



SIGMA

Sigma Wear Parts (Pty) Ltd

Powered by-  **RPG Powders and Granules**
FeSi-15 - HEAVY MEDIA

SIGMA - RPG



ATOMISED FERROSILICON

PHYSICAL SPECIFICATIONS

CHEMICAL COMPOSITION

Si	-	14 - 16%
Fe	-	82%
C	-	0.4 %
Mn	-	0.5%
Cr	-	0.5 %

BULK DENSITY

4.1g/cm³

SPECIFIC GRAVITY

7.20 +- 0.15g/cm

NON MAGNETICS (Davis Tube)

<0.4%

MAGNETIC SUSCEPTIBILITY

(Via Satmagan Balance)

60 % Min

PACKAGING

Bulk Bag – 1MT (2205 lb)

Bulk Bag – 2MT (4410 lb)

Steel Drum – On Request

This is a product information sheet. It is not a specification sheet. The values are for indication purposes only. Due to the nature of the production process minor variations of sizing and chemical analysis in the actual product may occur. If your process is such that minor variations can cause problems or damage to your process/products, please call our office for additional technical help.

SIEVE SPECIFICATION

Weight %

Grade	Product Code	45μ Absolute %
Sigma 30*	RPG – D30AM	50 – 55
Sigma Coarse	RPG – CG35	32 – 42
Sigma Fine	RPG – FG45	42 – 50
Sigma Dynamic Fine	RPG – DF56	56 – 66
Sigma Cyclone 60	RPG – C60	68 – 78
Sigma Cyclone 40	RPG – C40	82 – 90

**Blend of +- 70% Atomised & +- 30% Milled HMS. Optimised for double-density drum*

DESCRIPTION

RPG Atomised 14/16% FeSi is produced from virgin steel and Ferro silicon (75%Si). It is melted in Induction furnaces and then atomised under controlled atomising heads to form Atomised HMS Powder with high density. This process route allows the exact control shape, Chemical and physical properties.

APPLICATIONS

RPG Atomised 14/16% FeSi HMS Media is suited for HMS Slurry separation systems. It is suitable for both drum (Bath) and Cyclone separation systems. It is ideal for Aggregates, Metals, Minerals, and any other process needing a sink/float process with particles of specific gravity ranges of 1.8 – 4.2 with a cut density below 4.0. It is ideally suited for the recycling industry.

ADVANTAGES

- High Fe Content – Increased Magnetic Susceptibility – High recovery in Magnetic Separator results in lower losses of media and lower consumption.
- High Bulk Density – Requires less media to achieve required cut density. Results in a Lower viscosity slurry and a more stable operation.
- Dynamic sieving control, consistent and reproducible sieve analysis. Lower process variation.
- Quality Control – Sieve analysis on every 1 MT.
- Product is made from virgin raw materials. Contains low levels of trace elements unlike products made from a By-product of Fused alumina.
- Product is spherical in nature; this allows for higher cut densities and thus better float/sink separation. This also allows for the product to be more easily recovered in the final wash station, meaning lower consumption per ton of feed.