

IRON325

IRON325 is a high green strength reduced iron powder specifically manufactured for low to medium density P/M applications, resin casting, magnetic paints and magnetic inks.

FEATURES AND BENEFITS

- Replacing Carbonyl Iron Powder
- High strength/ High hardness
- Improves the wear resistance of the tool

High Consistency	A stable ore base and statistically controlled manufacturing process assure lot-to-lot consistency.	<ul style="list-style-type: none"> • Improves product consistency • Increases productivity • Reduces processing cost
-------------------------	---	---

High Purity	IRON325 is produced from ore, not scrap, assuring a consistently pure product	<ul style="list-style-type: none"> • Assures consistency of pre-mix 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 IRON325 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

Chemical Analysis, Typical

C	0.04 %
O	0.92 %
S	0.006 %
Insoluble	0.24 %
As	0.69 ppm
Pb	< 0.25 ppm
Hg	< 0.5 ppm
Cd	< 0.5 ppm
Fe	> 97.7

Typical Screen Analysis

U.S. mesh	Microns	Wt %
-	-150	100
+200	+74	0.1
+325	+45	2.4
-325	-45	97.5

+: stays over/ is larger than
- : Passes through/ is smaller than

Apparent Density < 2.2 g/cm³
Specific Surface Area 320 m²/kg

Cumulative Distribution	Microns
D ₁₀	5
D ₅₀	15
D ₉₀	30