

# Shaking Hands in Indianapolis

## Manufacturers Set to Talk with Buyers at Gear Expo

Matthew Jaster, Senior Editor

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**The inbox is obnoxious.** This magazine is guilty. You're guilty. We're all guilty of spending a little too much time at the keyboard, iPad or smart phone checking mail, sending mail and deciphering text messages from our sons and daughters. I'm worried that our collective thumbs are going to fall off sometime before 2015.

Fortunately, we haven't forgotten what it's like to hold an *actual conversation* with another human being. The upcoming Gear Expo, taking place in Indianapolis from September 17–19, gives the gear industry an opportunity to convene in one location and talk shop face to face. This is extremely valuable in 2013 when surfing, sharing, linking, tweeting and posting is nice and everything—but isn't nearly enough.

There were approximately 50 gear manufacturers that participated in the 2011 Gear Expo held in Cincinnati, Ohio. This number is closer to 75 (so far) for the 2013 show in Indianapolis.

"We have a strong number of gear manufacturers that will be there to talk with gear buyers. The interest level in Gear Expo continues to increase," says Jenny Blackford, AGMA director of marketing and communication. "I'm happy to report that the 2013 show will be 20 percent larger than the show in Cincinnati."



N.K. "Chinn" Chinnusamy explains his products during a previous Gear Expo show.

"We want these customers to become aware of the fact that we're a full service manufacturer, in addition to our gear making capabilities."

**JAMES MANNING**, STD Precision Gear

## Indianapolis To-Do-List

So why should you attend Gear Expo if you're in the business of buying gears? First, it's rare to find so many gear manufacturers under one roof. This show provides a unique opportunity to discuss capabilities, technological developments and future markets for gears and geared products. Instead of communicating via phone or e-mail, gear buyers can discuss the complex components they need with some of the engineers that make them. It's not unheard of to find a couple of engineers tucked away in a corner of a booth trying to resolve a manufacturing challenge onsite.

"As in years past, our goals for the show are to meet new potential customers, inform them of our areas of expertise, and find ways to integrate our



Arrow Gear has a long history of producing high precision gearing for aerospace systems.

expertise with their business needs," says Joe Arvin, president and COO of Arrow Gear.

"We're planning to meet with existing and candidate customers and suppliers," says Tony Miller, vice president of sales and marketing at Fabco Automotive Corp. "Loose gear alternatives to improve cost and lead time will be discussed during the show."

"We hope to access the spiral bevel gear market in the United States," says

Vincent Chen, sales executive at Yager Gear Enterprise Co., Ltd. "We would like to have an opportunity to discuss the present as well as potential business in this market during Gear Expo."

James Manning, president at STD Precision Gear and Instrument, hopes to gain recognition and RFQs from potential customers for the complex geometry work the company produces. "We want these customers to become

aware of the fact that we're a full service manufacturer, in addition to our gear making capabilities. We are Nad-cap accredited for heat treating (PH Stainless Alloys) and chemical processing (passivation) adding depth to our capabilities as well as our quality management system."

"As with any exhibitor, we hope to get more exposure and awareness to our company and potentially find new

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opportunities to support our business," says Mike Goza, general manager at First Gear Engineering and Technology.

Tony Werschky, sales manager and partner for the Delta family of companies (Delta Gear, Delta Research and Delta Inspection) would like to build better brand awareness to leaders in the industry and to engineers and buyers during Gear Expo. "We'd also like to maintain the relationships we currently have not only with our customers but our suppliers and look to develop at least one large new relationship with a prospective customer," Werschky says.

## The Exhibit Hall

The 2013 show at the Indiana Convention Center will look nothing like the Gear Expo that took place in this building in 2009. AGMA is utilizing a new section of the convention center and the layout has changed. "The move brings us a little closer to the restaurant and entertainment district, AGMA's Blackford says. Those that attended the



Delta Gear has been making master gears, spline gears, aerospace gears and automotive prototype gears since 1964.

2009 show in Indianapolis will have an entirely new experience in 2013."

Blackford adds that the entire gear manufacturing process will be well represented on the show floor. "It follows the gamut of operations you'll find in the gear industry, everything from forging to inspection to heat treat. Plus, there's an increased presence for gear manufacturers."

These gear manufacturers will be displaying a wide variety of new products/technologies and focus on educating the entire industry.

"This year, Arrow Gear will feature an interactive virtual tour which will be displayed on a large TV monitor. Visitors to the booth will be able to control the navigation of the virtual tour to explore 360-degree panoramic images of all the major areas of our plant. In addition, the virtual tour will also feature numerous videos on points of interest," Arvin says. "We feel this tool will provide a comprehensive overview of the extensive level of technology available from Arrow. It should also be noted that the virtual tour is available through Arrow's website and we will be using this to serve as a learning platform for young people who are contemplating careers in high precision manufacturing. To accomplish this we are promoting the virtual tour to middle schools, high schools, junior colleges as well as other organizations in an effort to engage a wide range of career counselors, educators, students, and their parents."



Photo courtesy of Delta Gear.

## Show Dates

**Tuesday 9:00 am–6:00 pm**

*Networking Reception: 5:00 pm–6:00 pm*

**Wednesday 9:00 am–5:00 pm**

**Thursday 9:00 am–4:00 pm**

### WHERE

#### Indiana Convention Center

100 S. Capitol Avenue

Indianapolis, IN 46225

Phone: (317) 262-3400

*(Note that a weather-proof pedestrian connector allows guests to walk from the Indiana Convention Center to 12 premium hotels including the Westin, Hyatt, Marriott, Conrad, Omni, Crowne Plaza at Union Station, Embassy Suites and JW Marriott.)*

## Gear Expo 2013 Schedule

### Saturday, September 14

Registration Open 10:00 am – 5:00 pm

### Sunday, September 15

Fall Technical Meeting 7:00 am – 5:00 pm

Registration Open 7:00 am – 5:00 pm

### Monday, September 16

Fall Technical Meeting 7:00 am – 5:00 pm

Registration Open 7:30 am – 6:00 pm

### Tuesday, September 17

Fall Technical Meeting 7:00 am – 5:00 pm

Registration Open 7:30 am – 6:00 pm

Training School for Gear Manufacturing  
8:00 am – 12 noon

Where Do I Start? The Preliminary Gear Design Thought Process 8:00 am – 4:00 pm

Exhibit Hall Open 9:00 am – 6:00 pm

Why Bearings Fail 1:00 pm – 5:00 pm

Networking Reception 5:00 pm – 6:00 pm

### Wednesday, September 18

Registration Open 7:30 am – 5:00 pm

How to Organize and Manage a Failure Investigation 8:00 am – 4:00 pm

Exhibit Hall Open 9:00 am – 5:00 pm

### Thursday, September 19

Registration Open 7:30 am – 4:00 pm

Inspection Criteria for Gearboxes 8:00 am – 4:00 pm

Materials Selection and Heat Treatment of Gears 8:00 am – 4:30 pm

Exhibit Hall Open 9:00 am – 4:00 pm



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"Our goals for the show are to meet new potential customers, inform them of our areas of expertise and find ways to integrate our expertise with their business needs."

**JOE ARVIN, Arrow Gear**

"We will be displaying examples of the work we have manufactured over the years," says Manning from STD Precision. "Very complex geometry with tight tolerances that is both very interesting and diverse. We also want to get the word out that we are in the process of setting up a liquid salt bath Ferritic Nitrocarburizing line to meet the requirements of AMS 27533 and that we intend to apply to PRI for a Nadcap process audit."

"Our sister company Delta Inspection is a contract inspection company with a main focus on gear metrology," says Delta's Werschky. "It is a 17025 accredited gear inspection lab through

A2LA. We will be presenting its capabilities and talking to customers about how Delta Inspection can help them with engineering development, part sorting, quality control and consulting services. In addition to Delta Inspection, our other sister company, Realtrac, will be launching a new job tracking software available for sale to the public which is ideal for gear and heat treatment. Realtrac, who is a veteran in Enterprise Resource Planning and Job-Tracking software industry for over 25 years. Known as "the Easy Resource Planning" software, it is very simple and intuitive and yet still a very powerful, in-depth planning software.

Anyone who stops by our booth can enter a daily drawing for free iPad."

The Yager Gear Enterprise booth will showcase the spiral bevel gear work the company provides for electric and pneumatic tools, machine tools, agricultural machinery and automobiles. "At Gear Expo, we'll show the spiral bevel gear with the technology of CNC and lapping from small to big module," says Chen.

First Gear Engineering and Technology hopes to get more exposure during Gear Expo and find new opportunities to grow. "We will basically feature a video of our CNC hobbing and shaping operations," says Goza. "First Gear representatives will be available at our booth to discuss our gear manufacturing capabilities and the services we can provide our customers."

### Education and New Technology

One way AGMA is increasing trade show attendance is to bring more new and mid-level employees into the mix



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by offering comprehensive training and educational sessions. AGMA's Blackford credits increased interest in Gear Expo to the organization's push to create more educational opportunities at the show. This means a full slate of sessions during the Fall Technical Meeting and a diverse lineup for the Solution Center during Gear Expo.

Many exhibitors, including Arrow and Delta, see the advantages of Gear Expo from an educational standpoint.

"Several of our new engineers will be attending Gear Expo this year for the first time. We feel this is crucial to building their experience and adding to their knowledge base. Having face-to-face discussion with others in the gear industry and those who provide services we may use is highly valuable as it leads to a broader appreciation for the industry as a whole," Arvin says. "I would have to say that industry trends are always at the forefront of people's minds during events like Gear Expo. Learning about areas that are healthy and those that are not are critical to competitive planning. Second only to industry trends is the issue of new technology. Remaining competitive in the gear industry requires that we carefully assess any new technology as soon as it is available," Arvin says.

"It's important to educate yourself in the latest technologies and look for ways to differentiate yourself from your competition," Werschky says. He adds that Gear Expo will provide a great opportunity to engage in discussions on isotropic superfinishing (ISF) and its effect on the overall performance of gears.

"I think there will be discussion regarding the future gearboxes of the auto industry with relation to multi-speed electric car transmission vs. highly engineered electric motors. Also, companies like Gleason and Ionbond continue to come out with new specialty coatings for the tool industry which offer significant cost saving opportunities for our high volume production gear cells," Werschky adds. "I am interested in learning more about these new technologies and which coatings work best with the materials that we are machining."

## Crunching Numbers

A highlight of Gear Expo is the economic forecast keynote that takes place on Tuesday, September 17<sup>th</sup>. *Gear Technology* decided to get a head start on the economic discussion by asking a few of the gear manufacturers to report conditions today and what they believe it will look like in the near future.

"Companies associated with the auto industry are much more excited about

what lies ahead. This is partially due to a few things. According to the Polk Research, the current age of automobile and truck fleets are on average 11 years old and car makers are struggling to increase production, dealers and their overall network to keep up with the renewed demand from the crash of 2009. And although demand is still sluggish for electric vehicles, there is a steady growth in popularity towards hybrid vehicles where you can provide fuel

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economy without excluding performance," says Werschky at Delta. "Development of more fuel efficient transmissions has given rise to opportunity in the automotive gear business. This may start to wean a little as many of these newly developed transmissions will soon go into production."

There have been mixed results for the launch of the Boeing 787 in the aerospace industry, he adds.

"This fly-by-wire aircraft's reputation has been damaged by production delays, temporary groundings and FAA warnings. Additionally, Boeing and their OEM supply base produced roughly 30 percent of the aircraft overseas, which has helped cause the delays and quality concerns. What we have seen at our Delta Gear facility where we make predominantly aerospace gears is that some of this work is returning back to the states. Unfortu-

nately, the OEMs want the pricing they received in the third world economy with the quality that they are accustomed to receiving here in the states. We should continue to see the aerospace gear market continue to stay steady for now," Werschky says.

"There is the ever-increasing demand for meeting rigid specifications while keeping prices low," adds Arvin at Arrow Gear. "Arrow has met this challenge through an aggressive focus on productivity, process improvement, and the latest technologies. Arrow's sales have increased nearly 30 percent in the last year and we are anxious to communicate to the industry how we are keeping pace with the leading edge of gear manufacturing."

Others exhibiting at the Expo have mixed feelings for the economic forecast.

"We expect an increase in the automotive sector but a decrease in our aerospace business," adds Albers at Euro-Tech.

"Our business to date has been fairly strong, exceeding sales thru the same period in 2012. It's anyone's guess but hopefully there will be continued improvement in the economy and the result will mean increased business opportunities in 2014 for the overall gear industry," Goza says.

"Our business is strong so far in 2013," says Manning at STD Precision. "I am cautiously optimistic about expectations for 2014."

"Business in 2013 is similar to 2012," says Chen at Yager Gear. "We expect that the business is going to increase 10 to 15 percent in 2014."

"Related to the overall market, our outlook for the next year is for flat growth due to a trickle down reaction to new higher-tax legislation implemented in 2013 that most of which we will start to see its effects on the economy by the beginning of 2014," Werschky adds.

### How About a Handshake and a Smile?

The average gear engineer can find plenty of relevant activity at various trade shows (see CIMT, EMO Hannover and IMTS). At most of these ex-

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hibitions, however, you'll find pockets of exhibitors and/or attendees that play a role in the gear industry. You'll also find exhibitors, educational sessions and keynote addresses that have little or nothing to do with your business. Frequently, it's more about cutting through the fat and searching for the exhibitors and programs relevant to your business.

Gear Expo is the gear industry. It boasts the companies involved in every aspect of the designing, manufacturing and selling gear and geared products.

"Obviously, for those of us who have been with Gear Expo from the start, are keenly aware of how participation has increased from year to year. Having an increasing presence by suppliers to the gear industry further enhances the experience," Arvin says.

While an added social media presence will be welcome at Gear Expo 2013 (AGMA is debuting the official Gear Expo App and monitors displaying social media updates will be featured throughout the show), it really comes back to the handshakes in Indianapolis.

"It's an opportunity to meet old friends. You meet some great people during Gear Expo and you come back to the next show and recognize all these faces," says Charlie Fischer, AGMA vice president/technical division. "It's a great way to establish a lifelong bond with your peers in the industry."

#### For more information:

AGMA (booth 1109)  
Phone: (703) 684-0211  
[www.agma.org](http://www.agma.org)

Arrow Gear (booth 801)  
Phone: (630) 353-9258  
[www.arrowgear.com](http://www.arrowgear.com)

Delta Gear (booth 800)  
Phone: (734) 525-8000  
[www.delta-gear.com](http://www.delta-gear.com)

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Phone: (260) 490-3238  
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Phone: (886) 4 24076223  
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"It's important to educate yourself in the latest technologies and look for ways to differentiate yourself from your competition."

TONY WERSCHKY, Delta Gear

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- Right Angle Worm Gearboxes** (Green label)
- Helical Inline Gear Reduction** (Orange label)
- Bevel Helical Gearboxes** (Blue label)
- Mechanical Speed Variators** (Red label)
- Planetary Gearboxes** (Purple label)
- Shaft Mounted Gearboxes** (Green label)
- Right Angle Worm Gearboxes** (Pink label)
- Bevel Gearboxes** (Teal label)
- Combination Right Angle Worm Gearboxes** (Dark blue label)
- Shaft Mounted Helical Gearboxes** (Purple label)

In the center, two large motors are shown, labeled **HPI** and **HPS**, with the text **High Performance Permanent Magnet Design Metric Motors** below them.

A QR code is located in the bottom left corner of the collage.

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