

# Military Specifications & Manufacturing Tolerances

MATERIAL		FINISH		USED ON
MATERIAL DESIGNATION	MIL. or FED. SPECIFICATION	BERG FINISH DESIGNATION	MIL. FINISH SPECIFICATION	
303 STAINLESS STEEL (BAR)	ASTM A484 ASTM A582	—	QQ-P-35	GEARS, SHAFTS
302 STAINLESS STEEL (Spring Temp.)	MIL-W-6713 Comp. B	—	QQ-P-35	SPRINGS, RETAINER RINGS
416 STAINLESS STEEL (BAR)	ASTM A484 ASTM A582	—	QQ-P-35	RACKS-HEAT TREATABLE
440 STAINLESS STEEL (BAR)	QQ-S-763/c Class 10 Type A	CLEAR PASSIVATE	QQ-P-35	BALL BEARINGS (Hardened)
2024 ALUMINUM (BAR)	QQ-A-225/6 Cond. T4	CHROMIC ACID ANODIZED	MIL-A-8625 Type 1	GEARS, HANGERS, ETC.
2024 ALUMINUM (SHEET)	QQ-A-268 Cond. T4	BLACK ANODIZED	MIL-A-8625 Type 11	DIALS
108 ALUMINUM (CAST)	QQ-A-601 Comp. 8CondT55	CHROMIC ACID OR BLACK ANODIZED	MIL-A-8625 Type 1+Type 11	BREADBOARD COMPONENT
BRONZE (NAVALBRASS)	QQ-B-637 Alloy 464	—	—	WORM WHEELS
BRASS-POROUS (OIL LESS)	MIL-B-5687 Type 1 Comp. A	LUBRICATED WITH S.A.E. 40 OIL	—	BEARINGS
BRASS (LAMINATED)	MIL-S-22499 Comp. 2CL.1	—	—	SHIMS
BERYLLIUM COPPER	MIL-C-6942	—	—	RETAINER RINGS
NYLON	MIL-M-20693 Type 1 Comp. A	—	—	GEARS
PHENOLIC	MIL-P-15035 Type FBE	—	—	GEARS
POLYURETHANE	—	—	—	GEARS, ROLLERS, BRG'S.
PLEXIGLASS (CLEAR)	MIL-P-5425 Finish A	—	—	DIAL INDEX'S
STAINLESS STEEL CABLE	MIL-W-83420	—	—	BELTS & CHAINS
GALVANIZED ST CABLE	MIL-C-1511A-4	GALVANIZED	—	—
OIL	MIL-L-6085	—	—	GEARS & BEARINGS -65°F to + 250°F
GREASE	MIL-G-23827	—	—	GEARS & BEARINGS -65°F to + 250°F

**Manufacturing Tolerances:**  
Unless Otherwise Specified

Fractional  $\pm 1/32$   
2 Place Decimal  $\pm 1/64$   
3 Place Decimal  $\pm .010$   
4 Place Decimal  $\pm .001$

**Note - Certification for materials and finishes are available on request - charges may apply.**

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