

7	8	10	12	14	16	18	20	25	30	35	40	45	50	80	120	200	325	product
	✓		80% min	90% min														G. 12
		✓		80% min	90% min													G. 14
			✓		75% min	85% min												G. 16
				✓		75% min		85% min										G. 18
					✓			70% min			80% min							G. 25
						✓					70% min		80% min					G. 40
							✓						65% min	75% min				G. 50
												✓		65% min	75% min			G. 80
													✓		60% min	70% min		G. 120
7	8	10	12	14	16	18	20	25	30	35	40	45	50	80	120	200	325	Screen number
2.00	2.30	2.00	1.70	1.40	1.18	1.00	0.85	0.71	0.60	0.50	0.425	0.350	0.30	0.130	0.125	0.076	0.045	Screen size mm
0.177	0.0937	0.0747	0.0651	0.0565	0.0489	0.0394	0.0301	0.0209	0.0232	0.0197	0.0163	0.0134	0.0117	0.0097	0.0045	0.0022		Screen size inches

✓: All Pass      %: Min cumulative percentages allowed on corresponding screens

Cast steel angular grit is produced by crushing specially heat treated shot pellets. Its behavior characteristics in service are very much dependent upon the hardness selection of GP, GB, GL or GH grit.

**GP STEEL GRIT**  
Angular when new, this grit rapidly rounds off in use and is particularly suited to descaling applications.

**GB STEEL GRIT**  
More aggressive than GP, with many characteristics similar to GL.

**GL STEEL GRIT**  
Although harder and more aggressive than GP Steel Grit, GL also loses its sharp edges during shotblasting and is particularly suited to descaling and surface preparation applications.

**GH STEEL GRIT**  
Having maximum hardness, GH always remains angular in its operating mix. This steel grit does not shatter readily yet has a fast, effective, etching action, making it ideal for deep descaling and etched surface requirements. For use mainly with compressed air equipment.

# Wheelabrator Steel Shot And Grit Specifications

PROPERTY	SHOT	GP	GL	GH
SIZE	All material is screened to meet or exceed SAE & SFS Specs.			
CHEMISTRY				
Carbon	0.85 - 1.20	0.85 - 1.20	0.85 - 1.20	0.85 - 1.20
Sulfur	Less than 0.05	Less than 0.05	Less than 0.05	Less than 0.05
Phosphorus	Less than 0.05	Less than 0.05	Less than 0.05	Less than 0.05
AV. HARDNESS	40-50 Rc	40 - 50 Rc	56 - 60 Rc	60 - 66 Rc
HARDNESS DEVIATION*	Maximum average deviation is + 3.0 Rc			
MICROSTRUCTURE	Highly refined and homogeneous tempered martensite and bainite.			Martensite and retained austenite.
MINIMUM DENSITY (as determined by displacement of alcohol)	7.3 g/cc	7.6 g/cc	7.6 g/cc	7.6 g/cc

\* Hardness is tested with a Tukon Microhardness Tester with Knöpp Indenter, 1000 gram load or equivalent.

## Wheelabrator steel abrasives sizes and general applications

(Based on results obtained with a 191/2" dia. w/a at 2250 R.P.M.)

Wheelabrator Steel Shot	Approx. Size of Abrasive	Abs Height" Expected in Peening Applications	Shot Finish Produced	General Applications	Corresponding SAE Grit Size	Grit Finish Produced
(None)	.002"			Blasting of small ferrous & non-ferrous work & machined parts.	G-200	Very light etch-Matte or satin finish.
(None)	.004"			Removal of very light scale.	G-120	
• S-70	.007"	.004 To .007 A <sub>1</sub>	Fine, smooth shot finish. Excellent coverage.	Blasting of relatively small ferrous & non-ferrous castings.	G-80	Medium etch
• S-110	.011"	.007 To .011 A <sub>1</sub>		Removal of light scale from forgings & heat treated parts.	G-50	
• S-170	.017"	.012 To .015 A <sub>1</sub>		Blasting of machined parts. Removal of mill scale, rust & other deposits.	G-40	
• S-230	.023"	.016 To .019 A <sub>1</sub>	Medium-light shot finish. Good coverage.	Blasting of grey iron, malleable iron, light steel castings.	G-25	Sharp etch
• S-280	.028"	.020 To .024 A <sub>1</sub>		medium forgings, heat treated parts & heavy mill scale, - rust & other deposits.		
• S-330	.033"	.024 To .028 A <sub>1</sub>				
• S-390	.039"	.007 To .011 C <sub>2</sub>	Average to heavy shot finish. Average coverage.	Blasting of steel, heavy malleable iron and grey iron castings.	G-18	Deep etch rough
• S-460	.046"	.012 To .016 C <sub>2</sub>		Removal of scale from large billets, slabs - rust & other deposits.	G-16	
• S-550	.055"				G-14	
• S-660	.066"		Rough coverage. Adequate for most applications.	Heavy steel castings.	G-12	Very rough
• S-780	.078"			Removal of tough heavy scale.	G-10	

\* Not often used

The above chart lists the abrasive sizes most commonly used in blasting operations - the encircled dots to the left of the SAE size number represent the approximate shape and size of actual abrasive pellets. The round Wheelabrator Steel Shot is heat treated and drawn to a hardness of 42 to 50 Rockwell "C." Wheelabrator angular products are available in various degrees of hardness.