

Blasting Media Selection Guide

It is important to know the differences in blasting media, since different abrasive blasting media are required for different applications. Blasting media can be used for purposes such as cleaning, stripping, etching, strengthening and polishing. In addition to the media type, grit or mesh size is another factor to consider for your application. The final choice of media depends on the nature of the work required and on the blasting equipment that is employed. The blasting media selection guide below contains a list of the common blasting media and the differences in blasting media.

Aluminum Oxide

Aluminum oxide is the most widely used abrasive in blast finishing and surface preparation. Aluminum oxide is an extremely sharp, long-lasting blasting abrasive that can be recycled many times. In addition to the standard brown, aluminum oxide is available in 99.5% pure white grades. Hardness 8-9; Grit size range 12-220; Angular shape.

Crushed Glass

The angular nature of crushed glass grit allows for aggressive surface profiling and removal of coatings and surface contamination. Crushed glass grit contains no free silica, is non-toxic and inert and contains no heavy metals typically found in coal and copper slags. Since crushed glass grit is lighter than many slags up to 50% less media can be used. Hardness 5-6; Grit size range Coarse to Extra Fine; Angular shape; Consumable.

Glass Beads

Manufactured from lead-free, soda lime-type glass, containing no free silica, glass beads are manufactured into preformed ball shapes. Glass beads produce a much smoother and brighter finish than angular abrasives. Glass beads can be recycled approximately 30 times. Hardness 5-6; Grit size range 50-325; Round shape.

Silicon Carbide

As the hardest blasting media available, silicon carbide has a very fast cutting speed. Manufactured to a blocky grain shape that splinters, silicon carbide grit can be recycled many more times than other blasting media. The hardness of silicon carbide is ideal for etching of glass and stone. Hardness 9-9.5; Grit size range 16-240; Angular shape.

Plastic Media

Plastic abrasives are available in a variety of types that deliver quick stripping rates and consistent performance. This media is ideal for stripping coatings and paint from substrates, including aluminum and other delicate metals, composites and plastics. The relative softness of plastic abrasive media makes it ideal for automotive and aerospace blasting applications. Hardness 3-4; Grit size range 12-80; Soft, angular shape; Urea, Melamine, Acrylic compositions.

Steel Shot

Blasting with steel shot is a popular method for cleaning, stripping and improving a metal

surface. Steel shot is manufactured into a round ball shape that results in a smooth and polished surface. The peening action of the steel shot produces improved compressive strength to metal surfaces. Hardness 40-51 HRC; Grit size range S-70 to S-780; Spherical shape.

Steel Grit

High-demand, aggressive applications are ideal for steel grit. Steel grit offers a very fast stripping action for many types of surface contaminants from steel and other foundry metals. Softer than aluminum oxide but still angular in shape, steel grit will not fracture as easily making it perfect for creating an etched surface on metal. Hardness 40-65 HRC; Grit size range G-12 to G-80; Angular shape.

Corn Cob

Corn cob is an organic, soft blasting grit that is safe for delicate parts and soft substrates. As the preferred blasting media for log homes and other wood surfaces, corn cob offers excellent cleaning and stripping properties without damage to the substrate. Hardness 4-4.5; Grit size range Extra Coarse to Extra Fine; Ground, Angular shape.

Walnut Shell

Walnut shell grit is used for applications that require aggressive stripping or cleaning without damage or effect on the underlying substrate. Organic and biodegradable, walnut shell is extremely durable, angular in shape but is considered a soft abrasive. Walnut shell sees utility in applications such as cleaning hard woods and aircraft and automotive stripping. Hardness 4.5-5; Grit size range Extra Coarse to Extra Fine; Angular shape.