

IRON12 is a coarse (large grain) hydrogen reduced sponge iron powder. It has the highest internal porosity, highest surface area and lowest apparent density among hydrogen reduced iron powders. IRON12 may be used in friction applications, chemical applications, gas filtration and ground remediation.

FEATURES AND BENEFITS

High Consistency

A stable ore base and statistically controlled manufacturing process assure lot-to-lot consistency.

- Improves product consistency
- Increases productivity
- Reduces processing cost

High Purity

IRON12 is produced from ore, not scrap, assuring a consistently pure product

- Assures consistency of pre-mix chemistry.
- Improves compressibility
- Extends tool life
- Promotes rapid sintering

Main benefits for brake applications

- Lower brake weight and reduction of material usage
- Improved brake surfaces and excellent pad and rotor wear properties
- Noise minimization
- Consistent powders ensure uniform products

Main benefits for chemical applications

- High rate of reaction

PHYSICAL AND CHEMICAL PROPERTIES

Chemical Analysis, Typical

C	0.01 %
O	1.62 %
S	0.005 %
P	0.011 %
Si	0.1 %
Mn	0.4 %
Cr	0.02 %
Cu	0.02 %
Mo	0.01 %
Ni	0.02 %
Pb	0.002 %
Fe	97.3
Insoluble	0.15 %
H2-Loss	1.51 %

Apparent Density	1.00 to 1.50 g/cm ³
Specific Surface Area	225 m ² /kg
H2-Loss	Max 2.5%

Typical Screen Analysis

U.S. mesh	Microns	Min %	Max %
	+1000		0.0
+20	+850		2.0
+60	+250	30.0	70.0
+100	+150	10.0	35.0
+325	+45	11.5	29.5
-325	-45		12.0

+ : stays over/ is larger than

- : Passes through/ is smaller than