



BLAST ROOMS



PART NUMBERS AND SCHEMATICS GUIDE

Company Profile

Since 1944, Marco has developed a strong tradition of providing innovative and reliable products and services to the surface preparation and protective coatings industries. We are the world's premier provider of Abrasives, Blasting Equipment, Coating Equipment, Engineered Systems, Rental Equipment, Safety Equipment, Service, and Repair.

Through innovative designs and a total commitment to quality, Marco manufactures products that increase production rates, create a safer workplace, and reduce maintenance costs. Marco's industry experience, manufacturing capabilities, legendary customer service, product availability, logistics services, and technology leadership is your assurance that we deliver high quality products and services, providing the best value to you, our customer.

The Marco Difference

- **Industry Experience** – With Marco on your team, you have access to expertise which can only come from decades of industry leadership. We have organized our engineering department, production specialists, customer operations, and safety support into a “Center of Competence.” As a Marco customer, you have access to hundreds of years of cumulative experience related to your operations.
- **Manufacturing Excellence** – Marco is a U.S. based, ISO 9001:2008 certified manufacturer of equipment for the Surface Preparation and Protective Coatings industries. Marco's engineers benchmark the industry to ensure that we design and manufacture superior products that set the “Gold Standard” for performance, safety, and quality.
- **Legendary Customer Service** – Marco's legendary customer service team is staffed by friendly, highly-trained individuals who are focused on providing the highest level of product support, order accuracy, and customer satisfaction.
- **Product Availability** – We stock over 10,000 SKU's and have over 45 shipping locations to serve North American and International markets for all major brands of blasting and painting equipment. As the largest provider of surface preparation and protective coatings equipment in the world, our inventory levels and product availability are unmatched.
- **Logistics Services** – Marco's in-house logistics team is dedicated to moving your shipment anywhere in the world. We move over 14,000 truckloads every year, allowing you to save on freight costs by leveraging our buying power. Lower your process costs with a single invoice, which includes product and freight.
- **Technology Leadership** – Our website provides: Operator's Manuals, Part Numbers and Schematics Guides, MSDS information, and Features and Specifications Guides, providing access to information 24/7. Our Extranet application allows you to receive quotes and place orders online. Our Intranet maintains a complete record of your purchase history to assist with ongoing support of your existing equipment and future purchasing decisions.

Vision Statement

Marco is the world's premier provider of Abrasives, Blasting Equipment, Coating Equipment, Engineered Systems, Rental Equipment, Safety Equipment, Service, and Repair.

Mission Statement

Marco provides strong leadership and innovation to the surface preparation and protective coatings industries. We dedicate our efforts to the continuous improvement of our products, services, processes, people, and most importantly, the quality of our customer's experience.

Quality Statement

Marco is committed to providing superior quality in the design, manufacturing, distribution, rental, service, and repair of our products. Our ISO 9001:2008 certification extends throughout all operations in all locations. Continuous improvement of our processes and supply chain Integration comprise the core of our business strategy for delivering exceptional quality and value in all Marco products and services.

Management Philosophy

We are a company dedicated to the success of every customer and associate. We discuss, debate, challenge, measure, and test our ideas. We will be boundless and limitless in our passion to improve. Through sound leadership and dedicated associates, we will ensure a long term, profitable future for Marco, our associates, customers, and suppliers.

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Definition of Terms:

Blast Enclosure: A Blast Enclosure is a metal structure that protects the blasting operations from the elements and contains it from other work areas. By enclosing the blast operations, you can now operate regardless of daylight or weather conditions. A Blast Enclosure also contains the used abrasive for easier cleanup and re-use. Blast Enclosures can be configured with one or multiple product doors that are steel or rubber. Lighting can be fluorescent or LED and located in the ceiling or side walls.

Dust Collector: A dust collector creates an engineered air flow in an enclosure, providing ventilation and collecting airborne dust and debris. Dust collection is regulated by OSHA for any sustained enclosed blasting operation. Using a dust collector helps to increase work surface visibility, increasing quality of work and production, while reducing cleanup. Dust collectors can be located inside or outside the building.

Abrasive Recovery System: An Abrasive Recovery System assists with the cleanup of abrasives and blasting debris in a blast enclosure. The system removes unwanted large particles and fines from the used abrasive during the cleaning process, preparing it for reuse.

Figure 1: Determine the size of enclosure

Best practices suggest that there should be 3-4' of clear space around the part that you are blasting. This allows room for the operator to safely move around the part and reduces wear on the walls from abrasive rebound. Keeping in mind that sometimes that isn't possible due to space constraints, we would still not recommend a booth that does not allow a minimum of 24" around the part. The height of the room can be more constricted if the part can be rotated to blast the top or bottom. If you have a wide variety of part sizes or ever changing part sizes it is best to plan for an enclosure size that can contain 80% of the volume that requires blasting unless your goal is to contain 100% of all your blasting needs. The column labelled "Suggested Product Size" is a quick reference for you to use. If your product dimensions fit the range, select one of the part numbers to the left.

A solid back room has one product door that you will bring product in and out of the blast enclosure. A drive through blast enclosure allows you to bring the product into one door and remove it through a second door.

Booth size is important as it can: effect wear, determine the size of the dust collector and abrasive recover system.



Drive-through, crane slot,
manual metal doors



Large equipment enclosure,
electric rubber doors

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Figure 1: Blast Enclosure

Part Number		Inside Dimensions			Suggested Product Size			Lights	Product Door		Personnel Door	Amperage	Category
Solid Back	Drive Thru	W	H	D	W	H	D		Size	Type	Qty		
10500100	10500101	10'	8'	10'	2'-4'	1'-4'	2'-4'	2	8' x 8'	double	1	2	80-10A
10500102	10500103	10'	8'	12'	2'-4'	1'-4'	4'-6'	3	8' x 8'	double	1	2	80-10B
10500104	10500105	10'	8'	16'	2'-4'	1'-4'	8'-10'	3	8' x 8'	double	1	2	80-10C
10500106	10500107	10'	8'	20'	2'-4'	1'-4'	12'-14'	4	8' x 8'	double	1	3	80-10D
10500110	10500111	10'	10'	10'	2'-4'	1'-7'	2'-4'	3	8' x 10'	double	1	2	100-10A
10500112	10500113	10'	10'	12'	2'-4'	1'-7'	4'-6'	3	8' x 10'	double	1	2	100-10B
10500114	10500115	10'	10'	16'	2'-4'	1'-7'	8'-10'	4	8' x 10'	double	1	3	100-10C
10500116	10500117	10'	10'	20'	2'-4'	1'-7'	12'-14'	5	8' x 10'	double	1	4	100-10D
10500120	10500121	12'	10'	12'	4-6'	1'-7'	4'-6'	4	8' x 10'	double	1	3	120-12B
10500122	10500123	12'	10'	16'	4-6'	1'-7'	8'-10'	5	8' x 10'	double	1	4	120-12C
10500124	10500125	12'	10'	20'	4-6'	1'-7'	12'-14'	6	8' x 10'	double	1	4	120-12D
10500130	10500131	12'	12'	12'	4-6'	1'-9'	4'-6'	4	8' x 10'	double	1	3	144-12B
10500132	10500133	12'	12'	16'	4-6'	1'-9'	8'-10'	6	8' x 10'	double	1	4	144-12C
10500134	10500135	12'	12'	20'	4-6'	1'-9'	12'-14'	7	8' x 10'	double	1	5	144-12D
10500136	10500137	12'	12'	24'	4-6'	1'-9'	16'-18'	8	8' x 10'	double	1	6	144-12E
10500138	10500139	12'	12'	28'	4-6'	1'-9'	20'-22'	10	8' x 10'	double	1	7	144-12F
10500140	10500141	12'	12'	32'	4-6'	1'-9'	24'-26'	12	8' x 10'	double	1	8	144-12G
10500150	10500151	14'	14'	12'	6'-8'	1'-8'	4'-6'	6	10' x 12'	double	2	4	196-14B
10500152	10500153	14'	14'	16'	6'-8'	1'-8'	8'-10'	8	10' x 12'	double	2	5	196-14C
10500154	10500105	14'	14'	20'	6'-8'	1'-8'	12'-14'	10	10' x 12'	double	2	7	196-14D
10500156	10500157	14'	14'	24'	6'-8'	1'-8'	16'-18'	12	10' x 12'	double	2	8	196-14E
10500158	10500159	14'	14'	28'	6'-8'	1'-8'	20'-22'	14	10' x 12'	double	2	9	196-14F
10500160	10500161	14'	14'	32'	6'-8'	1'-8'	24'-26'	15	10' x 12'	double	2	10	196-14G
10500170	10500171	16'	16'	16'	8'-10'	1'-10'	8'-10'	10	12' x 14'	double	2	7	256-16C
10500172	10500173	16'	16'	20'	8'-10'	1'-10'	12'-14'	12	12' x 14'	double	2	8	256-16D
10500174	10500175	16'	16'	24'	8'-10'	1'-10'	16'-18'	15	12' x 14'	double	2	10	256-16E
10500176	10500177	16'	16'	28'	8'-10'	1'-10'	20'-22'	18	12' x 14'	double	2	12	256-16F
10500178	10500179	16'	16'	32'	8'-10'	1'-10'	24'-26'	20	12' x 14'	double	2	13	256-16G
10500180	10500181	16'	16'	36'	8'-10'	1'-10'	28'-30'	22	12' x 14'	double	2	14	256-16H
10500182	10500183	16'	16'	40'	8'-10'	1'-10'	32'-34'	26	12' x 14'	double	2	17	256-16I

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Figure 2a: Choose Dust Collector

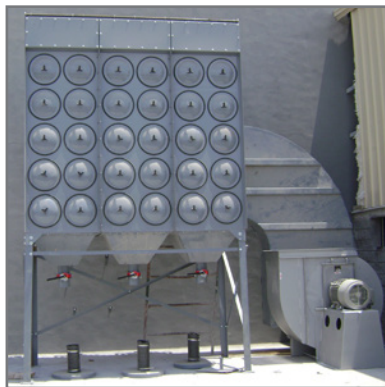
To help you choose the right dust collector to go with your blast enclosure we have coordinated the blast enclosures with the appropriate dust collector based on the four primary airflow categories by abrasives as outlined by OSHA.

1. Find your blast enclosure category number that you chose from the **blue column** in step 1.
2. Choose the column that has the abrasive type that you want to use. The part number that is at the intersection of the two that you have chosen is your dust collector.

You will notice that as the width and height of the blast enclosure increases the size of the dust collector increases. You will also notice that the dustier abrasives require a larger dust collector. The abrasive you chose can be critical to the overall cost of your blasting operation and ongoing operating costs. We have included a link to our abrasive selection and comparison guide to help with you with choosing an abrasive.

Figure 2a: Dust Collector

Blast Enclosure Category	DUST COLLECTOR			
	Abrasive Type Used			
	Carbon Steel Shot Carbon Steel Grit Stainless Steel Shot Stainless Steel Grit	Aluminum Oxide Glass Bead Crushed Glass Plastic Media	Corn Cob Garnet Staurolite Walnut Shell	Sand Copper Slag Coal Slag
80-10A-D	10604000	10605000	10607000	10608000
100-10A-D	10605000	10607000	10608000	10610000
120-12B-D	10607000	10607000	10610000	10612000
144-12B-G	10607000	10609000	10612000	10615000
196-14B-G	10610000	10612000	10615000	10620000
256-16C-I	10612000	10615000	10620000	10625500



Outdoor unit, ground-mounted fan



Outdoor unit, top-mounted fan



Indoor unit, top-mounted fan

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Figure 2b: Choose Ducting

To help you choose the right ducting to go with your dust collector we have coordinated the blast enclosures with your selected blast enclosure category.

1. Find your blast enclosure category number that you chose from the **red cells** in the step 2.
2. Find your Blast Enclosure from the **blue cells** in step 1.

NOTE: Ducting kit is designed to ventilate the blast booth only. Additional ducting, fittings, brackets may be required to exit your building.

Figure 2b: Ducting

Dust Collector Part Number	DUCTING					
	Blast Enclosure Category					
	80-10A-D	100-10A-D	120-12B-D	144-12B-G	196-14B-G	256-16C-I
10604000	10620100					
10605000	10620115	10620110				
10606000		10620120	10620125			
10607000	10620130		10620135	10620140		
10608000	10620145	10620150				
10609000				10620155		
10610000		10620160	10620165		10620170	
10612000			10620175	10620180	10620185	10620190
10615000				10620195	10620200	10620205
10620000					10620210	10620215
10625500						10620230

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Figure 3: Select an Abrasive Recovery System

1. Find your blast enclosure category number that you chose from the **blue column** in step 1.
2. Select recovery system type and hopper type **ONLY** listed in the row with your blast enclosure category.

The main factors to consider when choosing an abrasive recovery system are:

- Time available to clean up during the work shift or after the work shift
- Abrasive storage hopper size needed
- Ability to modify the floor in your blast area
- Abrasive type to be reused

There are two types of abrasive recovery systems to choose from: Pneumatic or Mechanical.

Pneumatic Recovery System:

- Uses vacuum to move and clean the used abrasive.
- Ideal for smaller and lighter abrasives, but will work with all abrasives.
- Does not require any floor modifications.
- Best suited for light intermediate blasting.
- Includes a 10 cubic foot hopper for abrasive storage.
- There are two models of pneumatic systems; Standard and Heavy.
 - Heavy model is required for carbon or stainless steel grit or shot.



Pneumatic, Abrasive Recovery System

Mechanical Recovery System:

- System is designed for higher volumes of abrasive and any size or weight of abrasive.
- May use augers in the floor with a bucket elevator to move the used abrasive to the cleaning portion of the system which the rotary screen and air wash.
- Abrasive storage hoppers can range in size to meet your production needs.
- Typical models are:
 - Sweep In or Shovel In
 - Single cross auger
 - Single long auger
 - Multiple Long augers



Mechanical, Single Long Auger



Mechanical, Shovel-In Hopper



Mechanical, Multiple Long Augers

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Figure 3: Abrasive Recovery System

Blast Enclosure Category	Pneumatic		Mechanical Recovery Hoppers						
	Pneumatic Recovery		Sweep-In		Shovel-In		Single Cross	Single Long	"H" or "U"
	Standard	Heavy	40 Cu. Ft.	80 Cu. Ft.	40 Cu. Ft.	80 Cu. Ft.	80 Cu. Ft.	80 Cu. Ft.	80 Cu. Ft.
80-10A	10611000	10612000	10853040		10854040				
80-10B	10611000	10612000	10853040		10854040				
80-10C	10611000	10612000	10853040		10854040				
80-10D	10611000	10612000	10853040		10854040				
100-10A	10611000	10612000	10853040		10854040				
100-10B	10611000	10612000	10853040		10854040				
100-10C	10611000	10612000	10853040		10854040				
100-10D	10611000	10612000	10853040		10854040				
120-12B	10611000	10612000	10853040		10854040		10864112		
120-12C	10611000	10612000	10853040		10854040		10864112		
120-12D							10864112		
144-12B	10611000	10612000	10853040		10854040		10864112		
144-12C	10611000	10612000	10853040		10854040		10864112		
144-12D				10853080		10854080	10864112	10874220	
144-12E				10853080		10854080	10864112	10874224	
144-12F				10853080		10854080	10864112	10874228	
144-12G				10853080		10854080	10864112	10874232	
196-14B	10611000	10612000	10853040		10854040		10864114		
196-14C	10611000	10612000	10853040		10854040		10864114		
196-14D				10853080		10854080	10864114	10874220	10881420
196-14E				10853080		10854080	10864114	10874224	10881424
196-14F				10853080		10854080	10864114	10874228	10881428
196-14G				10853080		10854080	10864114	10874232	10881432
256-16C				10853080		10854080	10864116		
256-16D				10853080		10854080	10864116	10874220	10881620
256-16E							10864116	10874224	10881624
256-16F							10864116	10874228	10881628
256-16G							10864116	10874232	10881632
256-16H							10864116	10874236	10881636
256-16I							10864116	10874240	10881640

OPTIONAL ACCESSORIES

Figure 1: Blastmaster® Smart Box™ Production Management System



Item #	Part #	Description
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Fig. 1

—	10102428	Blastmaster® Smart Box™ Production Management System
1	10104314	2GB SD Card
2	1015551	2 Prong Male Twist Lock Plug
—	10104348	Replacement Key (<i>not shown</i>)
—	105M104	Features and Specifications Guide – Blastmaster® Smart Box™
—	106M104	Part Numbers and Schematics Guide – Blastmaster® Smart Box™
—	1090104	Operator's Manual – Blastmaster® Smart Box™
—	1091045	Hazard Identification Tag

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