HIGH CARBON STEEL SHOT

Technical Data

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Sigma Shot
High Carbon Steel

Specifications

Sigma Steel Grit is manufactured to SAE J827, SAE J444.

Packaging

Sigma Steel Grit is Packaged in

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

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

S – 40 – 51HRc

Other Characteristics

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

Steel Shot Grades

SAE.	mm	S780	S660	S550	S460	S390	S330	S280	S230	S170	S110	S70
7	2.80	All Pass										
8	2.36		All Pass									
10	2.00	85% Min		All Pass	All Pass							
12	1.70	97% Min	85% Min		5% Max	All Pass						
14	1.40		97% Min	85% Min		5% Max	All Pass					
16	1.18			96% Min	85% Min		5% Max	All Pass				
18	1.00				96% Min	85% Min		5% Max	All Pass			
20	0.85					96% Min	85% Min		10% Max	All Pass		
25	0.71						96% Min	85% Min		10% Max		
30	0.60							97% Min	85% Min		All Pass	
35	0.50								97% Min		10% Max	
40	0.425									85% Min		All Pass
45	0.355									97% Min		10% Max
50	0.30										85% Min	
60	0.25										90% Min	
80	0.18											85% Min
120	0.125											90% Min