

## APPLICATION GUIDE

# ChipCHECK - PW4000

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 PW4000. This application guide is only applicable to ChipCHECKs with Material Library A027243 Rev C or equivalent. Please contact [support@gastops.com](mailto:support@gastops.com) to confirm unit compliance.



	ChipCHECK	PW4000
Fe Base	1010	AMS 5022, AMS 5040, AMS 5042, AMS 5062, AMS 5120, AMS 5316, AMS 5310, AMS 7330, ASTM 536, SAE 1060, SAE 1070, SAE 1090
	8740	AMS 6280, AMS 6281, AMS 6355, UNS G87400
	4130 / 52100* <sup>1</sup>	AMS 6304, AMS 6329 (SAE4140/UNS G41400), AMS 6349, AMS 6350, AMS 6351 (4130), AMS 6370, AMS 6371, AMS 6440, AMS 6444, PWA 723 (52100)
	15CDV6 (AIR)	AMS 6304
	4340*	AMS 6415, AMS 6416, UNS 643400 per MIL-S-5000
	32CDV13 (AIR)/30CD12 (AIR)/S-7 (AISI)	N/A to this engine type
	Nitralloy 135 Mod	N/A to this engine type
	9310*	AMS 6265
	35NCD16 (AIR)	N/A to this engine type
	Nitralloy N	N/A to this engine type
	H-13	N/A to this engine type
	6308	N/A to this engine type
	M50*	PWA 793, PWA 725
	400 Series	AISI-401, AMS 5504, AMS 5610, AMS 5616, UNS S41600, UNS S41623, X10 Cr13
	M50 Nil	N/A to this engine type
	Jethete M152 (P)	AMS 5616
	15-5PH / 17-4PH	AMS 5643, AMS 5662, AMS 5355
	AM-350	N/A to this engine type
	17-7 PH	AMS 5529, AMS 5678
	300 Series	AISI TYPE 316-L, AISI-301, AISI-302, AISI-303, AISI-304L, AISI-347, AISI-T303 CRES, AISI-T321 CRES, AMS 5510, AMS 5511, AMS 5513, AMS 5514, AMS 5515, AMS 5516, AMS 5524, AMS 5557, AMS 5639, AMS 5640, AMS 5645, AMS 5656, AMS 5674, AMS 5689, AMS 5866, AMS 7228, PWA S-5557
Al Base	Maraging 250 (P)	N/A to this engine type
	Alloy No. 42 (P)	N/A to this engine type
	A286	AMS 5525, AMS 5731, AMS 5731-85, AMS 5732, AMS 5734, AMS 5735, AMS 5736, AMS 5737
	ALNICO 5 (P)	N/A to this engine type
	6061	AMS 4001, AMS 4003, AMS 4022, AMS 4025, AMS 4027, AMS 4115, AMS 4116, AMS 4125, AMS 4146, PWA S-4116
Ni Base	2024	AMS 4035, AMS 4119, AMS 4121, AMS 4135, AMS 4152, AMS 4219, QQ-A-596, Alloy, 852.0-T5
	2219	AMS 4144
	2618	AMS 4132
	C355.0 / 356.0 / 357.0	AMS 4260
	7075	AMS 4045
Ti Base	Waspalloy	AMS 5708, AMS 5709
	Inconel 718	AMS 5596, PWA 649 (Inco 718), PWA 649-1, PWA 96NI, PWA 1065, PWA 1469-3, PWA S-5596, PWA S-5662
	Hastelloy X	AMS 5536
	Inconel 625	AMS 5545, AMS 5599, AMS 5666, AMS 5961, AMS 5999
	Inconel X750	AMS 5699, AMS 7232
Cu Base	Nickel	N/A to this engine type
	Ti 6-4	AMS 4911, AMS 4914, PWA 1228, PWA S-4928
Co Base	Ti 6-2-4-6	AMS 4919, AMS 4975, PWA 1224
	Copper*	AMS 4616 Forged Silicon Bronze, Copper, AMS 4846, MS23.06-01, Bronze
Ag Base	CDA443 (CDA)	N/A to this engine type
	L-605	N/A to this engine type
Unclassified	Elgiloy	N/A to this engine type
	Silver*	AMS 2410, AMS 2411, AMS 2412
		AMS 2400, AMS 2406, AMS 3617, AMS 4484, AMS 7267, AMS 7273, AMS 7276, AMS 7277, AMS 7278, AMS 7280, AMS R 83485, AMS-R-83485 Type 1, MIL-R-25988/2, SAE AMS-R-83485, Organic Material

\*Critical material.

<sup>1</sup>Please send suspect debris to laboratory or contact Gastops Customer Support to confirm the presence of 52100.

**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.