

# Bearings and Motors and Gears



Oh my. It's been another busy month here at *Power Transmission Engineering*, and we have another full issue for you.

This time around we have a focus on bearings, with plenty of great examples of applications and technology from the world's leading manufacturers. Of course, bearings are essential to power transmission and a core subject we cover every issue. But when it's the focus, we like to attack the subject from multiple different angles.

To start things off, Timken shares with us how they're using the latest software and analysis tools to design and manufacture quieter running bearings that address the modern NVH requirements of diverse applications like wind turbines, automobiles and paper manufacturing equipment (page 22).

Meanwhile, Schaeffler has unveiled their new end-to-end solution for monitoring bearings and other power transmission equipment. OPTIME is their wireless, battery-powered system that can measure temperature and vibration for condition monitoring across a whole plant (page 30).

And don't miss our *Engineering Showcase* special advertising section where leading bearing manufacturers describe their latest technologies and developments (page 26).

Lastly, there's plenty of new bearings-related information online, including our interview with Artur Rdzanek, global product manager for sensed products at ABB. Rdzanek describes the latest developments in ABB's condition monitoring system for bearings ([www.powertransmission.com](http://www.powertransmission.com)). Read it online at [www.powertransmission.com/blog/](http://www.powertransmission.com/blog/).

Other highlights this issue include our technical coverage of motor design. Don Labriola continues his series on hybrid step motors with an article that describes the techniques for measuring various motor parameters (page 54). And Clyde Hancock gives us a detailed FEA and design analysis of various configurations of coreless motors in his article, beginning on page 48.

Lastly, we couldn't claim comprehensive coverage of the power transmission space without excellent articles on gears. We're extremely grateful to our contributors at FZG for their paper on the condition monitoring of gear drives and the difficulties of obtaining consistent data sources to produce reliable, predictive results.

Also on the gear front, Senior Editor Matt Jaster has presented an overview of many of the excellent ways you can still offer your staff training in gear and gear drive technology, even in this era of travel restrictions and social distancing. His article, "Help Wanted," begins on page 38.

We strive to cover as much as possible each issue, so that no matter how you're involved with power transmission components, you'll find something that's interesting and useful.

Thanks for reading.