APPLICATION GUIDE

ChipCHECK - CFM56

The ChipCHECK alloy naming convention follows SAE standards which may differ from the manual. This application guide is a cross reference between the ChipCHECK report and the CFM56. Reference: CFM56_00_NDTM_REV-79-00-00-200-009



ChipCHECK	CFM56
1010	N/A to this engine type
8740	AISI 8620 (20NCD2)
4130/52100 ¹	AISI 4130 (30CD4) or AISI 4140H (40CD4)
15CDV6 (AIR)	VASCOJET90 (15CDV6)
4340	AISI 4340 (E-40NCD7)*
32CDV13 (AIR) / 30CD12 (AIR) / S-7 (AISI) ²	GK3 (30CD12) or GH4 (40CDV12) or CH4 (E40CDV12) or 32CDV13* or E-Z20WC10 RBD MODIFIED*
Nitralloy 135 Mod	AISI 9310 (16NCD13)
9310 ²	AISI 9315 (16NCD13) or 9310 (16NCD13) or 30NCD16 or SAE 3316 (12NC12)
35NCD16 (AIR)	35NCD16
Nitralloy N	N/A to this engine type
H-13	N/A to this engine type
6308	N/A to this engine type
M50	M50 (E-80DCV40)*
400 Series ¹	AISI 410 (Z12C13) or Z180CDW13 or Z15CN17
M50Nil	M50Nil (13DCNV40)*
Jethete M152 (P)	JETHETE M152 (Z12CNDV12)
	17-4PH (Z5CNU17)
	N/A to this engine type
17-7 PH	N/A to this engine type
300 Series ¹	AISI 321 (Z6CNT18) or AMS 5519 or AMS 5516 or Z12CN18
	Maraging 250 (Z2NKDT 18-8-5) or Maraging 300 (Z2NKDT 18-9-5)
	N/A to this engine type
	A286 Modified or A286
ALNICO 5 (P)	ALNICO5
6061	N/A to this engine type
2024	N/A to this engine type
2219	N/A to this engine type
2618	(AU2GN)
C355.0 / 356.0 / 357.0	A357 (AS7G06)
7075	N/A to this engine type
Waspalloy	N/A to this engine type
Inconel 718	INCO 718 (NC19FeNb)
Hastelloy X	Hastelloy-X
Inconel 625	N/A to this engine type
Inconel X750	N/A to this engine type
Nickel	Nickel
Ti 6-4	TITANIUM (TA6V)
Ti 6-2-4-6	N/A to this engine type
Copper ¹	UA10N BRONZO ALUMINUM NC4 or BRONZE SILICIUM (US3ZFe) or UE9P
CDA443 (CDA)	N/A to this engine type
L-605	N/A to this engine type
Elgiloy	N/A to this engine type
Silver ³	Silver, Ag
	Non-metallic or metallics other than Fe, Ni, Al, Ti, Cu, Aq, Co
	Non-metanic of metanics other than Fe, Ni, Ai, Ti, Cu, Ag, Co
	1010 8740 4130/52100¹ 15CDV6 (AIR) 4340 32CDV13 (AIR) / 30CD12 (AIR) / S-7 (AISI)² Nitralloy 135 Mod 9310² 35NCD16 (AIR) Nitralloy N H-13 6308 M50 400 Series¹ M50Nil Jethete M152 (P) 15-5PH / 17-4PH AM-350 17-7 PH 300 Series¹ Maraging 250 (P)¹ Alloy No. 42 (P) A286 ALNICO 5 (P) 6061 2024 2219 2618 C355.0 / 356.0 / 357.0 7075 Waspalloy Inconel 718 Hastelloy X Inconel 625 Inconel X750 Nickel Ti 6-4 Ti 6-2-4-6 Copper¹ CDA443 (CDA) L-605 Elgiloy

^{*}Bearing Material

Material and size are not the only criteria; consideration of the shape, engine parameters (oil delta pressure, oil consumption, vibration, engine maintenance history, chips count evolution) must be taken into account to provide accurate final recommendation according to AMM.

If you have any questions, please contact support@gastops.com



Disclaimer: The analyzed wear debris is reported by ChipCHECK as the nearest matched alloy classification per ASTM D8182-18. Any analyzed wear debris that could not be classified by ChipCHECK is reported as "Unclassified". Note that unclassified results do not necessarily constitute that the sample is in absence of the materials included in the configured material library. An unclassified result may be due to an inadequate spectra collected from the particles, which can be mitigated by following the procedures outlined in the user manual. All results reported by ChipCHECK are subject to the proper use, operation, and maintenance of the device in compliance with the defined requirements in user manual C009802.

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 $[\]frac{1}{2}$ To distinguish between grouped materials, refer to chemical weight percentage and NDTM Part 9.

²Material needs to be sent to an approved laboratory for confirmation of bearing or gearshaft material.

 $^{^{\}mathbf{3}}$ If silver is magnetic, send to an approved laboratory for confirmation of magnetic nature.