## PRODUCTION TAPPING SOLUTIONS

Foolproof results developed over five generations.

# IN-DIE TAPPING



## Thank you for looking at our brochure.

#### We have put this together for two reasons.

First, we want to help you decide if Jarvis and your company are a good fit. Jarvis is not the right partner for everyone, but if the fit is right, magic can happen.

Second, we want to tell you about what makes our Jarflos (form taps) so special. We have a great collection of both application experience and great technology that combine to improve quality and lower cost per hole.

Thank you for looking and if we are the right fit and you want superior Jarflos, please contact us. We want to work with you!

Sincerely,

Costikyan Jarvis

President and 5th Generation



## We have been manufacturing taps for a long time.

#### For over 115 years.

Throughout these 115+ years we have discovered a few things about ourselves: we make more custom, specially designed tools than standard, off-the-shelf tools; and we care about you and lowering your cost per hole.

Sure, "custom, specially designed tools" and "lowering your cost per hole" doesn't necessarily sound like two statements that would go together. But, in the case of working with us, it's true! That's the plus in making taps for so long, you learn to master these concepts of making customer specific tools that in the long run, cost you less. It's almost like magic or something.

In these next few pages, we will introduce you to this wizardry and tell you a little bit more about our process and our tools. Hopefully, this will help ease the process of you deciding on where to get your taps from next.

Founded in 1901 by Charles L. Jarvis; and was known as the "Ideal 1901 Manufacturing Company". It was located on a small site close to the Connecticut River which is now included in the Hartford Civic Center area. The original products of the Ideal Manufacturing Company were nutcrackers and nutpicks By 1910, the company had grown sufficiently to attract his son, Marshall N. Jarvis. That same year the entire operation was placed 1910 on a barge and shipped down the Connecticut River to Portland, CT. Three years later, to honor the work of Charles, the company was renamed The Charles L. Jarvis Company. William F. Jarvis joined his father, Marshall, and the company moved 1934 again to an even larger facility in Middletown, CT. The company started a program of expansion through acquisitions. 1949 This first acquisition moved the company into the cutting tool industry by purchasing a factory producing high speed steel taps. In 1954 the company shortened its name to **The Jarvis Corporation**. 1954 The 1950's and 1960's saw continued growth under the leadership 1955 of William. Acquisitions continued with the purchase of the Medfield Drill Company and other facilities were established in Lynn, MA and North Attleboro, MA. The marketplace's continued demand for Jarvis' quality and service enabled Jarvis to finance an aggressive 10-year plan that catapulted Jarvis into a major position in the cutting tool industry. 1965 To accomplish this goal, the Greenwood, SC facility was built in 1965. And the Rochester, NH facility was built in 1967. The decision to build in Rochester demonstrated the Jarvis family's attention to detail. Jarvis had, and continues to have, a customer 1967 base around the world and across North America. Before the creation of FedEX and UPS Next Day, shipments were done through the U.S. Postal Service. In 1967, US Postal Service trucks started their daily pick-up route in Rochester and ended at Logan Airport in Boston, MA. This daily route enabled Jarvis to provide Next Day shipments to the Los Angeles market and other points across the United States. Costikyan Jarvis (son of Marshall N. Jarvis, II) has been with Jarvis Cutting Tools since 1992. He began his career as an Application Engineer and has held a number of positions in 1992 engineering, operations, and sales. Rebecca Jarvis (daughter of Marshall N. Jarvis, II) joined the company in 2012 as a Process Engineer and Health and Safety Coordinator. She has a Bachelor of Arts from Claremont McKenna College and a Bachelor of Science from Columbia University School of Engineering and Applied Science. (In 2014, she was promoted to 2012 Manager of Precision Grinding and Health and Safety) In January, 2015, Costikyan was promoted to President. Costikyan is the 5th generation Jarvis to be an owner/manager. Costikyan is a graduate of St. Lawrence University and the Harvard Business School. Also in 2015, Rebecca was promoted to Vice President of Manufacturing and Compliance.

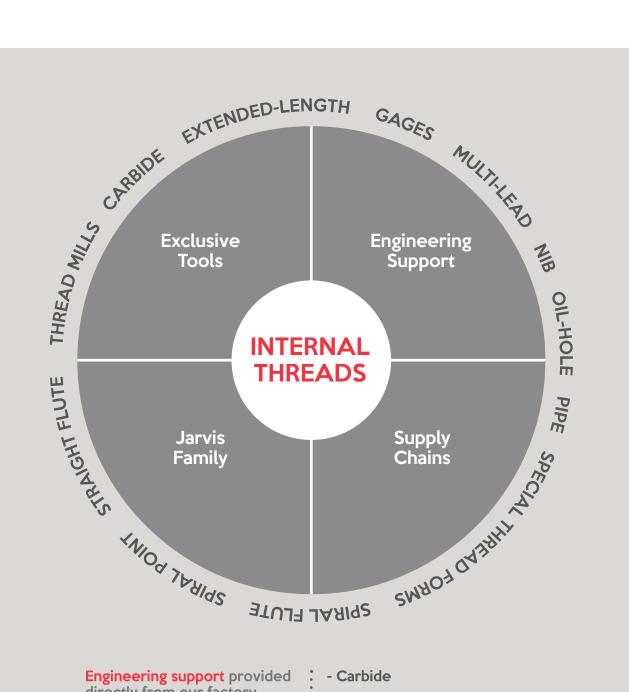
### We started with, "Why?"

#### Why have we been manufacturing taps for a long time?

That is a great question. We would ask ourselves this all of the time. And the answer that we would always come up with would be, "Manufacturing taps is what we do, it's who we are, it's our passion". Which, over time, that morphed into, "Internal Threads are our passion". Great answer, right?! Not really...

It's definitely great that we know what our passion is, and that we have it printed on a few flyer's/brochures, but how does knowing, *our passion* help you? Or how does it make this whole experience better *for you*? It doesn't. You, are what matters. And your needs and what you experience matters more than what we deem our passion to be.

This newfound thought is what brought us to where we currently are, "We are your production tapping solution." "Production Tapping Solutions. Foolproof results developed over 5 generations". Now THAT, is something that is more useful and beneficial to you.



**Engineering support provided** directly from our factory engineers.

Supply chains customized to provide you tools when you need them.

Tools designed and manufactured exclusively for you and your application.

Become a part of the Jarvis family, we have been partnering with customers for 115 years and counting.

- Carbide
- Extended Length
- Gages
- Multi-Lead
- Nib
- Oil-Hole
- Pipe
- Special Thread Form
- Spiral Flute
- Spiral Point
- Straight Flute
- Thread Mills

## Who is this, "you"?

#### You. And others like you, are that you!

Our customers want a competitive advantage. And gaining an advantage in this competitive industry is not always easy. It requires work, discipline, and more work; it requires both you (aka the customer) and us (aka the tooling supplier) to define the objective, test the options, measure the results, and implement the solution.

You, are that customer that has production tapping needs, and we want to be that production tapping solution! This is how it all ties into the beginning part of this booklet, we make the custom tools that are the perfect fit for you and your needs, while doing that we lower your cost per hole, and you are now a part of our family, like those shown on this next page. There's the wizardry we were talking about from before.

Are you interested in being a part of this?







































### **Our In-Die Taps!**



#### **AUTOMOTIVE**

The Automotive Industry is full of threaded holes. Jarvis has years of experience designing, manufacturing, and supplying taps for a variety of products including engines, transmissions, steering components, and fasteners.

Our products are relied upon the OEM's Tier 1 and Tier 2 manufacturers who require the highest quality, most consistent, and best productivity from their suppliers.

Examples of the parts are: Door Hinges, Expansion Nuts, Hose Clamps, Panel Nuts, Seat Adjusters, Seat Brackets, and U-Nuts.



#### **ELECTRICAL**

The Electrical Industry's process and products have many unique challenges. Jarvis understands the process requirements driven by Ettco Notches, In-Die Tapping, and secondary tapping of stamped holes.

We know the product demands of electrical boxes, conduit, and enclosures. Jarvis has decades of experience with galvanized steel, copper, brass, and aluminum, and our designs are proven to provide the productivity and quality that our customers require.

Some of these parts that we excel in are: Copper Lugs, Rack Rails, and Switch Plate Stampings.



#### **APPLIANCES**

What's in common with these? Making coffee, washing your clothes, or mowing the lawn? They all have threaded holes where Jarvis supplies the taps!

From leveling fixtures to covers, to assembly brackets, they all have tapped holes that need a cost effective solution. Jarvis provides industry leading cost-per-holes solutions for a wide variety of industrial customers.



### Features:

#### Coating:

Jarvis' most cost-effective solution is to purchase our own coating system. And this is just what many of competitors have done but not Jarvis. Why? Our goal is to provide the optimal coating for the application. As a result, we work with a group of coating companies. Each company has their own coatings and is constantly working to bring new coatings to the market. Because we are a valued customer of many coating companies, we have access to the best coatings and are not committed to only one system.

So if a single layer coating is what you need, we have a great, cost-effective option. If your application could benefit from a multi-layer coating, we have lots of options.

Whatever will optimize your application, we can provide the solution.

#### **Geometry:**

The geometry starts with the application.

First, we look at the part print. What are the requirements of the part? How many full threads are specified? What is the tolerance for the pitch diameter and minor diameter?

Second, we understand the tapping process. What material is being tapped? What cycle time do you want to achieve? What machine tools are being used? What lubrication is used?

Finally, our engineers combine all the options to achieve the optimal results. How many lobes and coolant grooves (Lube Grooves) should there be? What should the reliefs be? What should the shape of the relief look like?

The result? A tool geometry that is optimal for your application. And because we make exclusive tools, this geometry and Jarvis part number is just for you.

#### **Heat Treatment:**

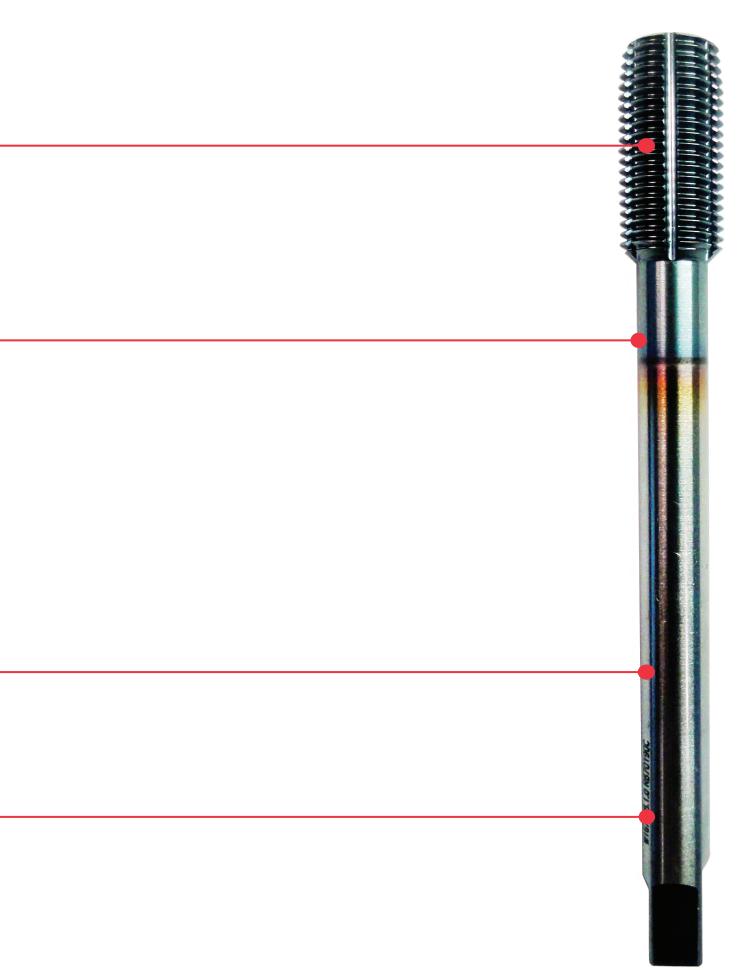
Our heat treat department has two goals. First, we want to give our customers the optimal combination of toughness and hardness. Second, we want each lot to have the identical heat treat properties (or characteristics).

Jarvis uses NC furnaces to monitor and control the entire heat treat process. We have in-house designed software that tracks each lot and insures that we provide our customers a consistent and optimal heat treat.

#### **Base Material:**

Jarvis offers multiple grades of conventional and powdered steels. Using the different steel grades allow us to provide the optimal combination of hot hardness and wear resistance depending on the application.

Jarvis works directly with steel mills in the United States and Europe.



#### **PERFORMANCE SERIES**

This In-Die Performance Series uses our VHP-G, which is our highest performing powdered material; and uses our standard forming tap geometries and coatings for high performance.

Part ID	Description	Class of Fit	PVD Coating	List Price
R868805C	M5 X 0.8 D7B 4LG JARFLO PRONIC	6H	TiCN	\$32.82
R870469C	M5 X 0.8 D9B 4LG JARFLO PRONIC	6HX, 6G	TiCN	\$32.82
R868806C	M6 X 1.0 D8B 4LG JARFLO PRONIC	6H	TiCN	\$34.49
R868806T	M6 X 1.0 D8B 4LG JARFLO PRONIC	6H	TiN	\$34.49
R870480T	M6 X 1.0 D10B 4LG JARFLO PRONIC	6HX, 6G, 7H	TiN	\$34.49
R870480C	M6 X 1.0 D10B 4LG JARFLO PRONIC	6HX, 6G	TiCN	\$34.49
R870153T	M6 X 1.0 D11B 4LG JARFLO PRONIC		TiN	\$34.49
R870153C	M6 X 1.0 D11B 4LG JARFLO PRONIC		TiCN	\$34.49
R868808C	M8 X 1.25 D9B 4LG JARFLO PRONIC	6H	TiCN	\$45.66
R868808T	M8 X 1.25 D9B 4LG JARFLO PRONIC	6H	TiN	\$45.66
R870491T	M8 X 1.25 D11B 4LG JARFLO PRONIC	6HX, 6G, 7H	TiN	\$45.66
R870491C	M8 X 1.25 D11B 4LG JARFLO PRONIC	6HX, 6G, 7H	TiCN	\$45.66
R868810T	M10 X 1.5 D10B 4LG JARFLO PRONIC	6H	TiN	\$55.68
R868810C	M10 X 1.5 D10B 4LG JARFLO PRONIC	6H	TiCN	\$55.68
R870492T	M10 X 1.5 D13B 4LG JARFLO PRONIC	6HX, 6G, 7H	TiN	\$55.68
R870492C	M10 X 1.5 D13B 4LG JARFLO PRONIC	6HX, 6G, 7H	TiCN	\$55.68

#### **ULTRA PERFORMANCE SERIES**

This In-Die Ultra Performance Series uses our VHP-G, which is our highest performing powdered material; this series also has an enhanced geometry and surface finish for ultra performance.

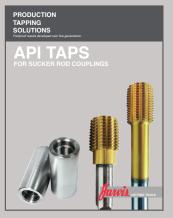
Part ID	Description	Class of Fit	PVD Coating	List Price
R873004C	M6 x 1.0 D11 5LG JARFLO PRONIC		TiCN	\$52.37
R870499C	M6 x 1.0 D10B 5LG JARFLO PRONIC	6HX, 6G, 7H	TiCN	\$52.37
R870166C	M6 x 1.0 D11 5LG JARFLO PRONIC	6H	TiCN	\$52.37
R870168C	M8 X 1.25 D9B 6LG JARFLO PRONIC	6H	TiCN	\$69.33
R870296C	M8 X 1.25 D11B 6LG JARFLO PRONIC	6HX, 6G, 7H	TiCN	\$69.33
R870280C	M10 X 1.5 D10B 6LG JARFLO PRONIC	6H	TiCN	\$84.54
R870170C	M10 X 1.5 6HX-D13 6LG JARFLO PRONIC	6HX, 6G, 7H	TiCN	\$84.54

#### **WE ARE MEMBERS OF THESE TRADE ASSOCIATIONS:**



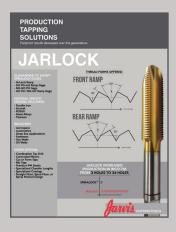
#### Other products available from Jarvis Cutting Tools:

We can mail you these brochures / flyers directly, or you can access them on our website. Go to, www.jarviscuttingtools.com and all will be under the "Literature" tab.





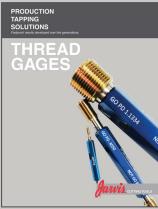












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