American Gear Manufacturers Association®

Technical Division

ERRATA
ANSI/AGMA 6123-C16
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The following editorial correction has been recorded for ANSI/AGMA 6123-C16, *Design Manual for Enclosed Epicyclic Gear Drives*.

In Table 7, the value of K_γ for Application Level 2-6 planets should be 1.38 instead of 1.44.

The change, discovered after publication, will be incorporated into the next revision of this document.

Users of ANSI/AGMA 6123-C16 are advised to mark up their copy of the standard as shown below.

Table 7 – Mesh load factor for the heaviest loaded planet

Application level[1), 3), 4), 5)]		Number of planets, N_{CP}								Flexible mounts[3)]
		2	3	4	5	6	7	8	9	
1	K_γ	1.16	1.23	1.32	1.35	1.38	1.47	1.52	~	without
2	K_γ	1.00	1.05	1.25	1.35	1.38 ~~1.44~~	1.47	1.52	1.61	without
3	K_γ	1.00	1.00	1.15	1.19	1.23	1.27	1.30	1.33	without
4	K_γ	1.00	1.00	1.08	1.12	1.16	1.20	1.23	1.26	with

NOTES:

1) Application level 1 typical for slow speed gears, mining mill drives, etc.;
2 moderate quality, i.e., commercial marine, non-military, wind turbines;
3 & 4 high quality, high speed, gas turbine/generator drives, military marine.

2) Gear manufacturing quality has an influence on the load sharing performance of the planets. Higher gear quality results in reduced load variations through each planet mesh.

3) Flexible mounts of the planets, such as flexible shafts or pins, flexible planet couplings improves load sharing. See 9.2.

4) Load sharing at application level 2 or higher requires at least one floating member, and that the total tangential tolerance of placement of the planet on the carrier with respect to the tangential placement of the planets on the carrier and the tooth thickness variation of the planets should be compatible with quality of the gears to be used.

5) Load sharing level 3 or higher requires a flexible ring gear.

6) Values shown may not be conservative enough for applications where the mass of any floating element is high in relation to the speed and radial forces required to accelerate the floating elements are significant.

7) The values specified in Table 7 are intended to represent an approximation of the worst torque load case K_γ values. At torques significantly lower than the worst case torque load K_γ rises significantly above table values. This may be important in design for fatigue; in such cases use of more sophisticated methods such as those found in Annex I may be warranted.