Materials in the MIM process
Stainless steels

Material specification	Alloy composition (wt %)	Condition	YS (0,2%) (MPa)	UTS (MPa)	Elon-gation (%)	Hardness	Tightness g/cm³ (min.)	Comments
MIM SS 316L	Ni 10 - 14% Mo 2 -9% C 0.15% max Fe Balance	as sintered	250	498	40	110 - 160 Hv1	7.75	-
MIM SS 316L Duplex	Ni 6 - 8% Mo 0.5% max C 0.15% max Fe Balance	as sintered	447	732	24	70 - 100 HRB	7.65	-
MIM SS 304	Cr 0 .5 - 1% Ni 0.5 - 1% Mo 0.5% max C 0.2% max Fe Balance	as sintered	270	480	35	110 - 160 Hv1	7.65	-
MIM ss 440C	Ni 1.5 - 2.5% Mo 0.75% max C 0.3 - 0.6% Fe Balance	sintered	-	-	-	25 - 35 HRC	7.50	-
MIM SS 420 (MIM - 420)	Ni 6 - 8% Mo 0.5% max C 0.2 - 1.5% Fe Balance	heat-treated	1150	1310	6	40 - 45 HRC	7.40	-
MIM 17-4PH	Ni 1.5 - 2.5% Cr 0.75 - 1.25 Mo 0.75% Max C 0.3 - 0.6% Fe Balance	sintered heat-treated	720 1070	90 1160	11 7	20 - 25 HRC 35 - 40 HRC	7.50	
MIM HK 30	Ni 0.75 - 1.25% Cr 0.75 - 1.25 Mo 0.75% Max C 0.3 - 0.6% Fe Balance	as sintered	436	782	18	160 – 250 Hv1	7.60	

Materials in the MIM process
Tool steels

Material specification	Alloy composition (wt %)	Condition	YS (0,2%) (MPa)	UTS (MPa)	Elon-gation (%)	Hardness	Tightness g/cm³ (min.)	Comments
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 heat-treated	- -	1550 1850	3 2	40 - 45 HRC 55 - 60 HRC	7.24	-
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 heat-treated	- -			55 - 60 HRC 60 - 65 HRC	7.90	-