



# HIGH CARBON STEEL GRIT

## Technical Data

**Sigma Wear Parts (Pty) Ltd**  
 6 Field Road  
 Lillianton, Boksburg  
 South Africa  
 Tel: +27 (0)11 823 4443  
 Email: [email@teamsigma.com.au](mailto:email@teamsigma.com.au)  
[www.Sigmateamsa.com](http://www.Sigmateamsa.com)



### Specifications

Sigma Steel Grit is manufactured to SAE J1993, SAE J444 and SSPC-AB 3 Specifications.

### Packaging

Sigma Steel Grit is Packaged in

- 220l/55gallon drums
- 1MT Pallet (40 \* 25kg bags)
- 1 MT Bulk Bags
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### Common Applications

**Surface Preparation** to remove a prior coating and to produce an etched or angular profile to prepare that surface for the coating process.

**Surface Cleaning** of rust, mill scale and other contaminants from the surface.

**De-Scaling** of products manufactured with forging, stamping, hot rolling or drawing processes.

**Sand Removal** from metal castings, most commonly in a wheelblast machine and utilizing the lowest hardness steel grit.

### Sigma Excellence

At Sigma Abrasives, our commitment to quality and service places our customers first. Our sales team has decades of abrasives experience and is able to give on the ground technical support and service when needed.

### Chemical Composition

Carbon: 0.80 – 1.2%  
 Silicon: 0.40 – 1.5%  
 Manganese: 0.35 – 1.2%  
 Sulphur: 0.05% Max  
 Phosphorus: 0.05% Max

### Microstructure

Uniform Martensitic tempered to a degree consistent with the hardness range.

### Hardness

GS 40 – 51 HRc  
 GM 47 – 56 HRc  
 GL 54 – 61 HRc  
 GH +60 HRc

### Other Characteristics

- Shape: Angular
- Bulk Density: 4.2 – 4.8g/cc
- <1% non-metallics
- Specific density of the steel shall not be less than 7.3g/cc

### Steel Grit Grades

SAE.	mm	G12	G14	G16	G18	G25	G40	G50	G80	SABLAST	GC20	GC25
8	2.36	All Pass										
10	2.00		All Pass									
12	1.70	80% Min		All Pass								
14	1.40	90% Min	80% Min		All Pass						All Pass	All Pass
16	1.18		90% Min	80% Min	75% Min	All Pass					10% Max	
18	1.00			90% Min			All Pass			All Pass	30 - 50%	30 - 50%
20	0.85				85% Min	70% Min				5% Max	90% Min	60% Min
25	0.71							All Pass			98% Min	85% Min
30	0.60					80% Min	70% Min		All Pass			
40	0.425						80% Min	70% Min				
50	0.30							80% Min				
80	0.18								65% Min	90% Min		
120	0.125								75% Min			