American Gear Manufacturers Association®

Technical Division

1001 N. Fairfax Street
Suite 500
Alexandria, VA 22314

P: 703.684.0211
www.agma.org

ERRATA

ANSI/AGMA 2111-A98

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The following editorial corrections will be added to the next edition of ANSI/AGMA 2111-A98. The changes, discovered after publication, have been reviewed and approved by the AGMA Wormgearing Committee.

Error: There are conflicts in the usage of the term “lead variation” in the following three places: Clause 2.2, Figure 2, and Clause 4.4.

Correction 1: Delete the last two sentences from the definition of “lead form variation” in Clause 2.2.

lead form variation, V_{lf}: The lead form variation is the total variation distance between the actual lead trace from the mean lead trace. The total variation is the sum of the maximum upper deviation and the maximum lower deviation between the two traces (see figure 2). The mean lead trace is established using the least squares method. This is to be done, so that within the evaluation range, the sum of the squares of the deviations of the actual lead trace from the mean lead trace is minimal. ~~The evaluation range is equal to four axial pitches of the worm. The distance referred to in this clause is to be measured in the direction parallel to the lead variation measurement as shown in figure 2.~~

Correction 2:
Replace the definition of “lead variation” in Clause 2.2, with the following three definitions:

~~**lead variation, V_l:** Lead variation is the difference between the theoretical and the observed axial advance of the thread for the amount of rotation necessary to advance through four axial pitches of the worm (lead variation for functional thread length). See figure 2.~~

worm lead evaluation range: the worm lead evaluation range represents the active portion of the thread length (analogous to the active face width). It should be set to a distance of four (4) axial pitches and centered at the point where the mating gear mean diameter meets the worm mean diameter. See Figure 2.

> **NOTE:** The worm lead variation tolerance is based on an evaluation range of four (4) axial pitches. If a different evaluation range is necessary because of part geometry or application considerations, then an adjustment of the lead variation tolerance may be appropriate and should be carefully considered. These adjustments are beyond the scope of this standard.

worm lead trace: the worm lead trace represents the difference between the theoretical and the observed axial advance of an individual thread. See Figure 2.

worm lead variation, V_{l1}: worm lead variation is the difference from the maximum peak to the minimum valley of the lead trace within the defined evaluation range. See Figure 2.

(***SEE NEXT PAGE***)

Correction 3: Replace Figure 2 with the following new figure:

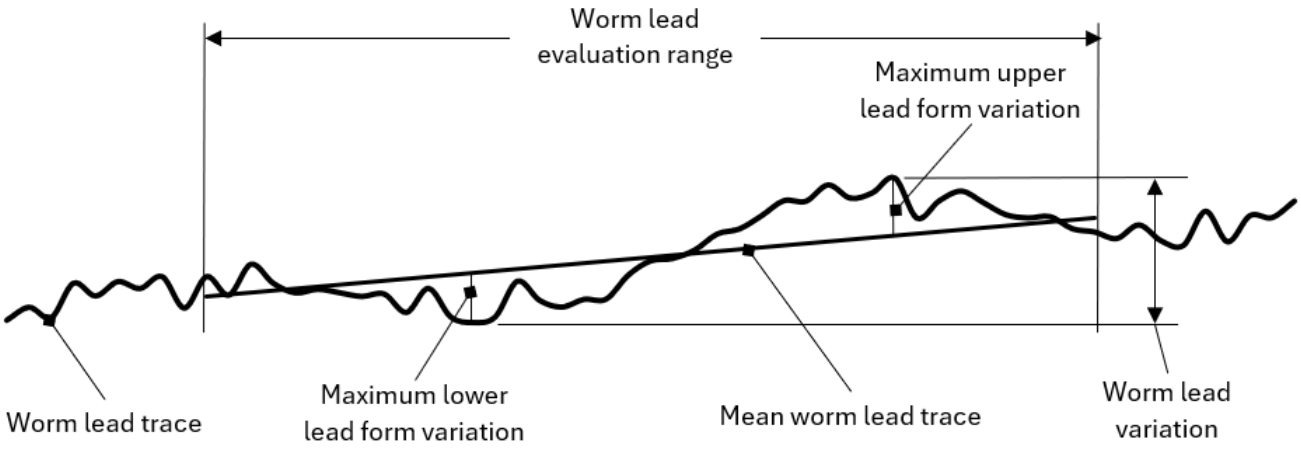

Figure 2 – Worm lead form and lead variation

Correction 4: Replace the second paragraph of Clause 4.4 with the new version below:

~~Measurements should be recorded over the central four (4) axial pitches (the active thread length). On a single thread worm, this represents four (4) revolutions of the worm. For an eight (8) threaded worm, only 1/2 revolution of the worm is required to cover a thread length of four (4) axial pitches. Mean lead trace as shown in figure 2 should be drawn and the mean lead variation (+ or -) (long or short) should be compared to the worm lead variation tolerance, V_{l1}, given by the equations and tables in this standard.~~

Measurements should be recorded over at least the evaluation range of the central four (4) axial pitches (the active thread length). On a single thread worm, this represents four (4) revolutions of the worm. For an eight (8) threaded worm, only 1/2 revolution of the worm is required to cover a thread length of four (4) axial pitches. The worm lead variation, V_{l1}, as shown in Figure 2 should be compared to the worm lead variation tolerance, V_{lT1}, given by the equations and tables in this standard.