

Material Designation	Alloy Composition (wt %)	Condition	YS (0.2%) (Mpa)	UTS (Mpa)	Elongation (%)	Hardness	Density g/cm ³ (min)	Remarks
CASE HARDENED STEELS								
MIM 4600 (MIM 2200)	Ni 1.5-2.5% Mo 0.75% max C 0.15% max Fe Balance	Sintered	140	310	40	45 - 65 HRB	7.50	Can be case hardened to surface hardness of 600 - 750 HV 1.
MIM 4600 (modified) (MIM 2700)	Ni 6-8% Mo 0.5% max C 0.15% max Fe Balance	Sintered	265	410	25	70 - 90 HRB	7.60	-
		Heat Treated	450	900	10	500-600 HRB		
MIM 8620	Cr 0.5-1% Ni 0.5-1% Mo 0.5% max C 0.2% max Fe Balance	Sintered	210	445	30	45 - 65 HRB	7.50	Can be case hardened to surface hardness of 600 - 750 HV 1.
HARDENED & TEMPERED STEELS								
MIM 4650	Ni 1.5-2.5% Mo 0.75% max C 0.3-0.6% Fe Balance	Sintered	500	700	11	70 - 100 HRB	7.50	-
		Heat Treated	1425	1610	3	45-50 HRB		
MIM 4630 Modified	Ni 6-8% Mo 0.5% max C 0.2-15% Fe Balance	Sintered	600	700	13	25 - 30 HRC	7.50	-
		Heat Treated	960	1180	10	35-40 HRC		
MIM 4340	Ni 1.5-2.5% Cr 0.75-1.25 Mo 0.75% max C 0.3-0.6% Fe Balance	Sintered	500	700	11	70-100 HRB	7.50	-
		Heat Treated	1400	1620	3	45-50 HRC		
MIM 4140	Ni 0.75-1.25% Cr 0.75-1.25 Mo 0.75% max C 0.3-0.6% Fe Balance	Sintered	625	825	9	70-100 HRB	7.50	-
		Heat Treated	820	1405	5	40-45 HRC		
MIM 52100	Ni 0.5% max Cr 1-16% Mo 0.5% max C 0.90-1.2% max Fe Balance	Sintered	1000	1250	5	25-30 HRC	7.50	-
		Heat Treated	1100	1500	4	25-30 HRC		
STAINLESS STEELS								
MIM SS 316L	Ni 0.08 MAX Ni 10-14% Mo 2-3% Cr 16-18% Balance	As-sintered	250	498	45	110-160 Hv1	7.75	-
MIM SS 316 Duplex	C 0.08 max Ni 4.5 - 7.0 Cr 21-23 Mo 2.5-3.5 Fe Balance	As-sintered	447	732	24	70 - 100 HVB	7.65	-
MIM SS 304	C 0.08 max Ni 8-10.5% Cr 18-20% Fe Balance	As-sintered	270	480	35	110-160 Hv1	7.65	-
MIM SS 440C	C 0.9-1.2% Cr 16-18% Fe Balance	Sintered	-	-	-	25-35 HRC	7.50	-
MIM SS 420 (MIM - 420)	C 0.2-0.4% Cr 12-14% Fe Balance	Heat Treated	1150	1310	6	40-45 HRC	7.40	-
MIM 17-4PH	C 0.07 max Cr 15-18% Cu 3.5-5% Ni 3-5% Nb 0.15-0.5% Fe Balance	Sintered	720	900	11	20-25 HRC	7.50	-
		Heat Treated	1070	1160	7	35-40 HRC		
MIM HK 30	C 0.2-0.5% Cr 23-27% Ni 19-22% Fe Balance	As-sintered	436	782	18	160-250 HV1	7.60	-

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TOOL STEELS								
MIM S7	C 0.45-0.6% Cr 2.5-3.5% Si 0.5-1% Mo 1-1.80% Ni 0.30% max Fe Balance	Sintered	-	1550	3	40-45 HRC	7.24	-
		Heat Treated	-	1850	2	55-60 HRC		
MIM M2	C 0.8-1.1% Cr 3.5-4.5% Mo 4.5-5.5% W 5.5-6.5% V 1.5-2.2% Fe Balance	Sintered	-	-	-	55-60 HRC	7.90	-
		Heat Treated	-	-	-	60-65 HRC		
MAGNETIC MATERIALS								
MIM Fe 3Si (MIM-FE-3%Si Grade 1)	C 0.08% Si 2.5-3.5% Fe Balance	Sintered	372	525	23	80 HRB	7.50	-
MIM Fe 49 Co-2V (MIM-FE-50% Co)	C 0.08 max Co 47-50% V 1.5-2.1% Fe Balance	Sintered	132	201	<1	80 HRB	7.80	-
MIM SS 430	C 0.08 max Cr 16-18 Fe Balance	Sintered	242	438	25	65 HRB	7.40	-
TUNGSTEN HEAVY ALLOYS								
MIM WHA1	Ni 2.5-3.5% Fe 0.5-1.0% W Balance	Sintered	-	-	-	-	18.00	WHA are characterized by the density values. Indo-MIM can produce WHA with density ranging from 17 to 18.25 g/cc.
MIM WHA2	Ni 3-4% Cu/Fe 1 max W Balance	Sintered	-	-	-	-	18.00	
SUPER ALLOYS								
MIM NIMONIC 90	C 0.13 max Fe 5 Max Ti 1.5-3% Al 1-2% Co 15-21% Cr 17-21% Ni Balance	Sintered & Heat treated	1162	782	12	300-400 Hv1	7.70	-

Note:
The material Designation indicated in green font is the equivalent MPIF STD 35 designation.

Other compositionsion request

The above indicated values of mechanical properties are typical.
Material property details apart from above list can be had by request.
Also Indo-MIM can cater to special chemistry requirement upon request.

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