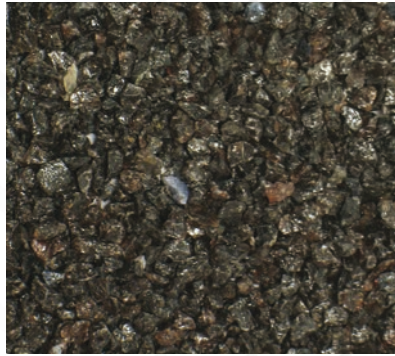
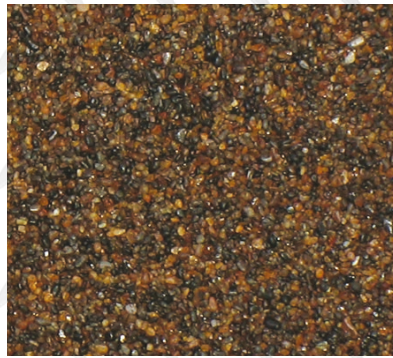




**ABRASIVE BLASTING
EQUIPMENT & SUPPLIES**



ABRASIVES CATALOG

Service Defines Our Reputation

YOU WANT IT? WE'VE GOT IT!



IDS - SUPPLIES & FACILITIES

IDS BLAST is a full line stocking distributor of abrasive blasting equipment, parts, safety supplies and abrasives. We stock a wide variety of hose, valves, wheels, blades, liners, fittings, couplers, nozzles, gaskets, hoods, filters and much more. Our knowledgeable sales team provides "in the field" technical analysis and solutions while our service department services most manufacturer's blasting equipment. We pride ourselves in providing solutions to the Contractor and Industrial markets.



- **QUALITY**
- **SERVICE**
- **EXPERIENCE**



FOR YOU, OUR CUSTOMER

RECYCLING PROGRAM

IDS BLAST offers a recycling program on Aluminum Oxide, Steel Abrasives & Plastic Media. The recycling program allows customer's to get paid for their "used" abrasives. By recycling "used" abrasive, we are reducing abrasive waste which is environmentally friendly.

Please contact us to discuss the possibility of a recycling program at your facility.



**ENVIRONMENTALLY
FRIENDLY**

BLANKET ORDERS

Blanket orders enable IDS BLAST to partner with our suppliers to offer discounted prices on our complete line of abrasives. This allows us to negotiate prices which has proven to reduce our customer's costs.

Blanket orders have been instrumental in increasing the efficiencies of our customer's operations.

**WE OFFER COMPETITIVE PRICES
WITH UNEQUALLED SERVICE**

SERVICE INSPECTIONS

Our trained sales professionals at IDS BLAST provide free service inspections which have proven to increase productivity and reduce down time. We have a complete service department that can provide in-house or on-site service inspections and repairs.

We become partners with our customers to assist them in increasing their operation efficiencies and productivity. We take our customer's success seriously.

**SERVICE DEFINES
OUR REPUTATION**

What Can Our Service Department Do For You?

- Inspections
- Recommendations
- Equipment Installation
- Equipment Repair
- Efficiency Evaluations

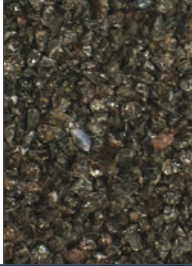


ABRASIVES INDEX

PAGE 6

Aluminum Oxide - Brown

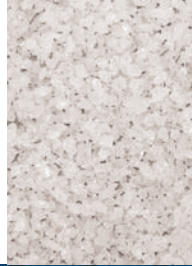
Deburring, descaling, etching and surface preparation applications.



PAGE 6

Aluminum Oxide - White

Cleans engine heads, valves, pistons, and turbine blades.



PAGE 7

Coal Slag

Provides foundation for coatings on buildings, castings, ships, railroad equipment and tanks.



PAGE 7

Corn Cob

Cleans, polishes and dries surfaces such as smoke damaged buildings and oil rigs.



PAGE 8

Crushed Glass

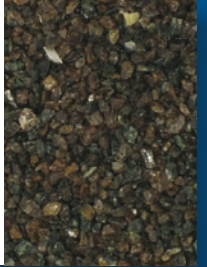
Removes rust, mill scale and coatings on concrete, structures, tanks and pipelines.



PAGE 8

Garnet

Heavy coating removal work, new steel, feathering and heavy rust removal.



PAGE 9

Glass Beads

Finishes, cleans, deburrs and peens materials like metal, plastic and rubber.



PAGE 9

Plastic Media

Removes and strips powder coatings, primers and topcoats.



PAGE 10

Silicon Carbide

Cleans and prepares extremely hard surfaces such as stone, ceramic, glass and metal.



PAGE 10

Sodium Bicarbonate

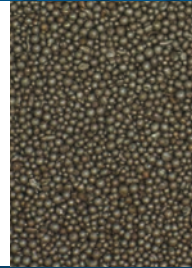
Effectively removes paint and grease from brick, copper, stainless steel, glass and rubber.



PAGE 11

Soft Shot

Remove, descale and deburr surfaces such as powder metal parts, die castings and stampings.



PAGE 11

Starblast® (Stauroelite Mineral)

Removes brittle coatings and prepares surfaces with mill scale or light rust.



PAGE 12

Steel Grit

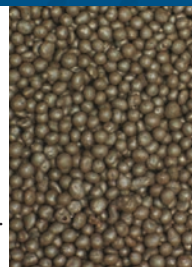
Used on metal for superior adhesion of paint, epoxy, enamel and other coatings.



PAGE 12

Steel Shot

Cleans, polishes and peens surfaces such as structural steel, castings & aerospace applications.



PAGE 13

Walnut Shell

Polishes and cleans fiberglass, soft metals, wood, plastics and stone.



PAGE 13

Special Notes, Precautions & Disclaimer

PAGE 14

Technical Data

PACKAGING AND SHIPPING

Repacked Media



PACKAGING OPTIONS

Abrasive media can come to you a lot of different ways; as small as a 40 lb. bag, to as large as a 50,000 lb. bulk truck (and everything in between). We can even transfer media into pails or boxes if that is what you require.

WE HAVE YOU COVERED!

These Packaging Icons are located throughout this catalog to indicate the different packaging sizes available for a given media.



SHIPPING - QUICK AND ON TIME

Abrasive arrives at our facility by the truckload where we off-load it, store it and get it ready to ship. When an order is received, all that is left to do is load it and ship it to you.

WE KNOW ABRASIVE SHIPPING!

What Can Our Shipping Department Do For You?

- Typically In-stock / Same Day Shipping
- Direct Shipping: From our Manufacturers
- Logistics - On Time Arrivals
- J.I.T. (Just In Time) Services Available



Arriving by the truckload and staged for quick shipping



Out to you quickly on less-than-truck loads

ABRASIVES

Aluminum Oxide-Brown

Aluminum Oxide grit is carefully shaped and graded for pressure blasting applications. It is sharp and can be used and reused again. Absence of wasteful flats and slivers maximizes cutting efficiency in deburring, descaling, etching and surface smoothing applications. Low iron content eliminates danger of rust-staining to weather-exposed granite, marble and stainless steel.

Features & Benefits

- **Recyclable**
- **Maximum resistance to breakdown**
- **Less than 1% free silica**
- **Low iron content**
- **Eliminates danger of rust-staining**
- **Non-skid floor coating applications**

PRODUCT TYPE

Industrial

US SIEVE SIZE

**16, 20, 24, 30, 36,
46, 54, 60, 70, 80,
90, 100, 120, 150,
180, 220, 240**

HARDNESS

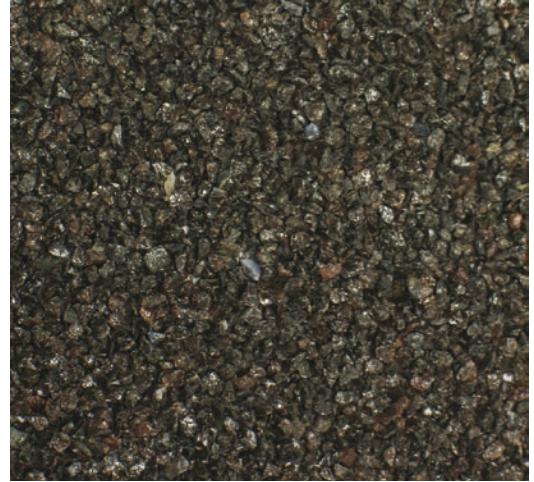
(MOHS) SCALE

9

BULK DENSITY

(LBS PER CU FT)

120



HOW IT COMES



40 Bags
per Pallet



4 Fibre Drums
per Pallet



1 or 2 Bulk Bags
per Pallet

Aluminum Oxide-White

White Aluminum Oxide has higher hardness and slightly lower toughness compared to brown aluminum oxide. It is characterized by its high purity, ability to self-sharpen, better cutting, lower heat emissions, higher efficiency, acid and alkali resistance and good thermal stability.

Features & Benefits

- **High resistance to breakdown**
- **Less than 1% free silica**
- **Liquid honing capabilities**
- **Allows for repeated use, less dust and less clean up**
- **Eliminates danger of rust-staining**
- **Non-skid floor coating applications**

PRODUCT TYPE

Industrial

US SIEVE SIZE

**12, 16, 20, 24,
30, 36, 46, 54,
60, 70, 80, 90,
100, 120, 150,
180, 220**

HARDNESS

(MOHS) SCALE

9

BULK DENSITY

(LBS PER CU FT)

120



HOW IT COMES



40 Bags
per Pallet



4 Fibre Drums
per Pallet



1 Bulk Bag
per Pallet

ABRASIVES

Coal Slag

Coal Slag is a fast-cutting and a good general purpose abrasive that is tough enough to get the job done. Its angular shape and hardness quickly cut away existing coatings. Use Coal Slag on buildings, tanks, castings, ships, bridges, railroad equipment, structural steel, exposed aggregate and more.

BLASTOX™ BLENDS AVAILABLE

Features & Benefits

- Less than 1% free silica
- Chemically inert
- Low friability
- Consistent uniform weight
- Approved by the U.S. Navy's OPL (MIL-A-222820)

PRODUCT TYPE

Contractor

US SIEVE SIZE

10/40
12/40
20/40
30/60

HARDNESS (MOHS) SCALE

6 to 7

BULK DENSITY (LBS PER CU FT)

85



HOW IT COMES



30 Bags
per Pallet



1 Bulk Bag
per Pallet



50,000 Pounds
per Bulk Truck

Corn Cob

Corn Cob is a resilient and durable abrasive that can clean, dry and polish a surface. Corn Cob granules are increasingly becoming the choice when the job calls for a softer, less dusty and environmentally safe abrasive.

Features & Benefits

- Cleaner and less dusty than many other abrasives
- Absorbs oils as it cleans
- Biodegradable
- Will not damage gears of equipment as sand often does
- 0% free silica

PRODUCT TYPE

**Contractor
& Industrial**

US SIEVE SIZE

1014
1420
2040
4060

HARDNESS (MOHS) SCALE

2

BULK DENSITY (LBS PER CU FT)

34 to 42



HOW IT COMES



48 Bags
per Pallet



40 Bags
per Pallet

ABRASIVES

Crushed Glass

Crushed glass is a 100% recycled material and contains no detectable crystalline silica. Crushed Glass delivers very low particle embedment which applies a whiter finish to the substrate.

Features & Benefits

- 100% recycled glass
- Non-reactive, inert
- Less than 1% free silica (silica sand contains up to 99% free silica)
- White post-blast finish
- Translucent white dust for increased visibility
- QPL approved (select plants)
- CARB approved (select plants)
- SSPC AB-1 Class A, MIL-A-22262B (SH) approved

PRODUCT TYPE

**Contractor &
Industrial**

US SIEVE SIZE

**10-40
20-40
40-70
70-100**

HARDNESS

(MOHS) SCALE

6

BULK DENSITY

(LBS PER CU FT)

80



HOW IT COMES



40 Bags
per Pallet



1 Bulk Bag
per Pallet

Garnet

Garnet is a hard and heavy abrasive that can increase productivity while reducing the amount of abrasive used. It offers the performance of synthetic and more expensive abrasives and is environmentally friendly.

Features & Benefits

- Cuts fast, reduces abrasive consumption
- Better visibility while blasting, low dust
- Recyclable
- Chemically inert
- Non-toxic
- Less than 1% free silica

PRODUCT TYPE

**Contractor &
Industrial**

US SIEVE SIZE

**30/60/80 GAGX1
80
120
200**

HARDNESS

(MOHS) SCALE

7 to 8.3

BULK DENSITY

(LBS PER CU FT)

147



HOW IT COMES



40 or 80 Bags
per Pallet



1 or 2 Bulk Bags
per Pallet

ABRASIVES

Glass Beads

Glass Beads are environmentally friendly and can be used in many blast applications to provide a finish with no profile. Use while working with metal, plastic or rubber materials to clean, debur and finish.

Features & Benefits

- Ideal "Cleaning" Abrasive
- Consumed at slow rate and can be recycled
- Will not contaminate metal being treated
- 0% free silica
- No Profile
- Uniform hardness and size

PRODUCT TYPE

Industrial

US SIEVE SIZE

**30-40, 40-60, 40-70,
50-80, 60-120,
80-120, 100-170,
120-270, 170-235**

HARDNESS

(MOHS) SCALE

4.5

BULK DENSITY

(LBS PER CU FT)

85



HOW IT COMES



40 Bags
per Pallet



1 Bulk Bag
per Pallet

Plastic Media

General applications of Plastic Media include powder coating removal, stripping aircraft and aerospace components, and removal of coatings from vehicles and vehicle parts. Different types of plastic media include:

- Type II - Urea
- Type III - Melamine
- Type V - Acrylic

Features & Benefits

- Low dust
- Reusable
- Infinite shelf life
- Non-toxic and environmentally safe
- Low machine wear
- 0% free silica

PRODUCT TYPE

Industrial

US SIEVE SIZE

**12/16
16/20
20/30
30/40**

HARDNESS

(MOHS) SCALE

3 to 4.0

BULK DENSITY

(LBS PER CU FT)

45-48



HOW IT COMES



20 Boxes
per Pallet



4 Fibre Drums
per Pallet

ABRASIVES

Silicon Carbide

Silicon Carbide blasting grit is designed for use on super hard metals, ceramics, glass and stone. Upon impact, grits shatter to form a continuous stream of sharp, new cutting edges.

Features & Benefits

- High resistance to breakdown
- No free crystalline silica
- Liquid honing capabilities
- Allows for repeated use, less dust and less clean up
- Minimizes danger of rust-staining

PRODUCT TYPE

Industrial

US SIEVE SIZE

**12, 16, 20, 24, 30,
36, 46, 54, 60, 70,
80, 90, 100, 120,
150, 180, 220, 240**

HARDNESS

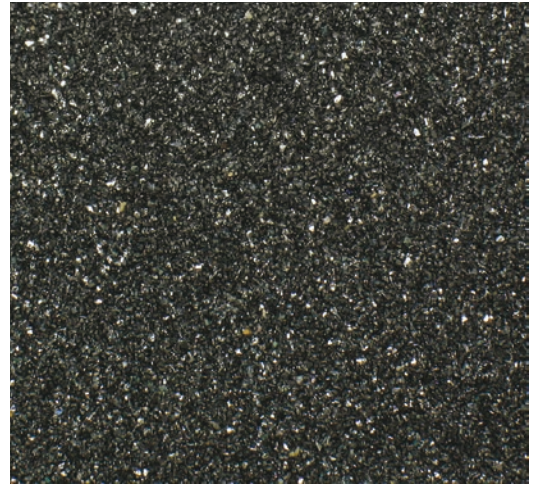
(MOHS) SCALE

6

BULK DENSITY

(LBS PER CU FT)

80



HOW IT COMES



40 Bags
per Pallet



4 Fibre Drums
per Pallet

Sodium Bicarbonate

Soda blasting uses large, sharp crystals of sodium bicarbonate (baking soda) to effectively and safely remove paint, grease, process residue, or graffiti from brick, glass, rubber aluminum, galvanized metals, stainless steel, copper, engine parts or TEFC motors.

Features & Benefits

- Non-hazardous
- Water soluble
- Won't damage most surfaces
- New uses continue to be developed
- Environmentally safe
- 0% free silica

PRODUCT TYPE

**Contractor &
Industrial**

US SIEVE SIZE

**48 (300)
58 (260)
100 (150)**

HARDNESS

(MOHS) SCALE

2.8

BULK DENSITY

(LBS PER CU FT)

61



HOW IT COMES



56 Bags
per Pallet

ABRASIVES

Soft Shot

Soft Shot was developed for cleaning soft, delicate metal parts. It's very durable and is made from virgin, premium-grade, cast steel shot. Soft Shot is good for cleaning, deburring and deflashing.

Features & Benefits

- Doesn't scratch or pit surfaces
- Doesn't damage blast machine wear parts
- Twice the life of standard SAE grades
- Environmentally friendly
- Doesn't generate hazardous waste

PRODUCT TYPE

Industrial

US SIEVE SIZE

NS-70

NS-90

NS-110

NS-170

NS-230

HARDNESS

(MOHS) SCALE

3 to 3.5

BULK DENSITY

(LBS PER CU FT)

225



HOW IT COMES



40 Pails
per Pallet



3 Steel Drums
and 1 Steel Drum
per Pallet

Starblast®

Starblast® works great on light rust, brittle paint, mill scale and is an excellent abrasive for blasting new steel.

- Starblast - <3% Free Silica (typically <2%)
- Starblast XL - <1% Free Silica
- Starblast Ultra - <5% Free Silica (typically <3%)

Features & Benefits

- Lower coating consumption
- Lower abrasive consumption
- Low dust and recyclable
- <1%-3% free silica (see above)
- More uniform blasting pattern
- Electrically non-conducting

PRODUCT TYPE

Contractor &
Industrial

US SIEVE SIZE

One size

(Ultra slightly larger)

HARDNESS

(MOHS) SCALE

6.5 to 7

BULK DENSITY

(LBS PER CU FT)

128-134



HOW IT COMES



80 Bags
per Pallet



1 Bulk Bag
per Pallet



50,000 Pounds
per Bulk Truck

ABRASIVES

Steel Grit

Steel Grit works well in many tough applications. Common applications are railcars, structural steel and in foundries. Steel Grit is used in airblast rooms and airless wheel blast machines for surface preparation.

Features & Benefits

- Long lasting
- Can be recycled many times
- Low dust
- Does not fracture easily
- Produces an etched surface on metal for superior adhesion of paint, epoxy and other coatings

PRODUCT TYPE

Contractor & Industrial

US SIEVE SIZE

12, 14, 16, 18, 25, 40, 50, 80, 120

HARDNESS

(MOHS) SCALE

6 to 7

HARDNESS

(ROCKWELL) C SCALE

**GP: 40-51RC
GM: 47-56RC
GL: 51-61RC
GH: 60+ RC**

BULK DENSITY

(LBS PER CU FT)

215 to 285



HOW IT COMES



40 Bags per Pallet



1 Steel Drum per Pallet

Steel Shot

Steel Shot is commonly used in applications such as railcars, structural steel and foundries. It is also used in airless wheel blast machines for surface polishing and shot peening. Another common use is in portable trackblast airless wheel blast machines for profiling and concrete floor preparation.

Features & Benefits

- Long lasting
- Can be recycled many times
- Shot peening applications
- Low dust
- Results in a smoother and more polished surface

PRODUCT TYPE

Industrial

US SIEVE SIZE

070, 110, 170, 230, 280, 330, 390, 460, 550, 660, 780

HARDNESS

(MOHS) SCALE

6 to 7

BULK DENSITY

(LBS PER CU FT)

215 to 285



HOW IT COMES



40 Bags per Pallet



1 Steel Drum per Pallet

ABRASIVES

Walnut Shell

Walnut shell provides an excellent finish without scratching or pitting the surface. It's relatively dust-free and can be used for deburring, deflashing and tumbling.

Features & Benefits

- **Recyclable**
- **Low dusting**

PRODUCT TYPE

Industrial

US SIEVE SIZE

6-10

8-12

12-20

18-40

HARDNESS

(MOHS) SCALE

3

BULK DENSITY

(LBS PER CU FT)

45



HOW IT COMES



40 Bags
per Pallet



Special Notes, Precautions & Disclaimer

The information contained in this brochure is believed to be accurate but is not warranted with respect to the accuracy of the information or recommendation. Purchasers of the materials listed in this brochure are advised to confirm in advance of need that the information is current and applicable to their circumstances and usage. Variations from tested samples may occur. As the information contained herein may be applied under conditions beyond our control, we assume no responsibility for the use of the materials listed in this brochure.

TECHNICAL DATA

Disclaimer: Information in this chart should only be used as general guideline and not for quoting purposes. Actual stripping rates vary based on media size, blasting pressure, and surface being blasted.

APROXIMATE STRIPPING RATES (SQ FT PER HOUR)

FINISH	SURFACE CONDITION	1/2" Nozzle	7/16" Nozzle	3/8" Nozzle	5/16" Nozzle	1/4" Nozzle
WHITE METAL	LOOSE MILL SCALE	250	200	145	102	61
	TIGHT MILL SCALE	211	164	121	84	50
	PITTED PAINT	125	100	71	50	32
	MULTICOATS	100	80	58	40	25
NEAR WHITE METAL	LOOSE MILL SCALE	265	210	150	106	65
	TIGHT MILL SCALE	220	172	125	90	55
	PITTED PAINT	132	104	75	55	34
	MULTICOATS	106	84	60	44	25
COMMERICAL	LOOSE MILL SCALE	632	495	360	255	155
	TIGHT MILL SCALE	420	320	240	170	102
	PITTED PAINT	316	246	181	128	76
	MULTICOATS	210	165	120	85	50
BRUSH-OFF	LOOSE MILL SCALE	1264	990	720	508	310
	TIGHT MILL SCALE	1264	990	720	508	310
	PITTED PAINT	1264	990	720	508	310
	MULTICOATS	1264	990	720	508	310

SURFACE FINISH STANDARDS

SSPC-SP10 NEAR-WHITE METAL

A **Near-White Blast Cleaned Surface**, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and any other foreign matter, except for staining. Staining shall be limited to no more than 5 percent of each square inch of surface area and may consist of light shadows, light streaks, or minor discolorations caused by stains of rust, stains of mill scale, or stains of previously applied paint.

REFERENCE: SSPC-SPI0, Steel Structures Painting Council (U.S.A.)
NACE No. 2, National Association of Corrosion Engineers (U.S.A.)
SA-2-1/2, Swedish Standards Organization
2nd. Quality, United Kingdom Standards (BS 4232)

SSPC-SP6 COMMERCIAL

A **Commercial Blast Cleaned Surface**, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, paint, oxides, corrosion products and other foreign matter, except for staining. Staining shall be limited to no more than 33 percent of each square inch of surface area and may consist of light shadows, light streaks, or minor discolorations caused by stains of rust, stains of mill scale, or stains of previously applied paint. Slight residues of rust and paint may also be left in the bottoms of pits if the original surface is pitted.

REFERENCE: SSPC-SP6, Steel Structures Painting Council (U.S.A.)
NACE No. 3, National Association of Corrosion Engineers (U.S.A.)
SA-2, Swedish Standards Organization
3rd, Quality, United Kingdom Standards (BS 4232)

SSPC-SP7 BRUSH-OFF

A **Brush-Off Blast Cleaned Surface**, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, loose mill scale, loose rust, and loose paint. Tightly adherent mill scale, rust, and paint may remain on the surface. Mill scale, rust, and paint are considered tightly adherent if they cannot be removed by lifting with a small putty knife.

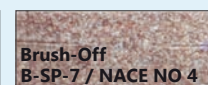
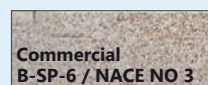
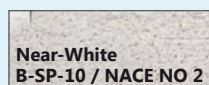
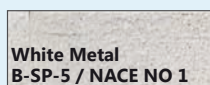
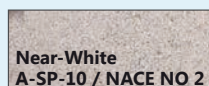
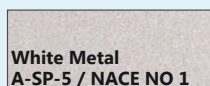
REFERENCE: SSPC-SP7, Steel Structures Painting Council (U.S.A.)
NACE No. 4, National Association of Corrosion Engineers (U.S.A.)
SA-I, Swedish Standards Organization

SSPC-SP5 WHITE METAL

A **White Metal Blast Cleaned Surface**, when viewed without magnification, shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter.

REFERENCE: SSPC-SP5, Steel Structures Painting Council (U.S.A.)
NACE No. 1, National Association of Corrosion Engineers (U.S.A.)
SA-3, Swedish Standards Organization
1st. Quality, United Kingdom, Standards (BS 4232)

NOTE: Consult with local standards organization to obtain complete specifications on degrees of surface cleanliness.



SSPC photographs are shown courtesy of SSPC. The Society for Protective Coatings. The digital photographs provided do not sufficiently depict the photographs that are available in the actual physical SSPC reference photographs and should not be used in the field for comparison. The SSPC-VIS 1 may be purchased at <http://www.sspc.org/marketplace>

TECHNICAL DATA

PHYSICAL CHARACTERISTICS OF ABRASIVES

MATERIAL	HARDNESS (MOHS SCALE)	GRAIN SHAPE	SPECIFIC GRAVITY	COLOR	FREE SILICA CONTENT	FREE IRON CONTENT	DURABILITY
Corn Cobs	2	Cubical	1.3	Tan	None	None	Good
Sodium Bicarbonate	2.8	Angular	2.2	White	None	None	Poor
Walnut Shells	3	Cubical	1.3	Light Brown	None	None	Good
Soft Shot	3 to 3.5	Spherical	7.0	Steel Gray	None	99%	Excellent
Plastic Media	3 to 4.0	Angular	1.2	Multi-colored	None	<.002%	Good
Glass Beads	4.5	Spherical	3.0	Crystal	None	None	Good
Crushed Glass	6	Angular	3.2	Clear-Brown	None	None	Fair
Coal Slag	6 to 7	Angular	2.7	Black	<.1%	N/A	Fair
Steel Shot	6 to 7	Spherical	7.2	Steel Gray	None	99%	Excellent
Steel Grit	6 to 7	Angular	7.5	Steel Gray	None	99%	Excellent
Staurolite Mineral	7 to 7.5	Rounded	3.6 to 3.9	Brown	1<% to 3%	1<% to 3%	Fair
Garnet	7 to 8.3	Cubical	4	Pink to Dark Red	<1%	None	Good
Aluminum Oxide	9	Cubical	3.8	Brown or White	<1%	<1%	Very Good
Silicon Carbide	9	Cubical	3.1	Black	<1%	<1%	Good
Diamonds	10	Cubical	3.5	White-Yellow	<1%	<1%	Very Good

ABRASIVES - BULK DENSITY

All direct pressure blast machines are filled by "volume", not "pounds", of abrasive. The weight of each type of abrasive is different per Cubic Foot of "volume". The weight is called the "Bulk Density" of that abrasive.

The chart to the right shows the "Bulk Density" (weight per cubic foot) of several common blast cleaning abrasives.

As a general rule, it can safely be figured that a typical air blast machine can only hold abrasive in about 75% of its inside space. So a typical 650 pound (6.5 Cu. Ft.) machine will only freely hold 488 pounds of abrasive that weighs 100 pounds per Cu. Ft. (Bulk Density), But, that same machine can hold 1219 pounds of Steel Grit, but only 219 pounds of Walnut Shells. But it is still as full as it possibly can be due to its filling angle of repose.

ABRASIVE TYPES	BULK DENSITY (LBS PER CU FT)
Aluminum Oxide	120
Coal Slag	85
Corn Cobs	35 to 42
Crushed Glass	80
Garnet	147
Glass Beads	85
Plastic Media	45 to 48
Silicon Carbide	106
Sodium Bicarbonate	61
Soft Shot	225
Staurolite Mineral	125
Steel Shot/Grit	215 to 285
Walnut Shell	45

PARTICLE SIZE TABLE SIEVE INFORMATION

SIEVE SIZE U.S. MESH	INCHES
4	.187
5	.157
6	.132
7	.111
8	.0937
10	.0787
12	.0661
14	.0555
16	.0469
18	.0394
20	.0331
25	.0280
30	.0232
35	.0197
40	.0165
45	.0138
50	.0117
60	.0098
70	.0083
80	.0070
100	.0059
120	.0049
140	.0041
170	.0035
200	.0029
230	.0024
270	.0021
325	.0017
400	.0015

CONVERSION MULTIPLIERS FACTOR CHART

From/To	cm	mm	um	in	mils
cm	1	10	10000	0.3937	0393.7
mm	.01	1	1000	0.0394	39.37
um	0.0001	0.001	1	.0000394	0.0394
in	2.54	25.4	25400	1	1000
mils	0.00254	0.00254	2.54	0.001	1

Example: 4.5 mils - 4.5 x 25.4 = 114.3 millimeters

cm=Centimeter um=Micron (micrometer) mm=Millimeter in=Inch mils=Thou (1/1000 of an inch)

CFM / PSI / ABRASIVE REQUIREMENTS

NOZZLE# ORIFICE SIZE	AIR & ABRASIVE RATES	NOZZLE PRESSURE								
		50 PSI (3.5 BAR)	60 PSI (4.1 BAR)	70 PSI (4.8 BAR)	80 PSI (5.5 BAR)	90 PSI (6.2 BAR)	100 PSI* (6.9 BAR)	125 PSI (8.6 BAR)	140 PSI (9.7 BAR)	
#2 1/8 inch (3.2 mm)	AIR	(cu ft/min)	12	13	15	18	19	21	26	
		(cu m/min)	.34	.37	.42	.51	.54	.59	.74	
	ABRASIVE	(lb/hr)	70	80	90	100	110	120	135	
		(kg/hr)	32	36	41	45	50	54	61	
#3 3/16 inch (4.8 mm)	AIR	(cu ft/min)	25	30	35	40	43	45	60	
		(cu m/min)	0.71	0.85	0.99	1.13	1.22	1.27	1.70	
	ABRASIVE	(lb/hr)	150	170	200	215	240	260	320	
		(kg/hr)	68	77	91	98	109	118	145	
#4 1/4 inch (6.35 mm)	AIR	(cu ft/min)	50	55	60	70	75	80	95	
		(cu m/min)	1.42	1.56	1.70	1.98	2.12	2.27	2.69	
	ABRASIVE	(lb/hr)	270	300	350	400	450	500	675	
		(kg/hr)	122	136	159	181	204	227	306	
#5 5/16 inch (8 mm)	AIR	(cu ft/min)	80	90	100	115	125	140	190	230
		(cu m/min)	2.27	2.55	2.83	3.26	3.54	3.96	5.38	6.51
	ABRASIVE	(lb/hr)	470	530	600	675	750	825	1000	1125
		(kg/hr)	213	240	272	306	340	374	454	510
#6 1/8 inch (9.5 mm)	AIR	(cu ft/min)	110	125	145	160	175	200	275	315
		(cu m/min)	3.12	3.54	4.11	4.53	4.96	5.66	7.79	8.91
	ABRASIVE	(lb/hr)	675	775	875	975	1060	1100	1350	1840
		(kg/hr)	306	352	397	442	481	499	612	835
#7 7/16 inch (11.1 mm)	AIR	(cu ft/min)	150	170	200	215	240	255	315	405
		(cu m/min)	4.25	4.81	5.66	6.09	6.80	7.22	8.92	11.46
	ABRASIVE	(lb/hr)	900	1000	1200	1300	1400	1510	1800	2540
		(kg/hr)	408	454	544	590	635	703	816	1152
#8 1/2 inch (12.7 mm)	AIR	(cu ft/min)	200	225	250	275	300	340	430	540
		(cu m/min)	5.66	6.37	7.08	7.79	8.50	9.63	12.18	15.28
	ABRASIVE	(lb/hr)	1200	1350	1500	17010	1850	2025	2525	3240
		(kg/hr)	544	612	680	771	839	919	1145	1470
#10 5/8 inch (16 mm)	AIR	(cu ft/min)	300	350	400	450	500	550	700	880
		(cu m/min)	8.50	9.91	11.33	12.74	14.16	15.58	19.82	24.90
	ABRASIVE	(lb/hr)	1900	2200	2400	2700	3000	3300	4000	5200
		(kg/hr)	862	998	1089	1225	1361	1497	1814	2359
#12 3/4 inch (19 mm)	AIR	(cu ft/min)	430	500	575	650	700	800	1100	1255
		(cu m/min)	12.18	14.16	16.28	18.41	19.82	22.66	31.15	35.52
	ABRASIVE	(lb/hr)	2700	3100	3500	3900	4300	4700	5700	7375
		(kg/hr)	1225	1406	1588	1769	1950	2132	2586	3345

This table is to be used as reference only. Actual results may vary depending on specific abrasive media used. This table is based on abrasive with a bulk density of 100 pounds per cubic foot.



*100 PSI MIN/REDUCE CFM REQUIRED

Most abrasive blast equipment requires a minimum pressure of 100 PSI in order for the control system to function properly. To maintain the 100 PSI minimum and lower the CFM requirement of blasting, a pressure regulator can be installed downstream of the control air connection. Example: if blasting with a #5 nozzle, the CFM requirement can be lowered from 140 to 115 by regulating the pressure to 80 PSI.



RESPIRATOR REQUIREMENTS

When calculating your CFM requirements, the air used by each respirator must be taken into account. A general rule is each respirator will require an additional **6-16 CFM**. PSI and type of control device will affect the CFM used. Consult the owners manual for your respirator for more on specific PSI and CFM requirements.

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