

Datasheet of MIM materials we (Baison) work with

	Chemistry	Grade	Density	Size	Hardness	Application Data
PIM / MIM Powder						
HR304(L) Stainless Steel Powder Atomized	Cr:18-20 Ni:8-12 C:0.08(0.03) Si:1max Mn:2max Fe:bal.	304(L)	app.4.1-4.5 tap.>4.9 g/cm3	150um 75um 45um 15um	34.5HRC	MIM part weight:0.03-200g Apparent relative density>95% Sinter density>7.6g/cm3 sinter temperature:1360-1380c Shrinkage rate:1.18
HR316(L) Stainless steel powder Atomized	Cr:16-18 Ni:10-14 Mo:2-3 C:0.08(0.03) Si:1max Mn:2max Fe:bal.	316(L)	app.4.1-4.5 tap.>4.8 g/cm3	150um 75um 45um 15um	36HRC	MIM part weight:0.03-200g Apparent relative density>95% Sinter density>7.8g/cm3 sinter temperature:1360-1380c Shrinkage rate:1.18
HR174PH Stainless steel powder Atomized	Cr:15.5-17.5 Ni:3-5 Nb:0.15-0.45 Cu:3-5 C:0.07 Si:1max Mn:1max Fe:bal.	17-4PH	app.4.1-4.5 tap.>4.8 g/cm3	150um 75um 45um 15um	35HRC	MIM part weight:0.03-200g Apparent relative density>95% Sinter density>7.8g/cm3 sinter temperature:1360-1380c Shrinkage rate:1.18
HR420 Stainless steel powder Atomized	Cr:12-14 C:0.25max Si:1max Mn:1max Fe:bal.	420	app.4.1-4.5 tap.>4.8 g/cm3	150um 75um 45um 15um	HRC50	MIM part weight:0.03-200g Apparent relative density>95% Sinter density>7.8g/cm3 sinter temperature:1360-1380c Shrinkage rate:1.18
HR430 Stainless steel powder Atomized	Cr:16-18 C:0.12max Si:1max Mn:1max Fe:bal.	430	app.4.1-4.5 top.>4.8 g/cm3	150um 75um 45um 15um	HRC51	MIM part weight:0.03-200g Apparent relative density>95% Sinter density>7.8g/cm3 sinter temperature:1360-1380c Shrinkage rate:1.18
HR70Cr	Cr:65-70 C:0.06(0.03) Si:1.0max S:0.03max P:0.03max	70Cr	/	-75um -45um	/	As additive for special part require anti-wear and anti-corrosion, like auto valve shaft guide pipe, seat etc.
HR60Mo	Mo:60-65 C:0.04max S:0.15max P:0.06max Si:1.5max	60Mo	/	75um 45um 37um 25um	/	As additive for special part require anti-wear and anti-corrosion, like auto valve shaft guide pipe, seat etc.
HRCr12Mo	Cr:10 Mo:1.5 C:0.06 Mn:0.1 S:0.022 P:0.022 Si: 1.0 Fe:bal.	12CrMo	/	75micron 53micron 45micron	/	this alloy powder contain Cr and Mo content, can provide good anti-wear, anti-corrosion performance, it is usually to produce special part which need above performance.
HRMnS	Mn:62-65 S:33-36 O:0.5 Other: 1max	MnS	/	300mesh D95:10-12micron	/	As additive, function is lubricaiton.
HRFeC1# Carbonyl Iron powder	Fe:98%min C:0.8%max N:0.6%max O:0.4%max	CF1-1	App.:2.2min Tap:4.0min	D10:0.5-1.0um D50:2.0ummax D90:3.0-5.0um	/	/
HRFeC1# Carbonyl Iron powder	Fe:98%min C:0.8%max N:0.6%max O:0.4%max	CF1-2	App.:2.5min Tap:3.9min	D10:0.6-1.5um D50:2.0-3.0um D90:4.5-8.0um	/	/
HRFeC1# Carbonyl Iron powder	Fe:98%min C:0.8%max N:0.6%max O:0.4%max	CF1-3	App.:2.5min Tap:3.8min	D10:1.0-3.0um D50:3.0-5.0um D90:5.0-12.0um	/	/
HRFeC1# Carbonyl Iron powder	Fe:98%min C:0.9%max N:0.7%max O:0.4%max	CF1-4	App.:2.2min Tap:3.5min	D10:1.5-3.5um D50:5.0-6.0um D90:11.5-16.5um	/	/
HRFeC2# Carbonyl Iron powder	Fe:99.5%min C:0.05%max N:0.01%max O:0.2%max	CF2-2	App.:2.5min Tap:3.8min	D10:0.9-3.0um D50:3.0-5.0um D90:5.5-12.0um	/	/
HRFeC2# Carbonyl Iron powder	Fe:99.5%min C:0.05%max N:0.01%max O:0.2%max	CF2-3	App.:2.5min Tap:3.6min	D10:1.5-3.0um D50:5.0-8.0um D90:10-18um	/	/
Other Carbonyl Iron powder						we have more than 20grades, please contact our sales to get more details