

FINE

FINISHING

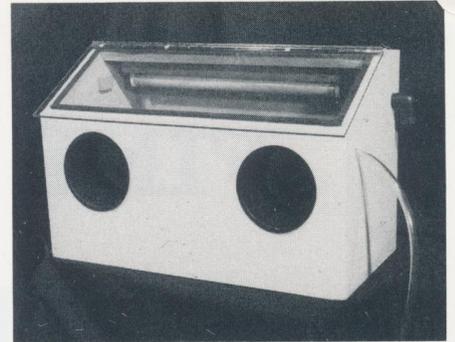
PRODUCTS

&

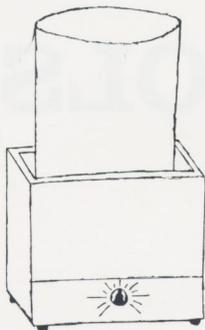
TOOLS

Fine Finishing Products to Expand Your Modeling Capabilities

The Abrasive Blaster is designed for use on plastic and brass to professionally prepare the surface for painting. When used with our especially formulated Abrasive Compound, lettering, single layers of paint, plating, and crazed plastic can be removed without the loss of detail. If used on wood or plaster castings the grain will be raised providing an exceptional level of detail. Because the Abrasive Blaster operates at a minimum of 20 psi @ 2.1 CFM, nozzle and abrasive life are extended dramatically. The 24" wide, 16" high, 12" deep cabinet is available in kit or assembled form and recycles the abrasive. Our Abrasive will not cause silicosis and is non-carcenogenic.

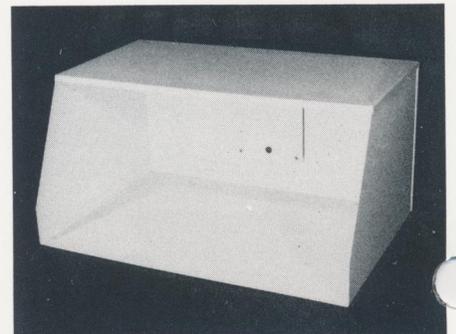


NEW!

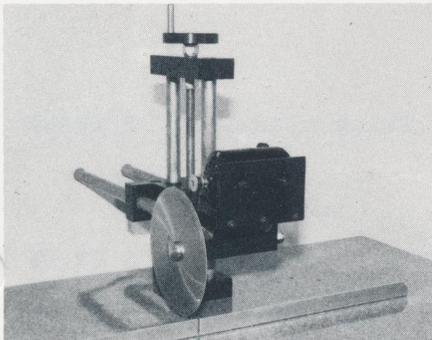
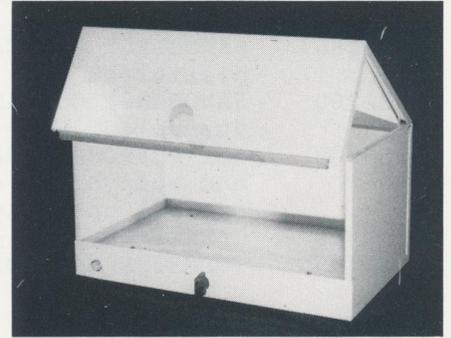


Complementing our Abrasive Blaster is our Ultrasonic Cleaner. The Ultrasonic Cleaner has been developed to solve the model railroaders' dimensional dilemmas. With our unique tank design powerful ultrasonic waves scrub the entire surface of a model to clean any residue from it. Cleaning solutions have been developed eliminating costly chemical solutions. Two tank sizes are available, with either available as an option.

The Burlington Roundhouse Spray Paint Booth was developed to provide the modeler with a high quality, reasonably priced spray booth to add to his painting enjoyment. Noxious paint odors and solids are exhausted from the work area through 4" solid or flexible duct. Constructed of 18 gauge steel, the unit comes complete with exhaust blower.



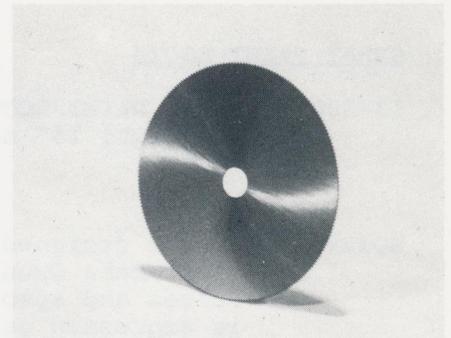
The Paint Bake Oven was developed so that plastic or brass models can be baked after painting to provide an exceptionally fine, durable finish in minimal time. Our unique lid design permits structures and odd shaped items to be easily inserted into the Oven. Constructed of 18 gauge steel, the Oven is insulated, thermostatically controlled with over-temperature protection, and energy efficient. The Oven measures 24" wide, 12" high, and 16" deep.



This Precision Radial Arm Saw has most of the features found in larger saws commonly seen in the woodworking industry. Because of its unique arbor design unusually deep cuts can be taken with smaller diameter blades. Our Saw Blades have been especially made in a range of 3" - 6" and .012" - .051" thick. The Saw is sturdily constructed of aluminum and is powered by a continuous duty, ball-bearing motor. Saw characteristics found under Precision Saw Blades. Saw shown without guards for clarity. Preliminary specifications are:

Saw cut(depth) @ 90 :	w/3" Blade	1.0"
	w/4" Blade	1.50"
	w/5" Blade	2.00"
	w/6" Blade	3.00"
Crosscut:		7.25"

Precision Circular Saw Blades for the Dremel Table Saw are available for retrofit to expand the capabilities of the Dremel Table Saw. These blades produce a superior finish cut on plastic, brass, and wood. The Blades have been ground to our specifications for the modeler's precision needs and have been tested on brass, brass tubing, oak, balsa, basswood, plastic sheet, plastic tubing, plexiglass, flex track and rail, aluminum, and die cast, producing cuts virtually free of burrs. The standard blade is .032" thick. When extremely fine saw kerfs are required, .012" and .025" Blades are available.



COMING SOON: Programmable Turntable Controller. See our products in San Francisco, San Antonio, Boston, Cajon PSR, Denver, and MRIA-Omaha.

BURLINGTON ROUNDHOUSE PRODUCT RETAIL PRICE LIST

ABRASIVE BLASTER AND ACCESSORIES

13-150	SANDBLAST GUN/CABINET KIT - Cabinet kit, neoprene gloves, piano hinge, plexiglass lid, & all necessary hardware.	\$119.95
13-200	SANDBLAST GUN/ASSEMBLED CABINET - The above with the cabinet assembled. Some assembly & painting required for completion.	\$189.95
13-300	ALL PURPOSE ABRASIVE COMPOUND - Use on plastic, brass, glass, and most other compounds. 10 lbs. recommended per cabinet for optimal operation. Ten (10) lbs.	\$ 19.95
13-400	CERAMIC NOZZLE - Standard equipment replacement.	\$ 14.95
13-450	TUNGSTEN CARBIDE NOZZLE - Optional nozzle for increased life.	\$ 32.95

TURNTABLE CONTROLLER

13-500	Turntable Controller - Solid State, adapts to any existing turntable. Programmable for the user. Expected late summer.	EST.\$189.95
--------	--	--------------

ULTRASONIC CLEANER

13-600	ULTRASONIC CLEANER - Complete unit with choice of HO or O gauge tank. Either tank will be available as an option. Available 30 days.	\$289.95
--------	--	----------

RADIAL ARM SAW AND ACCESSORIES

13-700	BASIC RADIAL ARM SAW - Comes with a with 5", .032" Thick blade.	\$ TBABA
--------	---	----------

OPTIONAL SAW BLADES - Diameter x Thickness

13-731	3" x .012"	\$ 19.95		13-752	5" x .020"	\$ 29.95
13-732	3" x .014"	\$ 19.95		13-753	5" x .028"	\$ 29.95
13-733	3" x .032"	\$ 19.95		13-761	6" x .020"	\$ 39.95
13-741	4" x .012"	\$ 21.95	NEW!!!! FIT	13-762	6" x .025"	\$ 39.95
13-742	4" x .025"	\$ 19.95	NEW!!!! DREMEL	13-763	6" x .028"	\$ 34.95
13-743	4" x .032"	\$ 19.95	NEW!!!! SAW	13-764	6" x .051"	\$ 34.95
13-751	5" x .016"	\$ 29.95				

PAINT BAKE OVEN AND ACCESSORIES

13-800	PAINT OVEN - Thermostatically controlled, safe for most plastics epoxy resin castings, and brass. Temperature range 100-200 F. 24" Long x 16" Wide x 12" High.	\$229.95
--------	--	----------

SPRAY PAINT BOOTH

13-900	SPRAY PAINT BOOTH - All metal cabinet construction, 24" wide, 12" high, 16" deep, with 140 cfm blower.	\$189.95
--------	--	----------

NOTE: Custom designed cabinets are available for the Abrasive Blaster, Paint Bake Oven, and Spray Paint Booth. Write with your specifications. Prices and specifications are subject to change at any time. No warranty is expressed or implied as to the suitability of our products for any particular application(s). Always exercise appropriate safety precautions.

BURLINGTON ROUNDHOUSE 319 BARRETT STREET BURLINGTON, IOWA 52601
319-753-6037

TECH REP

This column is open editorial space provided to the model railroad industry by the NMRA for the individual manufacturers to discuss their products with the NMRA members. Model railroad manufacturers may submit their Tech Rep article to: Tech Rep, NMRA BULLETIN, N6633 Waukesha Ave., Sussex, WI 53089.

Abrasive blasting

by Randy Danniell

Burlington Roundhouse announced several new products at the 1985 MRIA Show in Pasadena, Calif., one of which was the multi-purpose Abrasive Blaster. The Abrasive Blaster can be used in all scales on plastic or brass to remove lettering, single/multiple layers of paint, nickle-plating, tarnish, weathered wood surfaces, weathered stone castings, and even etched glass. When used with the specially formulated abrasive compound, there will be no loss of detail on plastic surfaces. The innovative gun design allows the blaster to operate at very low pressure (20 psi @ 2.1 CFM). Because of this low operating pressure, nozzle and abrasive life are extended dramatically.

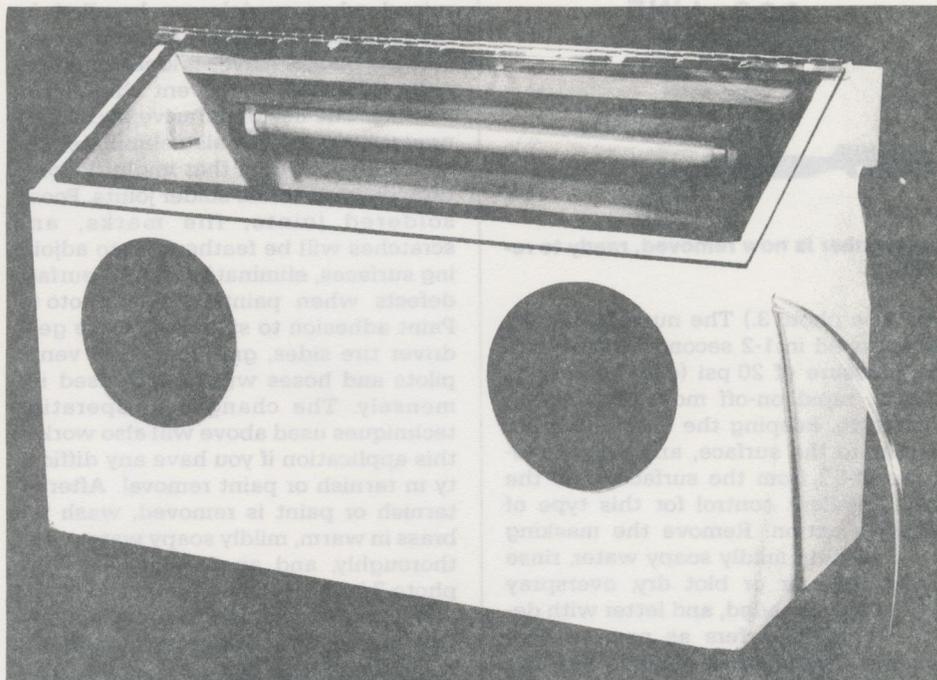
What Is Abrasive Blasting?

Abrasive blasting is the projection of an abrasive material, propelled by an air jet, onto a surface to clean, etch, or debur that surface. Originally invented in the late 1800's, many different systems and compounds have evolved.

The Burlington Roundhouse Abrasive Blasting System was designed out of necessity for an efficient, compact unit to abrasively blast plastic and brass models so custom paint projects could be completed faster. (See photo 1.)

The Blaster is a small, siphon-fed abrasive gun designed to be used in a cabinet enclosure. Compressed air, controlled by a foot valve, flows through the gun assembly creating a vacuum action on the abrasive into the gun assembly. It is then mixed with the air flow and propelled out of the gun through a ceramic nozzle onto the surface.

The cabinet is filtered to prevent loss of the abrasive so it may be reused, to control any dust created by the blasting action, and to prevent the abrasive from escaping into the workshop area. The cabinet is 24" long, 16" high, 12" deep, and is designed to sit on any flat surface and may be stored on a shelf when not being used so as to free valuable work space. Large O scale models can be accommodated in the cabinet, however,



1 The Abrasive Blaster by Burlington Roundhouse

custom cabinets can be fabricated for those who need larger cabinets.

The blasting cabinet is offered in kit or assembled form. The kit takes approximately one hour to assemble before painting. After painting, the assembled cabinet requires about 30 minutes of final assembly before use.

For proper operation of the Blaster/Cabinet, you must have a source of compressed air and a small vacuum cleaner. The compressed air supply should be well-filtered and regulated at 20 psi (20 psi minimum—40 psi maximum) with a standard 1/4" MPT hose fitting connected to the foot valve assembly. This clean, dry air supply is the basis for any fine finishing work whether abrasive blasting or airbrushing. The care taken now to ensure this will be rewarded many times over in the future.

In addition, a small vacuum (such as the Hoover Portapower™, Shop Vac Might-Mini™, flea market canister-type, etc.) with a cloth bag and 1 1/4" I.D. hose should be connected to the cabinet vacuum fitting. The vacuum is used for dust control and sealing of the cabinet to prevent abrasive loss. The use of a shop-vac style vacuum is **NOT RECOMMENDED** because of the very high vacuum pressures created.

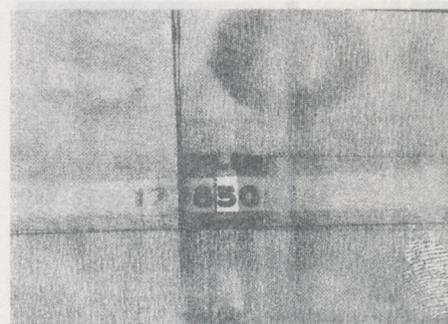
Some Basic Uses

NUMBER CHANGES—Many modelers have fought the problem of changing car or locomotive numbers when creating fleets of identical units. (See

photo 2.) This problem is easily solved by masking the car or locomotive number(s) to be changed with Scotch Fine Line Tape, drafting tape, masking tape,



2 The car number to be changed to create a large fleet.



3 The car masked with Scotch Fine Line Tape ready to blast.

SOO

SOO LINE

1778 O

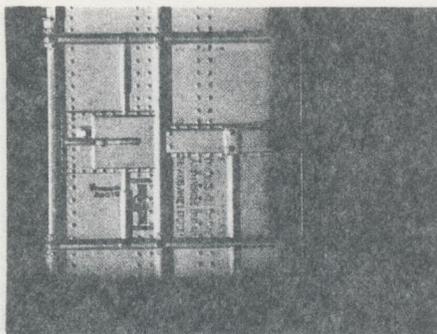
COPY 140000 RBL
LDLMT 152000
LTWT 68000 NEW 11-64



4
The number is now removed, ready to re-number.

etc. (See photo 3.) The numeral(s) may be removed in 1-2 seconds of blasting. Air pressure of 20 psi (even as low as 12 psi), rapid on-off movement of the foot valve, keeping the nozzle perpendicular to the surface, and proper distance (4-5") from the surface, give the user excellent control for this type of abrasive action. Remove the masking tape, wash in mildly soapy water, rinse thoroughly, air or blot dry, overspray with gloss if needed, and letter with decals or dry transfers as normal. (See photo 4.) Avoid direct contact with the etched surface as body oil from your fingers will impede proper paint adhesion.

PAINT REMOVAL—Suppose you want to change the roof color of a car, locomotive, building, or other large surface area, but want to retain the other surfaces' colors or lettering. Once again, mask off the portion not to be blasted, start blasting slowly, observing the changes in the paint's color/surface. Single layers of paint may be removed with this method. (See photo 5.) The abrasive action may be increased by moving the nozzle closer to the surface, reducing the nozzle angle to less than 90 degrees to the surface, and by increasing the air pressure (maximum pressure 40 psi). As operator proficiency increases, the blasting process may be sped up with use of these techniques. After blasting, remove masking tape and masking material, wash in mildly soapy water, rinse thoroughly,



5
Single layers of paint can be removed with no loss of detail.

blot/air dry, and spray with desired finish coat. Again, avoid touching the etched surface with your fingers.

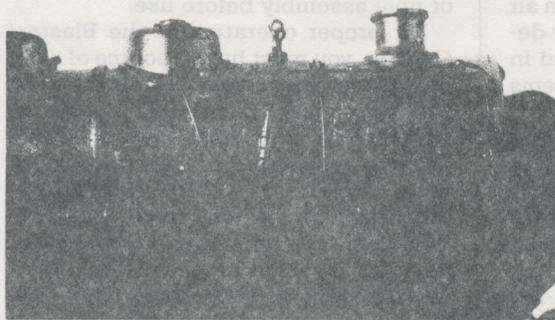
BRASS PREPARATION—Many modelers have seen their fine paint schemes ruined when models are handled for maintenance or display. The etched surface the Blaster leaves is ideal for proper paint adhesion to prevent chipping or peeling. The use of abrasive blasting to prepare the surface also eliminates the use of any solvents that might do long-term damage to the solder joints. Poorly soldered joints, file marks, and scratches will be feathered into adjoining surfaces, eliminating visible surface defects when painted. (See photo 6.) Paint adhesion to side rods, valve gear, driver tire sides, grabirons, roof vents, pilots and hoses will be increased immensely. The changes in operating techniques used above will also work in this application if you have any difficulty in tarnish or paint removal. After all tarnish or paint is removed, wash the brass in warm, mildly soapy water, rinse thoroughly, and air or blow dry. (See photo 7.) Avoid direct contact with the etched surface, again to avoid application of body oils. For brass models, we recommend the use of Floquil's Zinc Chromate Primer #601 applied in very thin coats before the final finish coat.

Review

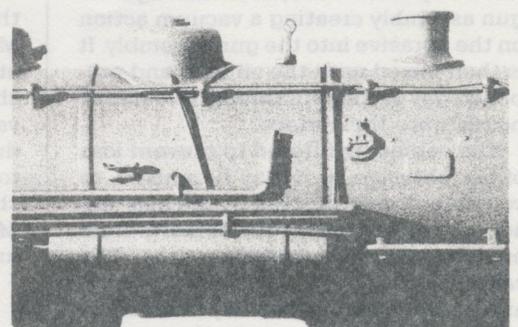
Excellent results will be achieved when the following operating guidelines are followed:

1. Use a dry, filtered air supply 20-40 psi.
2. Never put wet or oily parts in the cabinet.
3. The abrasive blasting action is controlled by:
 - Nozzle distance to the surface—A closer distance yields more abrasive action, greater distance, less abrasive action.
 - Nozzle angle to the surface—A 90 degree angle to surface has less abrasive action, a 20-45 degree angle has more abrasive action.
 - Air pressure—Higher pressure, more abrasive action, lower pressure, less abrasive action.
 - On-off cycling of the foot control valve—Shorter actuating times yield less abrasive action, longer actuating times yield more abrasive action.
 - Avoid touching the etched surface—Contamination of the surface with body oil will result.

Excellent surface preparation results can be achieved with the Burlington Roundhouse Abrasive Blaster. If you have any further questions, specialized applications, or need more information, contact Randy Danniell, Burlington Roundhouse, 319 Barret Street, Burlington, IA 52601. Watch future Tech Rep columns for more information about Burlington's Abrasive Blaster, Radial Arm Saw, Paint Bake Oven, Spray Paint Booth, Precision Circular Saw Blade for the Dremel™ Table Saw, and other future products.⊗



6
A brass model needing cleaning.



7
A brass model after blasting, ready to paint.