



*experience,
trust, service*

800-BLAST-IT
www.marcousa.com

Davenport, IA • Houston, TX • Shreveport, LA • Savannah, GA • Harrisburg, PA

Autofax #00093722
page 1 of 2

Updated: 08/27/03

GENERAL BLASTING GUIDELINES

These guidelines will aid in achieving maximum performance from garnet abrasives.

Clean Blast Machine

Remove all foreign materials or other blasting abrasives. Contaminants make proper abrasive metering impossible and increase dust generation.

Air Supply

Clean, dry air (*use aftercooler/dryer as needed*) with an air pressure range of 95-115 psi at the nozzle. Higher air pressure yields greater productivity, all things being equal and increases particle breakdown. When recycling, 95 PSI is recommended. Pressures above 100 psi at nozzle help ensure optimum abrasive efficiency in the form of faster cutting, lower abrasive consumption and lower dust generation.

Abrasive Metering

Very little garnet is required to produce a clean, uniform finish. Generally speaking, no more than half as much garnet, as compared to coal slag or sand, will be needed, provided the correct grade of garnet is used. To set metering valve, close valve, then open slowly while blasting to introduce abrasive to air stream, to find the point where the fastest cut is achieved. For new steel applications (*or to remove coatings under 5 mils*) one indication of proper abrasive-to-air mixture is a "blue flame" at the nozzle. A coating/contaminant that is thicker and tougher to remove, requires more abrasive to be metered into the air stream, to maintain fast cutting. Note: Running the abrasive too lean will reduce cutting speed and running the abrasive too rich will waste abrasive and increase dust generation.

Abrasive Grades

There are five blasting grades of garnet:

- ▶ The 30 x 60 grade typically produces a 2 - 3 mil profile on steel and is for removing light rust, mill scale (*new steel applications*) and coatings up to 15 - 20 mils.
- ▶ The #36 grade typically produces a 3.5 - 4.5 mil profile and is for removing heavier rust and 20 - 60 mils of coating.
- ▶ The #16 grade typically produces a 4 - 5+ mil profile and is for removing 60+ mils and the heaviest rust.
- ▶ For applications requiring 1-2 mil profiles or for aluminum/fiberglass, etc., #80 and #100 grades are also available.
- ▶ Test samples are always available FREE of charge, FOB shipping point.

Determining Correct Grade

The grade required is determined primarily by the profile specified and the coating/contaminant to be removed. On-site testing should be conducted to determine the best grade given application-specific performance. As a general rule, use the finest grade that will create the needed profile and remove the coating quickly.

GENERAL BLASTING GUIDELINES - *Continued*

Metering Valves

A Bantam/Maxum valve is suggested because these valves allow very precise metering and are easy to adjust and reset, though almost any valve will work.

Nozzles, Couplings Whips

A venturi-type nozzle will yield maximum performance. A long venturi bore #7 or #8 is suitable for most typical applications. Use largest nozzle possible given application and sufficient air pressure/volume. Replace nozzles once they are (1) size larger than the original orifice. Consider brass couplings and Superflex whips as needed.

Every blasting application is unique. If blasting issues develop, please contact your sales manager for assistance.

DISCLAIMER: The information in this sheet was obtained from sources, which we believe are reliable. However, the information is provided without any representation or warranty, expressed or implied, regarding accuracy. These conditions or methods of handling, storage use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Customers/users of silica must comply with all applicable health and safety laws, regulations and orders, including the OSHA Hazardous Communication Standard.



WARNING: Silicosis Warning - Breathing dust from silica sand causes silicosis, a fatal lung disease. Breathing dust during blasting operations may also cause asbestosis and/or other serious or fatal diseases. A NIOSH approved, well-maintained air-supplied respirator should be used by anyone blasting, anyone handling or using the sand and anyone in the area of the dust. Harmful dust can remain suspended in the air for long periods of time after the blasting has ceased causing serious injury or death.



For more information call:

800-BLAST-IT

Phone: 800-252-7848

Fax: 563-324-6258

e-mail: sales@marcouisa.com

www.marcouisa.com

