

porite Material Characteristics For MIM Products

Material code	Category	Chemical characteristics [wt%]								Density [g/cm ³]	Tensile strength [Mpa]		elongation [%]		Hardness [HR]		Other Characteristics	General usage	※ Equivalent grade
		Fe	C	Cu	Ni	Mo	Cr		Others		Sintered	Heat treatment	Sintered	Heat treatment	Sintered	Heat treatment			(JPMA S01:2005)
PMF01	For structural parts	Bal.	0.3~0.5	—	1.5~2.5	—	—	—	≦1	≧7.5	≧450	≧1200	≧15	≧3	≧60HRB	40HRC	—	Gear,Cam,Coupling, General structural parts	MIM-Fe2Ni
PMF02		Bal.	0.3~0.5	—	1.5~2.5	~1	—	—	≦1	≧7.5	≧550	≧1300	≧10	≧2	≧80HRB	50HRC	—		—
PMS11	Stainless steel	Bal.	≦0.03	—	12~15	2~3	16~18	—	≦1	≧7.5	≧450	—	≧40	—	—	—	—	Gear,Cam,Coupling, Corrogion resistant parts	MIM-SUS316L
PMS21		Bal.	≦0.03	—	3~5	—	15~18	Cu:3.5	≦4	≧7.5	—	≧1200	—	≧9	—	≧40HRC	—		Gear,Cam, Corrogion resistant &High-strength parts
PMM11	Magnetic material	Bal.	≦0.03	—	—	—	—	Co:48~50 V:~3	≦1	≧7.8	—	—	—	—	—	—	B ₂₅ : ≧1.95T Nc μ _{max} : ≧2000	Soft magnetic parts	Permendur
PMM21		Bal.	≦0.03	—	46~48	—	—	—	≦1	≧7.8	—	—	—	—	—	—	B ₂₅ : ≧1.4T μ _{max} : ≧28000		Pb Permalloy

※ Equivalent grade is for reference, so it doesn't guarantee to satisfy these specification.