

ALLOY REFERENCE GUIDE

From Carbon Steels and Ductile Ni-resists to the wide range of Corrosion and Wear Resistant Stainless Steels to proprietary Nickel and many Cobalt base alloys (including some vacuum cast alloys), DAMERON's computerized chemistry formulation capabilities are second to none in meeting our customers material requirements.

Over 120 standard chemistries are poured routinely at DAMERON, however our alloying capabilities extend beyond some 200 different alloys. Our sales and engineering teams can help suggest the alloy best suited to your particular needs. Just one more reason why DAMERON is your single source foundry for all of your alloy requirements.

The following lists the categories of alloys most frequently poured.

CORROSION RESISTENT STAINLESS STEELS

303	304	304L	309	310	316	316L	317	347	A20	APPLICATIONS: Mild to Severe Corrosive and Oxidation Resistance; Moderate Strength; Excellent Machineability.
CF16F	CF8	CF3	CH-20	CK20	CF8M	CF3M	CG8M	CF8C	CN7M	

HARDENABLE STAINLESS STEELS

400	410	416	420	431	440A	440C	17-4pH	15-5pH	CA6NM	APPLICATIONS: Maximum hardness to Rc-62 and Strength levels; Wear and Abrasion Resistance; Good Ductility in some applications.
C-12	CA15		CA40							

NICKEL BASE ALLOYS

Alloy B	Alloy C	Monel S	Monel E	M-35	Inconel	APPLICATIONS: High Strength; Good impact strength; Good/Excellent corrosive and heat resistance; Excellent Thermal Conductivity; Abrasion resistance. Anti-galling.
HR Series Alloys {Glass}					CY 40	
Vacuum cast alloys IN713, IN718, IN625} Series						

COBALT BASE ALLOYS

Cobalt 3 and Selected "Vacuum" Cast Alloys	Cobalt 6	Cobalt 12	Cobalt 19	Cobalt 21	Cobalt 28 (F75)	Medical	Cobalt 31	APPLICATIONS: Good/Excellent abrasion resistance; Excellent elevated temperature properties; Very Good wear characteristics; Oxidation resistance.
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CARBON STEELS/ LOW ALLOY STEELS/ TOOL STEELS

WCB	LCB	WCC / 1020	4140	8620 / A2	D2	H13	M4	S7	APPLICATIONS: Structural toughness; High impact strength; High wear resistance; Minimum corrosive properties.
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MISCELLANEOUS

Duplex Stainless 2205	Ferr 255	Steels Ductile Ni-Resists Type 1, 1B, 2, D2, 5	Aluminum Base Alloys A356, A357, Almag 35, Tensaloy	APPLICATIONS: Duplex -- High Strength; Resistance to Stress Corrosion Cracking. Ductile -- Superior corrosion resistance.
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