

FURTHER MATERIALS

MAGNETIC MATERIALS, HEAVY TUNGSTEN ALLOYS & SUPPER ALLOYS

	MATERIAL SPECIFICATION	ALLOY COMPOSITION (WT %)	CONDITION	YS (0.2%) (MPA)	UTS (MPA)	STRAIN (%)	HARDNESS	TIGHTNESS G/CM ³ (MIN)	REMARKS
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	-
HEAVY TUNGSTEN ALLOYS	MIM WHA1	Ni 2.5 - 3.5% Fe 0.5 - 1.0% W Balance	sintered	-	-	-	-	18.0	-
	MIM WHA2	Ni 3 - 4% Cu/Fe 1 max W Balance	sintered	-	-	-	-	18.0	-
SUPPER ALLOYS	MIM NIMO-NIC 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	-