

Celebrating



Years

Some Things Change, Some Things . . .

"We will be an ongoing gear clinic, ranging from the basics to the lead-edge of technology."

Publisher Michael Goldstein made that promise in *Gear Technology's* first issue: May/June 1984. Twenty years later, we continue to keep our word by publishing top-notch technical articles, as well as our industry's latest news. Every issue, we present the best of what's available from the industry's leading authorities to help you be more productive, be more efficient and better understand the technology used to manufacture gears and gear drives.

Randall Publishing's purpose has stayed the same, even as we expanded the ways we achieve that purpose.

In 1984, we launched *Gear Technology* to educate the gear manufacturing industry. The magazine's pages featured articles, news and advertisements. All the parts educated; they told readers about new and established processes and technologies for manufacturing gears, about people and events in the industry and about the many types of gears available from gear manufacturers.

By the mid-'90s, Randall Publishing had a new means for serving the industry as its ongoing gear clinic. That means was the Internet.

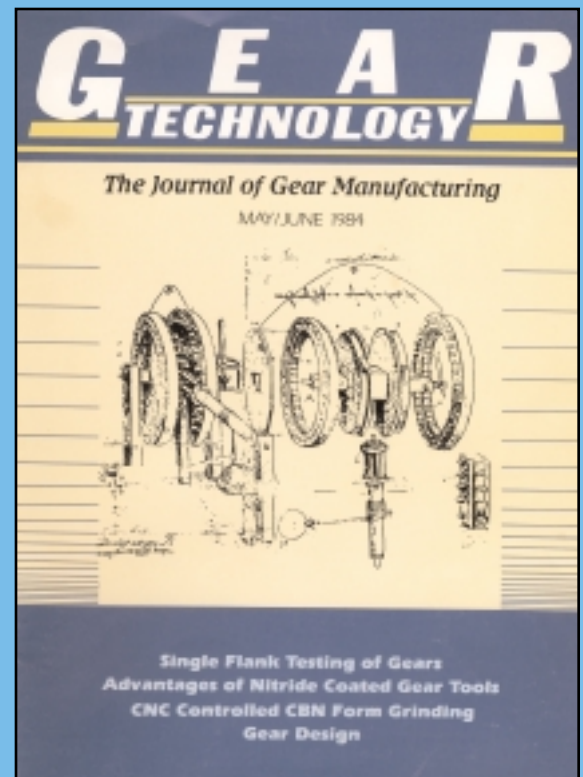
In 1996, we launched a website, *The Gear Industry Home Page*, at www.geartechnology.com to serve two groups among our readers: those who provided the machines, tools and other equipment and services for manufacturing gears and those who needed them.

In 1997, we launched *The Power Transmission Home Page* at www.powertransmission.com to serve *Gear Technology* readers who buy, sell and use gears, bearings, motors and other power transmission products and services.

Six years later, information technology allowed us to offer an online version, an exact duplicate of the entire magazine: departments, features, ads—everything.

In 2003, *E-GT* became available for free anywhere in the world, making it easier for *Gear Technology* to reach all the people in our increasingly global industry.

The next 20 years could bring even more startling transformations. But, while some things change, some things stay the same. And a promise made 20 years ago is worth repeating today: "We will be an ongoing gear clinic, ranging from the basics to the lead-edge of technology."



The cover of *Gear Technology's* first issue, the May/June 1984 issue.

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Some things change, some things stay the same.

For *Gear Technology's* 20th anniversary issue, we asked people and organizations involved in our first issue about how things have changed.

Some Things Change,

1. How has gear technology changed since mid-'84?



James S. Gleason, chairman, Gleason Corp.

"Productivity increases brought about by the huge increase in the application (almost universal) and sophistication (six axes of essentially simultaneous control) of numerical control technology."

"New tooling, carbide and coatings, coupled with higher cutting speeds result in huge gains in productivity."

Anthony M. Spinks, vice president, Parker Industries Inc.

"Improved steels have led to higher gear cutting speeds and reduced cost per unit. The same is true of coatings, which have seen greatly extended use along with new coatings offering ever-improving performance and more specific applications."

Robert E. Smith, gear consultant, R.E. Smith & Co.

"The development of CNC-type gear manufacturing machines and inspection instruments. The CNC gear manufacturing machines have used several improved technologies to increase production rates and product accuracy."

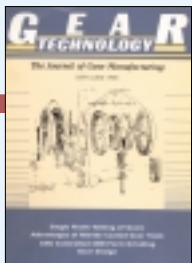
"Today's CNC gear inspection instruments are user-friendly, fast, very accurate, and can do a more thorough computer-aided analysis of data."

Peter Kozma, president, Liebherr Gear Technology Co.

"The emergence of dry hobbing machines, made possible by the development of PM-HSS. Dry hobbing has positive environmental impacts and provides a cleaner work area. Manufacturers using dry hobbing technology know that it also has significant financial benefits. Obviously, it eliminated the cost of the oil. In addition, by avoiding the need to clean each part before the next step in production or quality measurement, dry hobbing further reduces production cost."



**May/June 1984
First Issue of
Gear Technology**



**1986
Nintendo video
games are
introduced in the
United States.**



**1988
Compact
discs, CDs,
outsell vinyl
records for
the first time.**

**1985
"Dynasty," starring John
Forsythe and Linda
Evans, finishes as the
most popular show of
the '84-'85 TV season.**

**1987
Fox Broadcasting Co.
airs the first episode
of the TV show
"Married With
Children."**

But How?

2. How else has the gear industry changed since mid-'84?

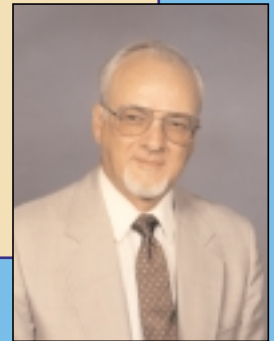
Anthony M. Spinks, vice president, Parker Industries Inc.

"The closing down of some gear plants, the migration of some operations from northern to southern U.S. states, and the outsourcing of gear production to other countries."

"A change in distribution channels with the development of integrated suppliers and their operations inside customer plants."

Robert E. Smith, gear consultant, R.E. Smith & Co.

"Downsizing. Many users of gearing have typically eliminated positions of gear engineering and expertise and have relied on outsourcing. This has caused a host of problems. Many times, their specifications are not up to date, correct or complete. They rely upon the company they contract with to provide good product. This company may then pass the job along to other suppliers. When product finally comes back, they don't have a clue as to the incoming quality. Then product problems result."



Peter Kozma, president, Liebherr Gear Technology Co.

"The gear industry's market has certainly expanded over the past twenty years. The main contributors to this expansion were changes in the automotive industry, such as the growing variation of models and an increased number of transmission speeds. Additionally, gears began to be used for new automotive applications such as timing gears, balance gears, camshaft adjustment gears, and for power-steering."



Diether Klingelberg, recently retired chairman, Klingelberg Group*

"The gear industry experienced a consolidation. Companies who were not ready to invest in the latest technology disappeared. Also the number of equipment and material suppliers was reduced. The companies with good management and financial strength have a bright future."

*Diether Klingelberg retired March 24 as chairman of Klingelberg Group.

1990
Musical duo Milli Vanilli, winner of the 1989 Grammy award for best new artist, is stripped of its Grammy after the public learns the men were lip-syncing to other people's singing.

1992
Andy Van Slyke, a Pittsburgh Pirate, became the first outfielder in almost 18 years to record an unassisted double play.

1989
"Batman," starring Michael Keaton, is the year's top grossing film.



1991
Nolan Ryan, 44, pitched his record 7th no-hitter, striking out 16 Blue Jays batters.



1993
Body piercing became more popular after actress Alicia Silverstone appeared in 1993 music video with a navel ring and tattoo.

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3. How will gear technology change in the next 20 years?

Diether Klingelberg, recently retired chairman, Klingelberg Group

"The tendency in technology is going to continue: more accuracy, more efficiency, more software driven, better process control, better tooling, in-line checking."

"Business will remain in the highly industrialized areas as long as the companies are ready to invest heavily in new methods and equipment."



Peter Kozma, president, Liebherr Gear Technology Co.

"We are expecting further advances in cutting tool lifetimes and increased operating speeds. This will be accomplished by improvements in the cutter's substrate and coatings. Cutting tool coatings will likely change from titanium to more advanced varieties such as zircon or gallium."

Anthony M. Spinks, vice president, Parker Industries Inc.

"There will be a move towards combining more operations, including hobbing or shaping, on one piece of equipment."

4. What else will change in the next 20 years?



Peter Kozma, president, Liebherr Gear Technology Co.

"There is also a recent technological movement towards eliminating gears in many products . . . The auto industry predicts passenger cars will be without gears within the next 10–15 years. This, however, is not to say that the gear industry is in for an eventual demise, since future technologies will certainly also create new markets for our industry. One example of this is the developing demand for transmissions in wind turbines."

"Globalization not only creates challenges for our industry but also creates new opportunities. Foreign developing economies will surely also increase the demand for gears."

David J. Burns, CEO, Gleason Corp.

"Globalization. On the equipment supply side, that globalization is well underway. It is also clear, from our perspective, that the notion of globalization is coming to the gear-manufacturing arena at an astounding rate."

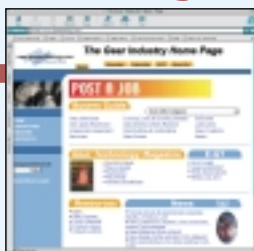
"Information technology is a huge enabler for this trend. People in really diverse geographic regions can now access information in real time, and then interface with each other in an almost virtual mode. All of that means that the companies that can quickly leverage their strategic advantages (price, quality, throughput) will gain increasing global market share."

1994
Lion King animals and Power Rangers were the most popular Christmas toys.



1995
"Braveheart," produced, directed and starring Mel Gibson, won the Oscar for best picture.

1996
Launch of The Gear Industry Home Page



1997
Launch of The Power Transmission Home Page

1998
Led by Michael Jordan and Scottie Pippen, the Chicago Bulls win their sixth NBA championship in eight years.



5. What effects has *Gear Technology* had in the gear industry during its 20 years?

Marty Woodhouse, vice president—sales, Star Cutter Co.
"Gear Technology has brought to the industry a tool for education."

David J. Burns, CEO, Gleason Corp.
*"There had been no worldwide voice for technological exchange within the gear industry. *Gear Technology* provided the first real periodical forum that gathered input from all over the world and made it readily available to anyone, anywhere. This was done in an impartial way, relative to region or company affiliation."*



Joe T. Franklin Jr., president, AGMA

*"The single most valuable service *Gear Technology* has provided has been in the area of dissemination of technical knowledge. The technical papers and articles are prized as guides to worldwide technological advancements. By opening the magazine to papers from international conferences, you have helped readers keep up with information largely beyond the reach of most."*

Peter Kozma, president, Liebherr Gear Technology Co.

*"By providing the industry a reliable source for current information, *Gear Technology* has made an invaluable contribution to all facets of our industry."*

6. How has the Internet affected *Gear Technology's* role as a source of technical information, news and advertisements about the gear industry?

Joe T. Franklin Jr., president, AGMA
*"*Gear Technology* embraced it as a way to get information to more readers and to cut the time—especially for the international readers—necessary for the delivery of the information. The Internet is just another way to help the market function efficiently and to disseminate the technical information that has become a hallmark of *Gear Technology*."*

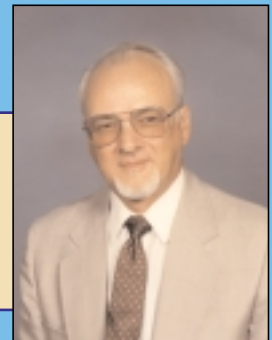
David J. Burns, CEO, Gleason Corp.
*"Hopefully, the Internet and *Gear Technology* [will] work in complementary ways to support the worldwide dissemination of technological information of the gear industry."*

Peter Kozma, president, Liebherr Gear Technology Co.

*"Through the use of the Internet, *Gear Technology* is able to reach a global audience."*

Robert E. Smith, gear consultant, R.E. Smith & Co.

"The magazine has been made available electronically, which is especially valuable to people in the overseas gear industry."



1999
Singer Ricky Martin's "Livin' La Vida Loca" finishes as one of the year's most popular hits.

2000
People celebrate the year 2000, which is widely viewed at the start of the new Millennium.



2001
The new Millennium really starts.



2002
Halle Berry and Denzel Washington make movie history as the first black actors to win both lead-role Oscars.



2003
E-GT launched with the January/February issue

2004