Seeking Metallurgy and Heat-Treating Experts

Phillip Olson, Director, AGMA Technical Services

AGMA Aerospace Gearing committee is seeking new committee members to revise AGMA 926-C99. Recommended Practice for Carburized Aerospace Gearing. Specifically, metallurgy and heat-treating experts are needed. This information sheet recommends material case properties, microstructure, processing procedures, and other critical parameters for carburized aerospace gears. Due to the unique requirements of aerospace gearing, such as typically smaller lot sizes, demands for higher precision, and stringent quality requirements, this information sheet aims to provide deeper, aerospace-specific information than other already published

metallurgical specifications such as AGMA 923, Metallurgical Specifications for Steel Gearing or AMS2759/7, Carburizing and Heat Treatment of Carburizing Grade Steel Parts.

The currently published version of AGMA 926-C99 covers AISI 9310 steel and similar materials, however, examples are limited to atmospheric carburized AISI 9310. The new revision will incorporate newer materials and heat treatment methods that represent the current state of the art in the aerospace industry. The revision will consider adding alloy examples for alloys published in both AGMA 911-B21, Design Guidelines for Aerospace Gear Systems, and AGMA 937-A12, Aerospace Bevel Gears, as well as possible newer alloy examples. Processes to be added or expanded on include, preoxidation, subcritical anneal, low pressure carburizing, high pressure carburizing, banding, cleanliness, testing acceptance criteria, definitions, and stress relief.

You are invited to take your seat at the table! 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.

From a company perspective, being involved in standards development saves time and money in a variety of ways, including reduction of redundancy, improved quality, and safety, and better focusing of R&D resources. Also note that if your company's not at the table helping to write the latest standards, the standards that affect your business will be written by your competitors. For the health of our industry, please reach out and make your experience a part of this living record.

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. The next aerospace gearing committee meeting scheduled to discuss this project is December 13, 2022. The meeting will be a two-hour virtual gathering held from 10:00 a.m. to 12:00 p.m. Eastern time.

If you are interested in working on this project, please contact us at tech@agma.org. 🍥

