

We've Got You Covered



Our goal with *Power Transmission Engineering* is to provide you with the most complete coverage of mechanical power transmission and motion control systems available anywhere. We home in on the details of the components that make things move to give you the best possible resource, whether you are a designer, buyer or end user of machinery for virtually any industry that uses power transmission components.

I'm pleased to say this issue has a little bit of something for everyone.

Starting with our focus on aerospace, we've taken a look at several key suppliers who provided the moving components for the Mars Perseverance Rover. Read Senior Editor Matt Jaster's article on page 32 to learn more about how Forest City Gear, maxon and Cobham Advanced Electronic Solutions all contributed motion components to this complex project where failure was not an option.

With Pack Expo right around the corner (October 23-26 in Chicago), we also have a focus this issue on packaging equipment. Bosch Rexroth has provided an excellent look at how smart mechatronic systems are helping provide plug-and-play systems for packaging machinery developers (p. 22). Also, we invite you to take a look at Senior Editor Aaron Fagan's Pack Expo preview (p. 26), highlighting many of the power transmission component suppliers who will be exhibiting at this year's show.

We also have some really solid technical content this issue, starting with "Noises in the Night," by our regular contributor and motion control expert, Don Labriola. In his article, Don details the causes of electric motor noise and what can be done to reduce it (p. 38).

We're pleased to welcome back Norm Parker, who has been contributing to the "Bearings Blog with Norm" feature

on our website since 2014. In his current article, Parker takes an in-depth look at bearing thermal speed rating and deciphering the differences between the standards and manufacturer catalog definitions (p. 42).

Lastly, we've got a serious research study from WZL-RWTH Aachen on the calculation of dynamic tooth root stresses in gears (p. 46).

Of course, that's not all. As always, we round out our coverage in our news sections by providing information on the latest technology from leading suppliers of power transmission components so that you can make informed decisions when it comes to buying or specifying the right gearboxes, couplings, motors and more.

Last issue, I implored you to consider writing for us. We're working hard to continue developing our roster of experts, and those efforts are definitely beginning to pay off. But I'd like to reiterate that suggestion by pointing you toward our 2023 Editorial Calendar and Contributor's Guidelines, which you can find online at powertransmission.com/adinfo. We welcome your contributions. Maybe next issue, you'll be one of the experts I'm talking about here.

Randy Stott

P.S. If you found this issue's content to be interesting, helpful and important to you, I urge you to renew your subscription by visiting powertransmission.com/subscribe2022.