

Engineering Smart



Our theme for 2016 is “Engineering Smart.” Our goal as a publication is to help you engineer better systems, taking advantage of the latest in technology to create mechanical systems that last longer, save energy, cost less and increase performance. The way we do that is by bringing you the best information possible on the design and engineering of gears, gear drives, bearings, motors, couplings and related power transmission components and systems.

In fact, we like the idea so much that we’ve created a new department in the magazine called Engineering sMart (page 31). This is a special advertising section that includes many of the most important new products, technologies and processes in the power transmission world. Engineering sMart is a marketplace as well as a showcase of these important technologies. We hope you’ll check the section often for ideas about new products and services to help you make your own smart engineering choices.

In addition, we’re pleased to announce a collaboration with the Bearing Specialists Association. We’ve partnered with the BSA to help bring you timely, relevant and useful information about the technical aspects of bearings that will help you make smart choices when it comes to designing new equipment or replacing bearings in existing equipment. The first installment of a new column, *Bearing Briefs*, can be found on page 32 of this issue. This issue’s *Bearing Brief* deals with the subject of counterfeit bearings and the potential consequences of using them. We look forward to a long and fruitful partnership with the BSA, and we’re confident that you’ll benefit from the addition of their information to our pages.

We’re also pleased to announce a new column called *Field Notes* (page 34). In this special department, we’ll bring you tales from the field regarding successful implementations of new technology, transitions and upgrades of power transmission equipment and descriptions of other problems solved by experts in our industry. The BSA was kind enough to help out with this column as well, and this issue’s *Field Note* includes a case study on identifying bearing failure from Certified Bearing Specialist Guy Gendron of Timken Canada. If you have a short case study that demonstrates the idea of “engineering smart” and you’d like to contribute a *Field Note* for a future issue, please contact Senior Editor Matt Jaster via e-mail at mjaster@powertransmission.com.

But that’s not all. We have a great lineup of articles covering a wide variety of power transmission topics. This issue’s cover story is on mechatronics, and you can turn to Matt Jaster’s article on page 18 for insights from Bosch Rexroth, Schaeffler Group and SKF on the ways mechatronics is finding practical applications in heavy industrial applications. Plus, we have great pieces on gear drives (page 24), wash-down-duty electrical motors (page 28) and gear design (page 36), along with the third and final installment of our series on motor management best practices (page 46).

We wouldn’t be able to pull off the concept of “engineering smart” without all of our smart contributors, so we’d like to thank everyone who wrote for us this issue, as well as all those who were gracious enough to be interviewed by our editors. We’re always looking for more contributors, so if you have an idea you’d like to share, we’d love to hear from you, too. Send me an e-mail at wrs@powertransmission.com with your ideas.

Thanks for reading.

A handwritten signature in black ink that reads "Randy Stott". The signature is written in a cursive, flowing style.