

Iron Powder

CNPC-FE100

CNPC-FE100 is high green strength iron powder specifically manufactured for low to medium density P/M applications, resin casting, and rough magnetic paints

FEATURES AND BENEFITS

High Consistency	A stable ore material and statistically controlled manufacturing process assure lot-to-lot consistency	<ul style="list-style-type: none"> ◆ Improves part consistency ◆ Increases productivity ◆ Reduces processing cost
High Purity	CNPC-FE100 is produced from high purity magnetic iron ore assures a consistently pure product	<ul style="list-style-type: none"> ◆ Assures consistency of premix chemistry. ◆ Improves compressibility ◆ Extends tool life ◆ Promotes rapid sintering
High Green Strength	Surface morphology assures powder compacts of good structural integrity	<ul style="list-style-type: none"> ◆ Improves thin section morphology ◆ Facilitates green part handling
Low Growth Characteristic	The high purity and large specific surface area of CNPC-AFE100 allow rapid sintering and high dimensional control.	<ul style="list-style-type: none"> ◆ Allows close-to-die design ◆ Reduces sintered dimensional variation Improves dimensional Control of infiltrated parts.

PHYSICAL AND CHEMICAL PROPERTIES

Green Density	6.8 g/cm ³	Chemical Analysis (wt %)
Apparent Density	2.7 g/cm ³	C 0.03
Flow rate	35.00 sec/50g	O 0.3
Typical Screen Analysis		S 0.006
U.S. mesh	Microns	P 0.008
80	+180	Mn 0.06
100	-180 +150	Cr 0.005
140	-150 +106	Ni 0.005
200	-106 +75	Si 0.08
325	-75 +45	Cu 0.005
-325	-45	Mo 0.003
+	stays over/ is larger than	Fe 99+
-	Passes through/ is smaller than	

- * CNPC-FE100 + graphite + copper + 0.75% ZnSt
- * Sintered in a rich endothermic atmosphere at 1120°C
- * Sintered Density 6.8g/cm³

