

New Documents Published by ISO TC 60



The following documents have been published by ISO Technical Committee TC 60, Gears. The technical input and expertise from the relevant AGMA committees, serving as ANSI Technical Advisory Groups, were valuable contributions to their development.

1. ISO 6336-1:2006, Calculation of load capacity of spur and helical gears – Part 1: Basic principles, introduction and general influence factors

2. ISO 6336-2:2006, Calculation of load capacity of spur and helical gears – Part 2: Calculation of surface durability (pitting)

3. ISO 6336-3:2006, Calculation of load capacity of spur and helical gears – Part 3: Calculation of tooth bending strength

These three standards, along with ISO 6336-5:2003 on material properties, form the basis for load capacity calculations for spur and helical gears. The 2006 versions reflect the continuing efforts by the various international delegations to refine the documents based on gathered experience.

4. ISO 6336-6:2006, Calculation of load capacity of spur and helical gears – Part 6: Calculation of service life under variable load

This is a new addition to the ISO 6336 series of standards. The document specifies the information and standardized conditions necessary for the calculation of the service life (or safety factors for a required life) of gears subject to variable loading. While the method is presented in the context of ISO 6336 and calculation of the load capacity of spur and helical gears, it is equally applicable to other types of gear stress.

5. ISO 17485:2006, Bevel gears – ISO system of accuracy

This International Standard establishes a classification system that can be used to communicate geometrical accuracy specifications of unassembled bevel gears, hypoid gears and gear pairs. It defines gear tooth accuracy terms, specifies the structure of the gear accuracy grade system, and provides allowable values. The standard provides the gear manufacturer and the gear buyer with a mutually advantageous reference for uniform tolerances. Ten grades are

defined, numbered 2 to 11 in order of decreasing precision. Equations for tolerances and their ranges of validity are provided for bevel and hypoid gearing.

6. ISO 23509:2006, Bevel and hypoid geometry

This International Standard integrates straight bevel gears and the three major design generation methods for spiral bevel gears into one complete set of formulas. The structure of the formulas is such that they can be programmed directly, allowing the user to compare the different designs. The formulas of the three methods are developed for the general case of hypoid gears and calculate the specific case of spiral bevel gears by entering zero for the hypoid offset. Additionally, the geometries correspond such that each gear set consists of a generated or non-generated wheel without offset and a pinion which is generated and provided with the total hypoid offset. □

If you would like to become involved with these, or any of the other AGMA Technical Committees, contact AGMA Headquarters at tech@agma.org. It's a rewarding experience! □

