5! INTRODUCES CANDUIT™ CLAMP

S-5! introduces its new electrical conduit clamp for metal roofs. The new CanDuit[™] clamp secures and supports chases and raceways, cable trays, gas piping, condensate lines and other round-shaped objects to metal roofs, in combination with any S-5! clamp or bracket, including the GripperFix[®] utility mounting system.



Made from electrozinc coated steel, the new clamp features two halves

that clamp around the pipe or conduit with an EPDM liner pad that protects against abrasion and a threaded M8 stud that allows for attachment to the manufacturer's other products.

It can be used in both residential and commercial settings for a range of applications including electrical, solar, plumbing for gas or water and condensate drainage.

www.S-5.com



TRIANGLE FASTENER STAINLESS STEEL SELF-DRILLING SCREWS

Triangle Fastener Corporation announces the addition of two new sizes to its line of SD300[™] stainless steel bi-metal self-drilling screws. Now available in a #12 diameter in 1" and 2" lengths. They come with a pancake head and #2 square recess and can drill and tap up to .210" thick steel or aluminum. They provide exceptional corrosion resistance and ductility, minimizing the chance of screw failure caused by stress corrosion cracking or hydrogen embrittlement.

The screws are made of 304 stainless steel for optimal corrosion resistance. The low profile pancake head is aesthetically pleasing when used in exposed fastener applications. The screws are TRI-SEAL* coated which minimizes galvanic corrosion when used in aluminum applications and are well suited for attaching aluminum materials like framing and ACM panels.

www.trianglefastener.com

INSULATED TOOL SET

The Dynamic* tool brand has introduced a 28-piece insulated tool set to meet the growing needs of commercial and residential electricians, industrial maintenance professionals, mobile/ field service technicians, and electric vehicle (EV) mechanics. Each tool within the set has been tested to 10,000 AC and is VDE certified to 1,000 VAC in compliance with IEC 60900.



The new insulated tool set includes a 1/2" drive ratchet with a selection of extensions and six-point metric sockets. It also contains open-ended metric wrenches, slotted screwdrivers, Phillips screwdrivers, side-cutting pliers, lineman's pliers and long-nose pliers. All pieces are precision machined to meet the needs of the most demanding professionals.

For secure storage, the set comes with a lockable case. The case has two foam organizers with labeled cutouts, which allows for easy tool identification, compliance with 5S work environments and added safeguarding against foreign object damage (FOD).

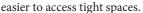
ShopDynamicTools.com

ADJUSTABLE WRENCHES

Wright introduces two, new adjustable wrenches including an extra-slim jaws wrench and a reversible adjustable wrench, both with extra-wide capacity.

The extra-slim adjustable wrenches feature an extra-slim jaw design, super-wide opening and feather weight that's up to 50 percent thinner, 78 percent wider and 68

percent lighter than standard adjustable wrenches of similar sizes. The slimmer jaw design makes it



The extra-wide capacity wrench with extra-slim jaws is available in sizes 6" and 8".

The reversible adjustable wrench serves as an adjustable wrench and a pipe wrench. The reversible jaw has the teeth and the angle to make it easy to work on pipes. Designed with an extra-wide jaw capacity, it allows operation over a wider range of nuts and bolts using the same size wrench. The reversible adjustable wrench features a double scale that has millimeters on the front and inches on the rear for multipurpose use. The reversible adjustable wrench is available in sizes 6", 8" 10" and 12".

www.wrighttool.com RF

Rosie The Riveter says:

You know if it's metal, **DYNAMIC FASTENER** is there. Whether your challenge is a leaky metal roof (DROP-STOP[®]), snow retention (DYNA-GUARD[®]), roof penetrations (DYNA-FLASH[®]), or fastening to all gauges of steel ($D \bullet F^{\text{@}}$ screws), we are your hassle free partner on the job site and on your project manager's desk. This includes our continually expanding line of $D \bullet F^{\text{@}}$ rivets!



We want to be your rivet supplier! What size do you need? Got it! What material do you need? Got it! What color do you need? Got it! What quantity do you need? Got it!

Do you want your rivets in handy bags of 250? Got it! Our stock level on rivets is over 185 *million* rivets with over a *hundred* different stocked colors for same day shipping.



12V Rivet Tool with FREE Extra Battery

