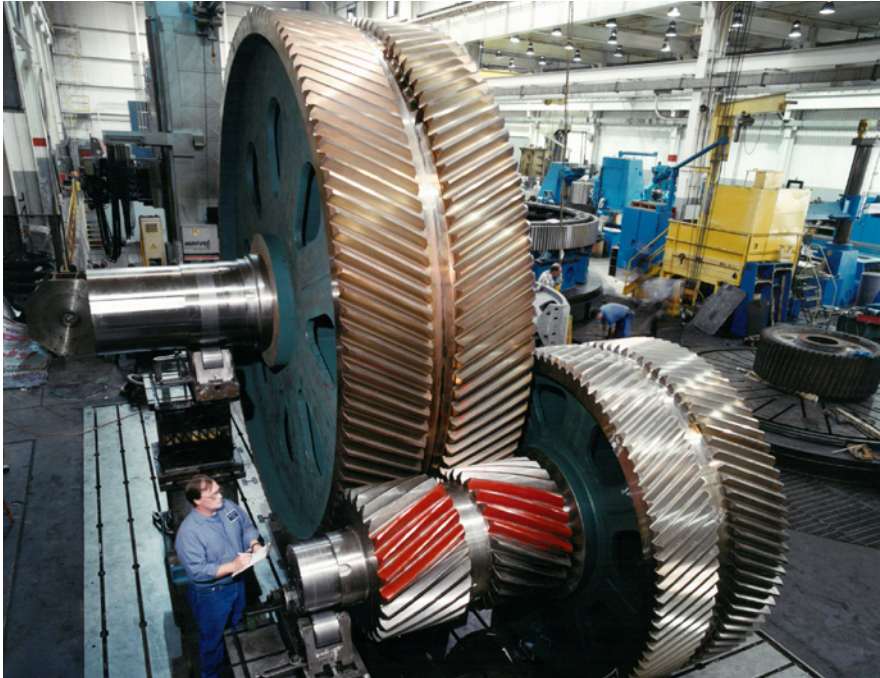


Seeking Standards Experts

Phillip Olson, AGMA Director, Technical Services

AGMA wants you to be involved in gear standards development. Committee meetings are a great place to network and collaborate with experts in the field, broaden your knowledge, capture technical expertise in writing, refine the standards you use, and see how your influence helps shape best practices throughout America and around the world. We are especially looking for experts to join four new standardization projects.



General example of a gear train being mesh checked with dye. (Photo courtesy of Horsburgh & Scott.)

From the AGMA Accuracy and Nomenclature Committee, a new project has been proposed to update a standard every gear engineer should be familiar with, ANSI/AGMA 1010-F14, *Appearance of Gear Teeth—Terminology of Wear and Failure*. This nomenclature standard identifies and describes the classes of common gear failures and illustrates degrees of deterioration. The current, sixth edition was published in 2014 with 89 detailed color figures showing gear failures over 81 pages. Proposed updates for the next edition include aligning nomenclature with ISO 10825 and ISO 15243, reorganizing clause numbers, and adding additional failure modes, including plastic and powder metal gear failure modes.

From the AGMA Metallurgy and Materials Committee an update to AGMA 930-A05, *Calculated Bending Load Capacity of Powder Metallurgy External Spur Gears* has been proposed. This information sheet has 78 pages and describes a procedure for calculating the load capacity of a pair of powder metal-urgy external spur gears based on tooth bending strength. Two types of loading are considered, repeated loading over many cycles; and occasional peak loading. Proposed updates for the next edition include aligning rating methods with the soon-to-be-published new edition of AGMA 2101 and MPFI 35, adding helical gear rating, adding pitting resistance rating, adding internal gear rating, and updating dynamic factors.

A brand-new project to create an information sheet on gearbox repair recommendations is also seeking experts. The proposed subjects for the document to cover are best practice steps to take during repair, quality levels for customers to compare different repair and rebuild companies, common terms, recommended testing, and separate sections for components such as gears, seals, and bearings.

Last, AGMA has formed a new working group to discuss standardization for gears used in electric vehicles. The scope of vehicles runs the gamut from automotive to agricultural to mining and more. The working group will likely propose writing an information sheet of recommended design practices, but currently, members are gathering information on subjects that need special consideration when designing EV gears.

For over 100 years, AGMA has been the facilitator for the development of American gear standards. For AGMA to make gear standards the best they can be, everyone in the industry needs to be involved. When AGMA standards-writing technical committees have open projects, they meet approximately six times per year for two-hour virtual meetings, and approximately once per year for a two-day in-person meeting. If you are interested in working on any open AGMA project, please contact us at tech@agma.org.

