

High capacity PMB dry stripping and reclaiming, convenient portability, plus easy add-on flexibility.

The RAM 21 system offers operators high performance Plastic Media and Starch Blasting (PMB), convenient portability, and the flexibility to add-on extended capabilities like closed-cycle dust-free blasting, and a quick connect add-on blast cabinet.

Engineered for simultaneous blasting and reclaiming of media with minimum air consumption, the RAM 21 yields optimum productive use from each pound of media. Included in the system is the RAM blast generator, remote control, complete recovery, reclaim, cyclone separator, air wash, vibrating screen and magnetic separator, dust collector, and electric motor powered high static blower, all mounted on a rugged carriage with heavy duty wheels and tow hitch.

A 65 foot (20 m) blast hose system, and 1/2" (13 mm) nozzle are included.



### Reduces media cost by recycling.

Media is cost effectively reclaimed and reused, not wasted as it is by other systems. Spent media is easily loaded into the hopper (or into the optional Low Profile recovery hopper), then pneumatically conveyed to the cyclone centrifuge, dual adjustable air wash, vibrating screen and magnetic separator which rapidly separate reusable abrasive from dust and debris. The large 24 cubic feet (680 liters) of media storage space in the hopper and blast generator expand blasting time substantially before reclaiming.

### Simple operation, consistent performance.

RAM 21 makes paint removal and media recycling a breeze. The operator masks areas not to be stripped and proceeds to strip coatings from the surface using a lightweight Feathertouch™ remote control.

Spent media is pneumatically conveyed from the hopper to the cyclone centrifuge, dual adjustable air wash, vibrating screen and magnetic separator, which rapidly separate reusable abrasive from dust and other fines. Media and debris fall to a vibrating screen, which captures the debris, and allows reusable, correctly sized media to



Cabinet Option with Accu-Flow Valve provides precise control for surface preparation of small parts.

fall through to the storage hopper. Dust is pulled from the center of the cyclone and pneumatically

conveyed to a high efficiency dust collector with filtered air exhausted into the atmosphere.

Straight-through media valve, 60 degree angled blast generator dis-



Dust free vacuum blasting is easy with the RAM 21 closed cycle option.

charge, and fluidizing metering valve, transport media for smooth, responsive non-pulsing nozzle performance.

### Closed cycle option provides dust free vacuum blasting.

If you need to comply with closed cycle paint removal regulations, cut down on clean-up time, or simply make less dust, add the Closed Cycle Blast Kit to your RAM 21. Perfect for in-plant and small area blasting, the portable system provides dust-free blasting that strips and vacuums dust simultaneously, and effectively eliminates clean up.

### Choose the RAM 21-2 and double your productivity.

If you need to double your production, choose the RAM 21-2 with two blast generators and hose systems. At twice the productivity of the RAM 21, the RAM 21-2 allows two operators to work simultaneously.

### Add-on a cabinet for blasting with precise control.

Plug in more capability to your RAM 21 with this quick connect cabinet. The unit provides precise control for surface preparation of smaller parts in a brilliantly illuminated sealed cabinet that keeps dust and debris out of the workplace.

## RAM 21 - the high capacity PMB dry stripping and reclaiming system with easy add-on flexibility includes:

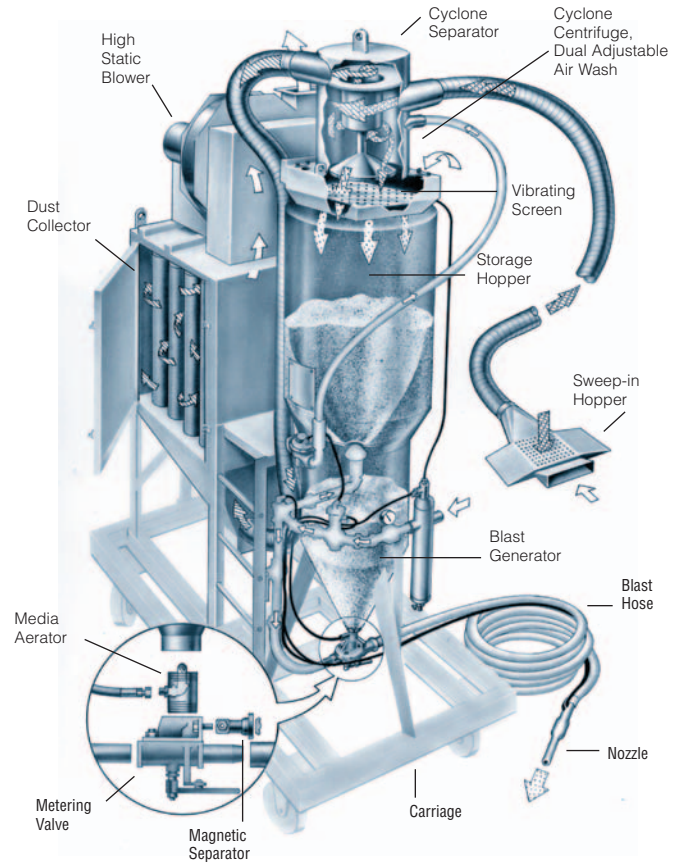
- RAM 11 Blast Generator, 6 ft<sup>3</sup> (170 l) volume and 60° cone discharge with fluidized metering.
- Accessories: RC150P 1-1/4" RC system, 66 ft (20 m) hose system with 50 ft of 1-1/4" blast hose and 16 ft of 3/4" whip hose for maximum operator ease.
- Recovery System with optional Lo-Pro or standard recovery hopper.
- 900 CFM (25 CMM) Cyclone Reclaimer with vibrating screen, plus four air gates and adjustable internal cones — a fine-tunable, two stage air wash system; continuous media reclaiming rate of 6400 lbs/hr (2900 kg/hr); magnetic separator.
- Dust collector with 7-1/2 HP TEFC motor and high static blower. Dust collector bags with a total of 140 ft<sup>2</sup> (13 m<sup>2</sup>) of filter area. Manual externally activated bag rapper for rapid cleaning.
- Maintenance platform, ladder and hand rail for easy access to reclaimer.
- 24 ft<sup>3</sup> (680 l) total media capacity.
- Media recovery hopper with 25 ft (7.6 m) of 5" ID (13 cm) reinforced vacuum hose. (Up to 50 ft (15.2 m) may be used)
- Optional Lo-Profile hopper to speed media loading; available at additional cost.
- Steel chassis with wheels and towbar.

Note: Flow rates are given for plastic media with 1.5 specific gravity. (58 lb/ft<sup>3</sup>) When using the lighter 1.2 media, such as Type V, use 80% of stated value. Starch media 1.45 sp gr, flow rates approximately same as 1.5 media.

### SPECIFICATIONS

<b>Stock Number</b>	494-000-04
<b>Overall Dimensions</b>	48" wide x 100" long x 161" high (122 cm x 254 cm x 409 cm) (standard unit on Note: Optional muffler adds 36" (91 cm) to overall height. wheeled carriage) Optional: less wheels and carriage reduces height by 16" (41 cm). New overall height 145" (368 cm). Loading Hopper: 24" wide x 24" deep x 24" high (61 cm x 61 cm x 61 cm) Optional Lo-Profile.
<b>Weight</b>	2500 lbs (1134 kg) with wheels and carriage 2200 lbs (1000 kg) without wheels and carriage
<b>Wheels and Carriage</b>	Full rated capacity wheels. 12" (30 cm) OD. Carriage with pintle eye hitch. Maximum speed rating of 2 mph (3 kph) empty
<b>Total Media Capacity Usable Blast Media</b>	1390 lbs (630 kg) for 58 lb/ft <sup>3</sup> media. 24 ft <sup>3</sup> (680 l)
<b>Media Flow Rate</b>	Primarily designed for plastic and starch blast media. Also functions superbly on glass, aluminum oxide or other common abrasive, except metals. For aluminum oxide an optional rubber lined HD cyclone is recommended
<b>Media Recovery Rate</b>	550 lbs/hr (362.9 kg/hr) with 1/2" (13 mm) nozzle; 1.5 sp gr media. (450 lb/hr for 1.2 sp gr media)
<b>Nozzle Hours/Charge</b>	3 hours 20 minutes (lean); 2+30 (average), 1+40 (rich)
<b>Media Recovery Rate</b>	6400 lbs/hr (2900 kg/hr) for media with 1.5 sp gr
<b>Air Requirement</b>	220 CFM @ 100 psi (6.2 m <sup>3</sup> /min @ 7 kg/cm <sup>2</sup> ) for 1/2" nozzle and operator breathing air
<b>Tubular Dust Bags</b>	30 bags with 140 ft <sup>2</sup> (13 m <sup>2</sup> ) filter area
<b>Motor</b>	TEFC 7-1/2 HP, 3450 rpm, 3 phase, 208-230/460 volt 60 hz motor with high static blower. Optional: 50 hz and other voltages
<b>Motor Starter</b>	Included
<b>BLAST GENERATOR</b>	
<b>Diameter</b>	24" (61 cm)
<b>Bottom Cone</b>	60 degree included angle
<b>Piping</b>	1-1/4" (32 mm)
<b>Volume</b>	6 ft <sup>3</sup> (170 l)
<b>Remote Controls</b>	RCP150P w/Feathertouch <sup>®</sup> , auto refill on shutdown
<b>Remote Control Hose</b>	Poly Air Cable twin line yellow/gray attached to media hose
<b>Nozzles</b>	Open Blast:: Tungsten Carbide BMLV-8, 1/2" (12.7 mm) Super Venturi nozzle with thermoplastic jacket
<b>Blast Hoses</b>	Open Blast: 50 ft (15 m) long 1-1/4" ID (31.8 mm) x 1-7/8 OD (47.6 mm) plus 16 ft (4.9 m) of 3/4" ID (19 mm) x 1-1/2" OD (38 mm) whip hose for maximum operator ease
<b>Moisture Separator</b>	Included 1-1/4" (31.8 mm) NPT continuous drain, #415-000
<b>Air Pressure Regulator</b>	Included
<b>Abrasive Diverter</b>	Included 240-030-05
<b>Media Aeration</b>	Fluidized bed in lower portion of pressure vessel
<b>Mixing Valve</b>	M-70
<b>Magnetic Separator</b>	Included
<b>RECLAIMER</b>	
Cyclone separator, air wash, vibrating screen, storage hopper	
<b>Air Volume</b>	900 CFM recovery system air flow (25 CMM)
<b>Air Wash</b>	Adjustable independently for both volume and velocity
<b>Hopper Volume</b>	18 ft <sup>3</sup> (510 l)
<b>Pick Up Hopper</b>	Pneumatically powered loading and recovery hopper with vibrating screen 24" wide x 24" deep x 24" high (61 cm x 61 cm x 61 cm). Optional Lo-Profile Media Recovery Hopper for ultimate recovery sweep-in convenience. Active area 32" x 24" x 4" high (81 cm x 61 cm x 10 cm high)
<b>Media Recovery Hose</b>	25 ft x 5" (7.6 m x 13 cm)

In accordance with our program of continued product improvement, specifications are subject to change at any time without notice.



### DUST COLLECTOR

<b>Air Volume</b>	900 CFM air flow (25 CMM)
<b>Dimensions</b>	36" wide x 36" deep x 124" high (92 cm x 92 cm x 315 cm)
<b>Electric Motor</b>	7-1/2 HP, 208-230/460 volt, 3 phase, 60 hz, TEFC. 50 hz optional
<b>Optional Air Motor</b>	10 HP, 2000 RPM, requires air supply of 280 CFM at 100 psi (8 CMM @ 7 bar)
<b>Blower</b>	High static 30 inch (75 cm) water gauge
<b>Filter Area</b>	30 dust bags with 140 ft <sup>2</sup> filter area (13 m <sup>2</sup> )
<b>Electric Controls</b>	Blower electric motor controlled with a manual starter in NEMA 1 enclosure

### RECOMMENDED OPERATOR PROTECTION PACKAGE

478-012-02	Protective helmet system with cape, inner and outer lens, 25 foot (8 m) air hose assembly, NIOSH approved
280-095-02	Extension air hose 25 feet (7.6 m) long for above helmet (total of 35 feet (10.7 m) NIOSH approved
478-012-12	Outer lens, package of 100
620-100-30	Tee, Valve and Hose Assembly includes pipe fitting, 1/2" valve, 10 ft (3 m) length of 1/2" I.D. air hose, coupled (purpose to connect air supply to breathing air filter) (Use approved breathing air)
240-010-05	Breathing air filter, two outlet (Use approved breathing air)
478-013-06	Leather gloves
478-012-18	Air Conditioner
120-060-01	CO Monitor/Alarm
326-010-01	Leather jacket
469-015-02	Leather overalls

**RAM 21-2 (494-000-02)** Same RAM 21 except for 2 RAM blast generators and hose systems. Total media capacity 30 ft<sup>3</sup> (850 l). Overall dimensions 135" x 48" x 172" high (3.43 m x 1.22 m x 4.37 m). Overall height with muffler 208" (5.28 m). Weight 3,000 lbs (1,364 kg)

**WARNING: NEVER USE WITH SAND ABRASIVE**  
**WARNING: ALL ABRASIVE BLASTING CREATES BREATHABLE PARTICLES OF DUST WHICH MAY INCLUDE SILICA AND WHICH MAY LEAD TO VARIOUS DISEASES INCLUDING SILICOSIS, A LUNG DISEASE THAT CAN BE FATAL. ABRASIVE REBOUND OR DIRECT BLAST MAY ALSO INJURE AN UNPROTECTED OPERATOR. THEREFORE, SAFETY REQUIRES THAT THOSE PERSONS IN THE AREA OF ABRASIVE BLASTING ALWAYS WEAR PROPERLY SELECTED AND MAINTAINED GOVERNMENT APPROVED RESPIRATORY EQUIPMENT AND FULL PROTECTIVE CLOTHING, FROM HEAD TO FOOT. IF YOUR PAINT OR PROCESS DUST IS HAZARDOUS, AN OPTIONAL HEPA FILTER MAY BE REQUIRED. BEFORE USING MACHINE GET APPROVAL FROM YOUR SAFETY DEPARTMENT.**



1820 Walters Court  
 Fairfield, California 94533 USA  
 TEL (707) 429-2434  
 FAX (707) 429-2424  
 E-MAIL info@paulisystems.com  
 WEB www.paulisystems.com