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The A/Cs are working in overdrive. The dog days of summer are upon us. Humidity levels are high. Sunburns have left their marks by way of curious tan lines on our bodies. We're still getting to work, aren't we? We hope you've got one more vacation in the queue as the season winds down, but, maybe you're saving it for fall, which might be a smarter play.

Anyhow, in this month's issue of the Gateway we have a feature penned by our friend Salvador Ordorica who put together some very interesting thoughts around the potential language gaps that exist in our shop environment. The piece is entitled "Language Diversity, Localization, and Manufacturing." We came away with some incredible insights to think on and we hope you do too. We owe it to our workforce to remain as inclusive as possible, so we're hoping this article helps point you in some solid directions.

The second piece is on the benefits of automated punch and die maintenance. Not a new topic, but a fresh take on how this practice boosts productivity, and a new solution on the market that can help with efficiencies and extend the life of our expensive machinery.

If you've got a story you'd like to share, we'd love to hear it. Send us anything you've got, and we'd be happy to consider it for publication in the pages of this magazine. If you have an idea you'd like to check in with us first before dedicating time to it, by all means, reach out to chris@thegatewaymag.com and he'll set you straight on whether or not it's something we'd be interested in running. That said, he's interested in just about anything, so don't be shy!

This magazine exists to put the spotlight on YOU. So, take advantage of it. If you're not sure how it works or where to start, we can guide you. It's easy. It's painless. And it's effective. Just ask anyone who has had a spotlight published in the past. People are paying attention. So why not shift their attention to what you're working on and how your business can help them with theirs.

Kind regards,



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AUTOMATED PUNCH AND DIE MAINTENANCE SIGNIFICANTLY BOOSTS PRODUCTIVITY

Advanced rotary surface grinders speed maintenance, extend tool life, and decrease press downtime compared to traditional, labor-intensive grinding methods

Many fabricators have numerous high-volume, active punches and dies that must be properly maintained to keep them in peak condition. Regular maintenance improves the tooling's ability to deliver clean sheared, straight-cut edges and ensures the tooling will hold very tight dimensional part tolerances, which minimizes potential quality issues.

By performing this type of maintenance correctly and consistently, fabricators can save a considerable amount of time and money. This is so important that many shops resurface their tooling in-house for items such as rooftop punches, turret press tooling, ironworker tooling, progressive dies, die sets, carbide tooling, and stripper plates.

At most turret press operations, tooling is removed and taken apart, cleaned, and inspected to ensure optimal performance on the next production run. The punches and dies also benefit from surface grinding, so many fabricators consider it a central tenet of their maintenance programs.

Unfortunately, traditional surface grinders have a reputation for being time-consuming and labor-intensive, with most requiring continual monitoring by an operator. However, more advanced, automated options can speed the grinding process and allow shops to resurface their tools in minutes, instead of hours.

“To grind .010” off a tool during the sharpening process takes less than five minutes, says Mike Anderson, Industrial Product Manager at Winona, MN-based DCM Tech, a designer, and builder of industrial rotary surface grinders.

According to Anderson, surface grinding has many benefits, including substantially increasing productivity, extending tool life, and improving finished part quality.

“Allowing a tool to be used too long without sharpening can seriously degrade the tool,” explains Anderson, adding that tool life is a function of the number of hits and the material being punched.

“Sharpening by the rotary surface grinding method can decrease tool replacement tooling costs by as much as 40%. Additional time and labor can be saved by reducing or eliminating deburring operations,” says Anderson. “For these reasons, automated equipment can deliver a return on investment in as little as one year.”



Traditional tool maintenance challenges

Some shops send an entire set of tooling out to be sharpened by an outside vendor, forcing the company to invest in another set of tooling to back up the set being sharpened. Other shops discard the tooling when it is no longer effective, rather than sharpening it to extend the tooling’s life.

For in-house tool maintenance, a basic pedestal grinder may be sufficient, but it provides no indication of how much material is being removed. This method burns the tool, fails to create a sharp edge, and ruins the tool.

With conventional reciprocating surface grinders, the tooling is set in a fixture and a table traverses back and forth under the grinding wheel, an inefficient approach that requires many passes and much time. In a case where there are hundreds of tools to manage, an operator will spend an inordinate amount of time in front of the grinder, watching and adjusting feeds.

Older equipment also has relatively complex wheels and dials to control the grinder’s motion. These controls require considerable experience and manual dexterity to operate. Ultimately, operators must be experienced and understand all the nuances of each machine, which can become an issue as veteran machinists retire.

Considering the limitations inherent of conventional tooling maintenance, a growing number of manufacturers and machining shops are turning to a more automated approach.



The benefits of automated punch and die grinding

Technological progress in the industry has led to greater automation of punch and die grinders using an advanced rotary surface grinder platform. As an example, DCM Tech's Punch and Die Grinder (PDG), a 5-HP rotary table surface grinder, is a turnkey package with autofeed control, self-dressing CBN abrasives, through-spindle coolant, and universal fixturing that accepts Amada, Trumpf, Salvagnini, Finnpower, Weideman, Whitney, and other style tooling.

With this type of equipment, the table rotates with the workpiece held firmly in place beneath a vertical spindle. The grinding is not performed by the peripheral edge of the wheel, but rather through the entire diameter of the abrasive surface.

“With reciprocating table surface grinders, it is like trying to cut grass with a lawnmower on its side, using just the edge of the blade, instead of horizontally where the entire blade can cut a wide swath of grass. This is the reason a rotary surface grinder requires fewer finish passes, and the process is much faster,” explains Anderson.

The PDG's automatic feed also eliminates potential problems due to inconsistent manual operation and enhances operator productivity. Once an operator sets up the tooling to be sharpened and starts the machine, he can leave and tend to other work. The PDG will automatically stop after feeding the selected amount of material and shut down the machine on completion of the process.

“The automatic feed protects both the tooling and the machine from potential aggressive operator manual downfeed, and streamlines the process,” says Anderson.

To minimize the risk of burning the tooling, coolant is fed through the spindle from the middle of the wheel, and externally where the wheel meets the tool.

Fixtures are also required to securely hold the punch or die during the grinding process.

However, fabricating shops can waste precious production time if operators search through a hodgepodge of specialized fixtures for one that will function properly with the tooling.

“DCM fixturing is universal, accepting most turret tool shapes and sizes,” says Anderson.





and excessive downtime. Today, the automated features of advanced rotary surface grinders will streamline tool maintenance in a fraction of the time, dramatically improving productivity, usable tool life, and ultimately the bottom line.

“Fabricators can sharpen non-turret tooling also, including small die inserts, and experience equivalent time savings,” says Anderson. “Shorter turnarounds for tool sharpening means tools are back in service faster, and that is what it is all about – producing the most parts in the shortest time.”

In the case of the PDG, punches are held in place by a unique three-jaw chuck that easily fixtures tools from small punches to large dies. Standard tooling allows for sharpening of rooftop and shear angle punches up to 10 degrees. An optional quick mount magnetic chuck allows grinding of stripper plates, rectangular tools, and small dies.

To speed tool maintenance, the grinder utilizes a self-dressing CBN abrasive wheel, which produces new tool condition and performance.

When less automation is required in a more compact footprint for in-cell tooling maintenance, the company also offers the Mini PDG with a 1.5 HP motor and a manual feed handwheel. For large die maintenance programs, DCM offers rotary surface grinding tables up to 48” diameter.

Turret press operators have long relied on labor-intensive methods to maintain punch and die tooling that has contributed to slowed production

DCMTech **Rotary Surface Grinders**



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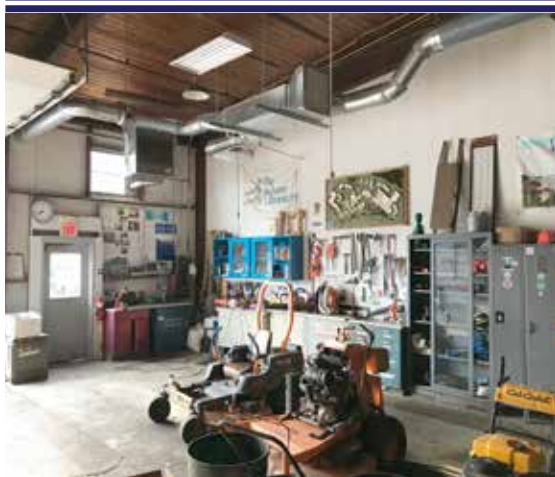
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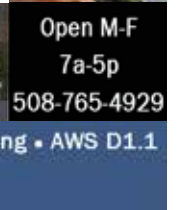
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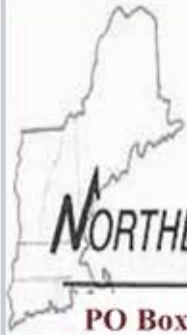
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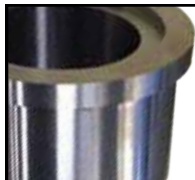
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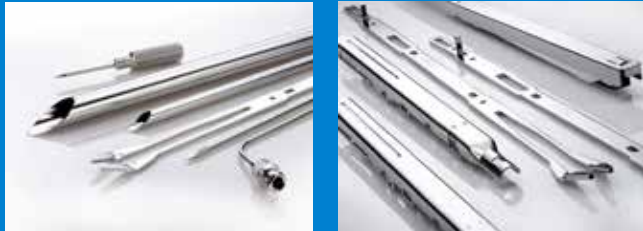
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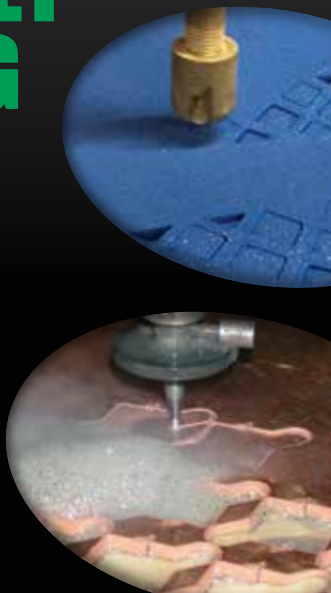
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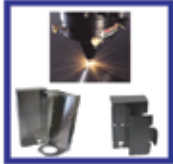
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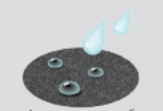
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LANGUAGE DIVERSITY, LOCALIZATION, AND MANUFACTURING



We recently received a note here at the Gateway Magazine Headquarters from our friend Salvador Ordorica. Salvador is the CEO and Founder of The Spanish Group who proposed an article dealing with a language gap in the manufacturing community, which we found particularly interesting as it can leave some of us in a vulnerable position if we're not adept to, well, adapting our management styles to best position the skillsets and communicative efforts of our workforce.

Salvador noted that a lack of diversity in languages is hitting manufacturers where it hurts the most— in the bottom line, according to data which you'll find cited below. Two statistics that act as the general overview of the impending dialogue are these:

1. *22% of companies reporting losing opportunity/income due to limited language skills/access*
2. *75% of manufacturers surveyed said they have need for diverse language skills*

The issue of a prospective language gap amongst our community is critical as, on a global level, 96% of the world's consumers and two-thirds of its purchasing power exist outside of the United States. Sure, the Gateway Magazine network is located here in the Northeast, but our customer sets aren't exclusive to our finite geographic locale. So, we thought the following article penned by Salvador would be of great interest to all of you, serving as a mode of thinking about ways to overcome the language gap and the areas that manufacturers here in our humble part of the world, across the country, and abroad.

Alright, let's get on with it:

Language Diversity, Localization, and Manufacturing

By Salvador Ordorica

Today's global economy can present a tangled web of supply chains and international markets that pose significant challenges for manufacturers. One of the outsized impacts currently experienced by manufacturing is a growing language gap that affects employers both at home and abroad.

In fact, a recent study (www.industryweek.com/talent/article/21119730/are-manufacturers-losing-out-on-business-due-to-lack-of-language-skills) by the American Council on the Teaching of Foreign Languages (ACTFL) found that one out of four US employers reported losing business due to a lack of language skills. This problem is particularly acute for manufacturers, 75% of whom cited an immediate need for more multilingual employees to bridge their language skills gap.

Factors that contribute to the language diversity gap

A lack of language diversity may be more of a significant concern in the US where language skills are not prioritized within the educational system. As more companies conduct business internationally, a lack of multilingual talent becomes a serious liability which can impact the ability to connect and communicate with potential consumers or clients.

For manufacturers, the language diversity gap isn't just a problem in foreign markets. It's also become a growing crisis domestically. In 2019, a survey conducted by language teaching and learning, not-for-profit organization ACTFL (www.actful.org), revealed that nine out of ten employers relied on U.S.-based workers who speak languages other than English. For manufacturers, this language diversity gap can lead to workforce challenges and even safety problems arising from miscommunication in the workplace.

Recommendations to bridge the language gap

Bridging the gap between the languages your workforce speaks and the language diversity your growing business needs is an essential effort for manufacturers. Here are a few steps to fostering a linguistically diverse workforce.

Analyze language needs

In order to define whether your organization could use more linguistic diversity, it helps to know the languages your workforce speaks. It's also worthwhile to connect with HR to consider how your recruitment process can cultivate a pipeline that meets both current and anticipated language needs.

Offer language training

Investing in language training as part of a professional development program takes time and resources but it can help manufacturers develop a linguistically and culturally diverse workforce. There's also evidence indicating that language training provides many other benefits to both the workforce and employers, such as increased employee satisfaction, retention, and productivity. A 2017 Entrepreneur article by writer Ryan McMunn cites research revealing that 70% of workers feel more confident in their work and interaction upon completion of language training.

Get creative

Expanding the linguistic diversity of your manufacturing workforce may mean thinking creatively about how to bring more people from different backgrounds to your leadership or management teams. Consider making some positions remote to recruit

more diverse applicants and foster a multilingual environment that encourages language learning.

Consider translation

Manufacturing and logistics rely on effectively communicating and executing complicated processes. In many cases, miscommunication as a result of language barriers can result in safety concerns, increased costs, legal liability, and lost revenue for manufacturers. Because developing a linguistically diverse workforce requires time, it makes sense to invest in professional translation services to fill immediate needs and address the most pressing problems.

Manufacturers who invest in developing a linguistically diverse workforce are not only bridging today's language diversity gap. These companies are positioning themselves for accelerated growth and success in an increasingly global market where the languages your company speaks make the difference and speak volumes about who and what you value.



About the Author

Salvador Ordorica

CEO and Founder of The Spanish Group

Salvador Ordorica is the founder and CEO of The Spanish Group LLC, an INC 5000 recognized enterprise offering expert translations in 90 languages globally. He is fluent in English, French, and Spanish and he is also learning Mandarin Chinese and Portuguese. He graduated cum laude with dual bachelor's degrees in Political Science and International Affairs from the University of California Irvine and has studied at Universidad Complutense de Madrid in Spain and Institut d'études politiques de Paris. He is an active member of honor society Phi Beta Kappa and a frequent traveler.

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“AMPLIFYING LEAN” THE THEME FOR THE 18TH ANNUAL NORTHEAST LEAN CONFERENCE

The GBMP conference, coming September 28-29, 2022, to Springfield, MA, will focus on identifying and sharing the causes of successful Lean transformation and how to overcome constraints to collaboration.

“It’s hard to argue with the ideal of everyone working together to achieve a common purpose, but true collaboration is a catalyst seen in very few organizations; we call it the Collaboration Effect. Respect for people and human development cannot be truly realized without it; and business results, too, will be limited. Lacking a spirit of collaboration, persons are marginalized in their own work groups, departments work at cross-purposes, managers compete for resources, customers and suppliers intentionally operate at arm’s length” said GBMP President Bruce Hamilton. “Eli Goldratt referred to three unique constraints to flow that inhibit collaboration: A) Logistical – layout, physical distance, time-zones, and other aspects of the physical world that limit communication. B) Behavioral – cultural norms that muffle the information flow and sow disengagement. C) Managerial – conventional policies and functional organization that discourage information sharing or out of the box thinking. (Eli asserted this constraint was 80% of the problem.)

Added Bruce Hamilton:

“While most organizations who aspire to enterprise excellence are thwarted at every turn by these constraints, there are leaders in every industry whose teamwork and collaboration amplify the continuous improvements of every individual in every part of the organization: Through the collaboration effect, one perspective is replaced by many, and good ideas develop further into incredible ideas. What can we learn from these organizations and thought leaders? This is the question we pose for our 18th Annual Northeast Lean Conference.”

The Northeast Lean Conference attracts more than 500 passionate Lean implementers every year, from the manufacturing, healthcare, and service industries. Lean practitioners from the front lines to the back office attend with the goal of networking, benchmarking, sharing, and learning all things continuous improvement and Lean – to get the tools, knowledge, inspiration, and confidence they need to bring their organizations to higher levels of operational excellence.

The annual event is ideal for executives and managers who play a role in driving Lean transformation AND provides exceptional educational benefits to front line team members, CI champions and change agents from all functional areas of any organization.

Featured keynote presenters include Lee Erickson, Chief Quality Officer at Tufts Medicine, Kevin Hancock, CEO of Hancock Lumber, and author of the book “The 7th Power – One CEO’s Journey into the Business of Shared Leadership”, Ken Snyder, Executive Director of The Shingo Institute, and Bruce Watkins, President & General Manager of KARL STORZ Endovision.

There will be more than 35 breakout sessions in five tracks: Strategic Thinking & Management’s Role in Fostering Improvement & Collaboration, Focus on People & Collaboration, Collaborative Workplaces & Lean Culture, and Innovations in Lean Thinking. There is also a track dedicated exclusively for those applying Lean in Healthcare. The final agenda was released earlier this month and is available to download from the website.

GBMP is excited to be able to offer the event once again in-person, at The MassMutual Center in Springfield MA, but all sessions will also be available to livestream for those unable to make the trip.

If you would like more information about The Northeast Lean Conference and GBMP, please contact Lela Glikes at 617-969-1396 ext. 2 or email at LGlikes@gbmp.org. Exhibitor and sponsor opportunities are still available. Read more and register at www.NortheastLeanConference.org

STEVE ONIK JOINS THE DAPRA MILLING SOLUTIONS TEAM

BLOOMFIELD, CT — Dapra Corporation is pleased to announce that Steve Onik has joined the Dapra Milling Solutions Team in the role of Zone Manager. Steve's efforts will focus on the deployment and management of the Dapra go-to-market sales strategy throughout the Midwest, Great Plains, and Mountain regions. In this role, he will be reporting to the Vice President of Sales and Marketing, Jim Henning, and collaborating across the entire milling solutions organization while expanding the sales organization in Illinois, Wisconsin, and Minnesota through manufacturer representation. He will be responsible for developing and growing both existing and new strategic channel partnerships within the Indexable milling, Workholding, and Hand tool product lines.

Steve has a bachelor's degree in marketing and brings over twenty years of industrial selling experience to Dapra. Steve has held roles including National Sales Manager with the Rohm Group and Director Sales & Marketing at Fraisa.

"We're very excited to welcome Steve to our team as our first zone manager." said Dapra VP Sales and Marketing Jim Henning. "His years of experience and go-to-market philosophy complement the customer experience transformation taking place at Dapra. His contributions will help evolve our business model and grow the Dapra impact and influence in the market. It's changes and additions like these that keep things fun and will make Dapra the supplier of choice!"

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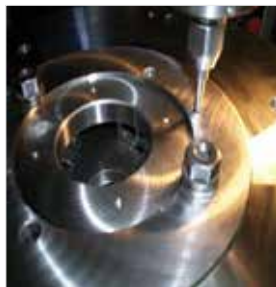
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