

# Steel Grit



## Description

Steel Grit is an angular metallic abrasive produced by crushing cast steel shot. Steel Grit is used for descaling, coating and corrosion removal, and surface etching. The angular particle shape provides a fast cleaning rate and an angular surface profile.

Steel Grit is tempered to three different hardness's. The hardest material, HG, is designed for use exclusively in air blasting equipment. The two softer materials, LG and SG, may also be used in centrifugal wheel blast equipment.

## Applications

Removal of mill scale, rust and old coatings from structural steel plates, profiles and fabrications prior to painting. Descaling of metal forgings and heat treated items.

Deep angular etching of components prior to thermal spray metallization, galvanizing or enamelling. Etching of mill rolls to provide consistent surface etch.

Large grits used for sand removal from large and medium sized steel and iron castings. Small grits used for sand removal and cleaning of non ferrous castings.

## Size Details

Opening			SAE Grit Size									
mesh	mm	in	G120	G80	G50	G40	G25	G18	G16	G14	G12	G10
7	2.80	.1110										All Pass
8	2.36	.0937									All Pass	
10	2.00	.0787								All Pass		Min 80%
12	1.70	.0661							All Pass		Min 80%	Min 90%
14	1.40	.0555						All Pass		Min 80%	Min 90%	
16	1.18	.0469					All Pass		Min 75%	Min 90%		
18	1.00	.0394				All Pass		Min 75%	Min 85%			
25	.710	.0278			All Pass		Min 70%	Min 85%				
40	.425	.0165		All Pass		Min 70%	Min 80%					
50	.300	.0117	All Pass		Min 65%	Min 80%						
80	.180	.0070		Min 65%	Min 75%							
120	.125	.0049	Min 60%	Min 75%								
200	.075	.0029	Min 70%									

Screen opening sizes and screen numbers with minimum cumulative percentages allowed on corresponding screens.  
ASTME-11 and ISO 565 Test Sieves.

## Chemical Composition & Physical Characteristics

Carbon	0.85 - 1.20 %
Manganese	0.60 - 1.20 %
Silicon	0.40 - 1.20 %
Sulfur	≤ 0.05 %
Phosphorus	≤ 0.05 %
Microstructure	Even tempered martensite
Density	≥ 7.3 g/cm <sup>3</sup>

## Hardness

Grit	SG	LG	HG
HRC	40 - 50	54 - 61	> 60

Hardness Deviation ± 3.0 HRC

## Specifications

Chemical Composition & Physical Characteristics - SAE J1993  
Size Distribution - J444  
Standard Specification for Cast Steel Abrasives - SFSA 20-66



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