

철 파우더

분류	순철		합금철		산화철	
종류/구성	BP 등급 (반화방지용 (화학 합성에서 반응 속도 를 제어하기 용이))	AP등급 (고순도) (일반사양 : 구조부품에 사용)	Fe-Mo	Fe-Cr 등	산화철 (Fe ₂ O ₃)	믹스 산화철 (FeO-Fe ₃ O ₄)
특성	<ul style="list-style-type: none"> 표면에 0.5μm급 산화피막이 존재 대기 중 추가 산화를 최소화 가능 화학반응 제어가 용이 	<ul style="list-style-type: none"> 표면 산화피막 제거 차량 및 각종 구조부품 	<ul style="list-style-type: none"> Mo함유량 : 0.5~1.5wt% 수준 순철과 동일하게 BP/AP등급 구분 	<ul style="list-style-type: none"> Cr함유량 : 8wt% 수준 		
입자경 (※평균 입자경 별 엑스트라 o)	≤40 μ m급(미세), 80 μ m급(일반), 200 μ m급(조대)		· 입자별 사양 세분화		1 μ m급, 10 μ m급	

물성

Classification	spec	+180 μ m	+150 μ m	+106 μ m	+75 μ m	+45 μ m	-45 μ m	Apparent Density (g/cm ³)	Flow Rate (Sec/50g)	Green Density (@600MPa, g/cm ³)
Pure Iron Powder	HSPP-1	Max 2	Max 10	10-30	10-30	20-40	15-30	2.88 - 3.05	Max. 30	Min. 7.09
	HSPP-2	Max 2	Max 10	10-30	10-30	20-40	15-35	2.88 - 3.05	Max. 28	Min. 7.16
	HSPP-3	Max 10	Max 15	10-30	10-30	10-30	10-25	2.90 - 3.20	Max. 28	Min. 7.20
Pre-mixed Powder	HSPM-207	-	-	-	-	-	-	3.00 - 3.30	Max. 50	Min. 7.00
	HSPM-308	-	-	-	-	-	-	3.00 - 3.30	Max. 50	Min. 7.00
Bluemix™ (Bond-mixed Powder)	HSPM-113B	-	-	-	-	-	-	3.10 - 3.30	Max 35	Min. 6.80
	HSPM-308B	-	-	-	-	-	-	3.00 - 3.30	Max 35	Min. 6.90
	HSPM-521B	-	-	-	-	-	-	3.00 - 3.40	Max 40	Min. 6.80
Diffusion-alloyed Powder	HSPA-D215	Max 2	Max 10	10-30	10-30	20-40	15-30	2.90 - 3.12	Max 30	Min. 7.10
	HSPA-D315	Max 2	Max 10	10-30	10-30	20-40	15-30	2.90 - 3.12	Max 30	Min. 7.10
	HSPA-D415	Max 2	Max 10	10-30	10-30	20-40	15-30	2.90 - 3.12	Max 30	Min. 7.10
Pre-alloyed Powder	HSPA-A085	Max 10	Max 10	10-30	10-30	20-40	15-30	2.90 - 3.20	Max 30	Min. 7.15
	HSPA-A150	Max 2	Max 10	-	-	-	15-30	2.90 - 3.20	Max 30	Min. 7.00
	HSPA-CL08	-	Max 1	5-20	15-30	20-35	25-45	2.70 - 3.20	Max 32	-

화학구성

Classification	spec	Fe	C	Si	Mn	P	S	O	Cu	Ni	Mo	Sn	Cr
Pure Iron Powder	HSPP-1	Bal.	< 0.01	< 0.05	< 0.25	< 0.02	< 0.02	< 0.17	-	-	-	-	-
	HSPP-2	Bal.	< 0.01	< 0.03	< 0.20	< 0.02	< 0.02	< 0.12	-	-	-	-	-
	HSPP-3	Bal.	< 0.01	< 0.03	< 0.15	< 0.02	< 0.02	< 0.11	-	-	-	-	-
Pre-mixed Powder	HSPM-207	Bal.	0.63-0.77	-	-	-	-	-	1.80-2.20	-	-	-	-
	HSPM-308	Bal.	0.72-0.88	-	-	-	-	-	2.50-3.10	-	-	-	-
Bluemix™ (Bond-mixed Powder)	HSPM-113B	Bal.	1.15-1.45	-	-	-	-	-	-	0.75-0.95	-	-	-
	HSPM-308B	Bal.	0.85-1.05	-	-	-	-	-	2.70-3.30	-	-	-	-
	HSPM-521B	Bal.	1.80-2.20	-	-	0.21-0.29	-	-	4.05-4.95	-	-	0.45-0.55	-
Diffusion-alloyed Powder	HSPA-D215	Bal.	< 0.01	< 0.03	< 0.20	< 0.02	< 0.02	< 0.12	1.35-1.65	1.60-1.90	0.45-0.55	-	-
	HSPA-D315	Bal.	< 0.01	< 0.03	< 0.20	< 0.02	< 0.02	< 0.12	1.35-1.65	2.80-3.40	0.45-0.55	-	-
	HSPA-D415	Bal.	< 0.01	< 0.03	< 0.20	< 0.02	< 0.02	< 0.12	1.35-1.65	3.65-4.35	0.45-0.55	-	-
Pre-alloyed Powder	HSPA-A085	Bal.	< 0.01	< 0.03	< 0.20	< 0.02	< 0.02	< 0.12	-	-	0.80-0.95	-	-
	HSPA-A150	Bal.	< 0.01	< 0.03	< 0.20	< 0.02	< 0.02	< 0.12	-	-	1.35-1.65	-	-
	HSPA-CL08	Bal.	< 0.01	0.60-0.90	< 0.30	0.40-0.65	< 0.02	< 0.15	-	1.50-1.80	1.60-1.90	-	7.50-8.50

