

**From Needle-Eyes to Locomotives
ACE Blasts Anything**

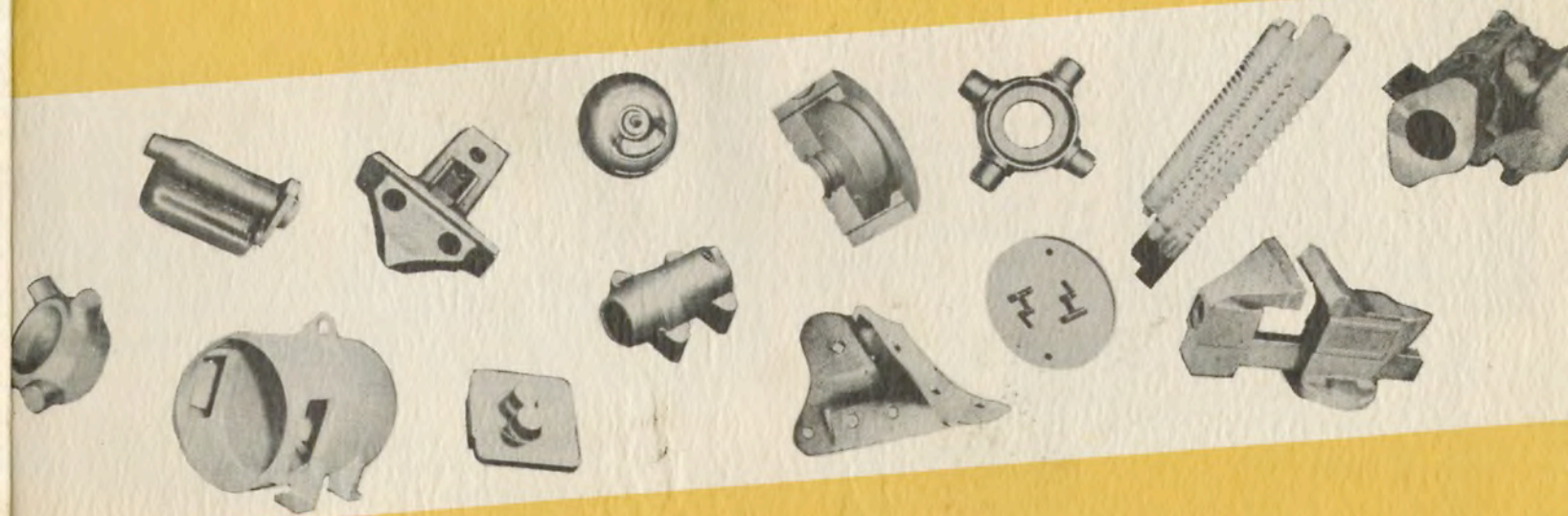
ACE

SANDBLASTING CO.

Modern facilities to handle



ANY Blasting Job



4330-40 W. Melrose - Chicago 41, Ill. - SP. 7-6654



Abrasive Shot Peening

TO S.A.E. AND GOVERNMENT SPECIFICATIONS

The Method

This is a Cold-Working Method done by pelting the surface of metal parts with round metallic shot at relatively high velocity. Each shot acts as a tiny peen-hammer and stretches the metal surface radially as it hits, causing a plastic flow of surface fibers beyond their tension yield point. The peened surface is thus put into a state of compression. The net result of this process is considerably greater fatigue life.

Advantages

1. IMPROVES RESISTANCE OF METALS, ESPECIALLY MAGNESIUM, TO STRESS CORROSION CRACKING.
2. IMPROVES FATIGUE RESISTANCE ALLOWING PARTS TO BE MADE SMALLER AND LIGHTER.
3. MAKES PARTS STRONGER, MEANING ADDITIONAL SAFETY AND THUS A MORE SALEABLE END PRODUCT.
4. ELIMINATES POROSITY IN ALUMINUM DIE CASTINGS.
5. APPLICABLE TO IRREGULAR SHAPED PARTS WHERE HEAT TREATING MIGHT CAUSE DISTORTION.
6. TENDS TO OFFSET STRESS CONCENTRATION WHEN APPLIED TO FINISHED PARTS SUCH AS SPRINGS OR STRUCTURAL AND MACHINE PARTS.
7. INCREASES YIELD STRENGTH OF SHEET METAL AND THIN PLATE METAL.
8. INCREASES SURFACE WEAR RESISTANCE OF PARTS SUCH AS GEAR TEETH.
9. SUBSTITUTES FOR POLISHING SURFACE FINISHES, WITH AN ACTUAL GAIN IN FATIGUE STRENGTH.
10. GIVES GREATER FATIGUE STRENGTH TO CARBURIZED PARTS AND HEAT TREATED ALLOY STEEL PARTS.
11. REDUCES COSTS BY ENABLING USE OF LOWER COST MATERIALS AND SPEEDING PRODUCTION.

Well, that is our story — or a part of it, anyway. If you are just curious of whether sandblasting* fits into your plans of producing an even-finer product; or if you have been using a blasting service but aren't certain whether the process being employed is the best for your purpose, we invite you to get in touch with us. Our facilities are capable of taking on — and expertly handling *any* industrial blasting operation — including insides of pipe preparatory to coating, and extremely-fine finishes for turbines and delicate machinery.

Won't you call us soon?

*Sandblasting is today a general term covering all the specific industrial blasting procedures such as grit and shot peening, vapor and liquid honing, corn-cob blasting and sandblasting.

**From Needle-Eyes
to Locomotives**

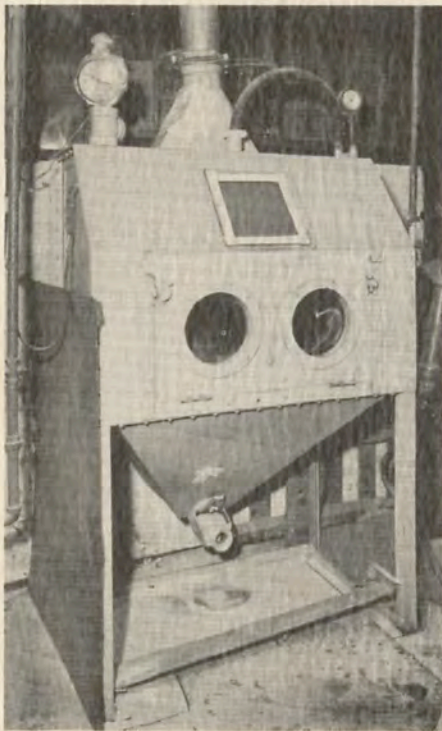
ACE Blasts Anything



ACE Sandblasting Co.

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Mott Sand Blast Cabinet



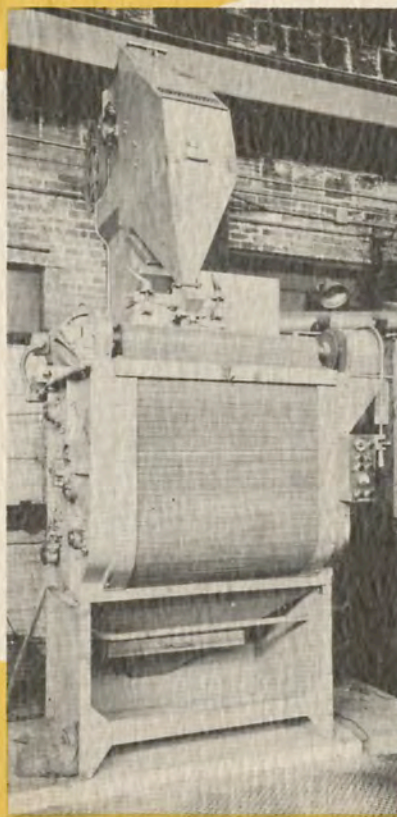
These are the "Babies" that are used for experimental work such as forgings, castings, stampings, plastics and glass. Whatever your problem—whatever the material involved—ACE can solve it. These machines thoroughly clean the surfaces and brings to view whatever fatigue cracks and surface defects might be present.



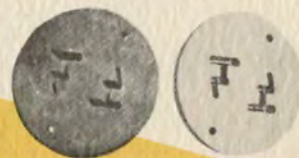
BEFORE

AFTER

Pangborn Automatic Blasting Barrel



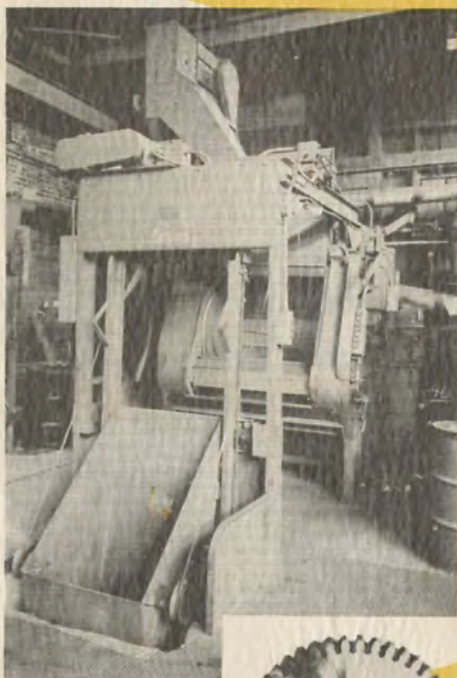
When high-volume production is called for the Pangborn "Automatics" are put into service. Without sacrificing (any) quality of finish, castings, forgings and stampings are blasted to laboratory-clean finishes. Heat-treat scale and discoloration are "meat" for these machines.



BEFORE

AFTER

American Automatic Blasting Barrel



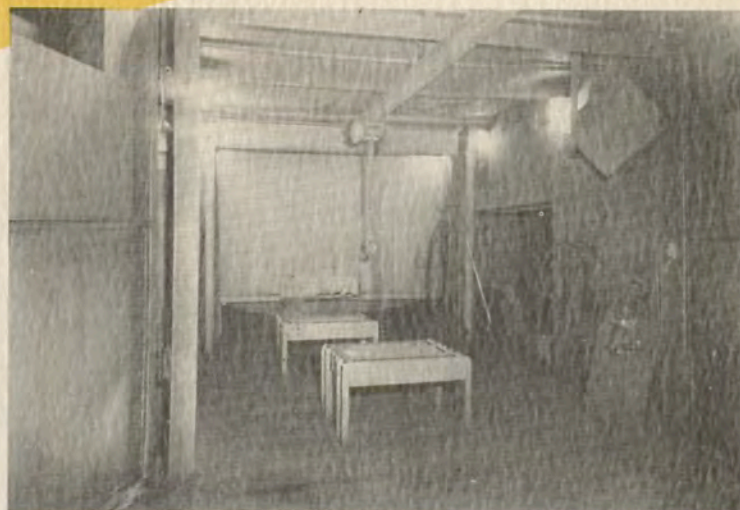
Meet the "Sweetheart" of particularly - quality - conscious production men everywhere. These machines are used for large loads of medium-to-large forgings, castings and weldments when only the finest finishes are specified. One of the more-recent blasting machines developed, ACE was among the first to recognize its outstanding cleansing qualities.



BEFORE

AFTER

Air Blast Rooms

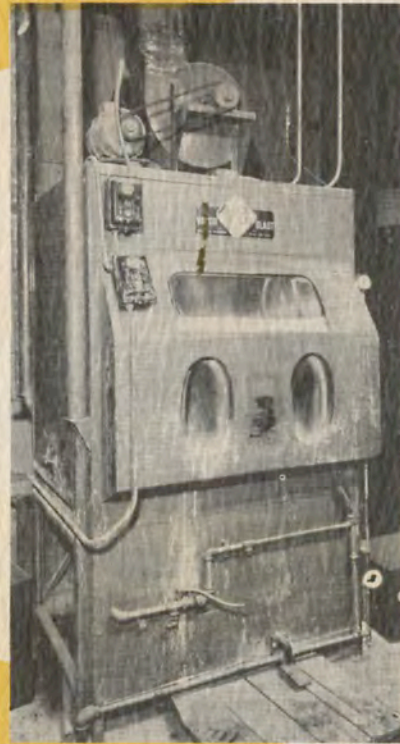


Pictured above is one of our 3 large Air Blast Rooms for handling extremely-large castings, forgings, weldments, pipe, sheet steel and bar stock. No item is too large to be blasted in these rooms. From large steel grit and shot to Micro-Mist finishes — No matter the finish called for ACE can/will do it!

Vapor Blast Liquid Honing

Ever since the middle-ages when sword-makers peened their swords and scimeters, men have been using abrasives to finish metal items. Today sandblasting is a science, demanding many specially-designed machines and much in the way of knowledge and skill. Today there are over two hundred different finishes that can be blasted on items ranging in size from needles to locomotive carriages — and there are over fifty different sizes of grit to work with (from fine particles of soft corn-cob to steel shot in all sizes).

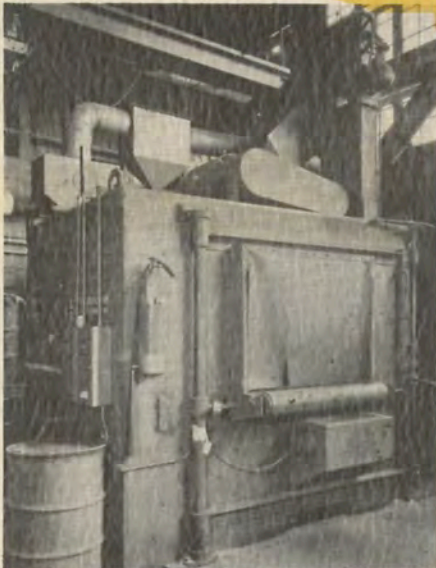
ACE Sandblast, with over 20 years of experience has the *only* shop in the middle west capable of efficiently handling *every* blasting job known and called for by industry. We are proud of our complete facilities because they reflect the scope of the services we offer. We would like you to know more about us; and since we can't bring our plant to you, we would like to bring you to our *plant* by means of this brochure . . . It's an interesting tour, will you follow me? . . .



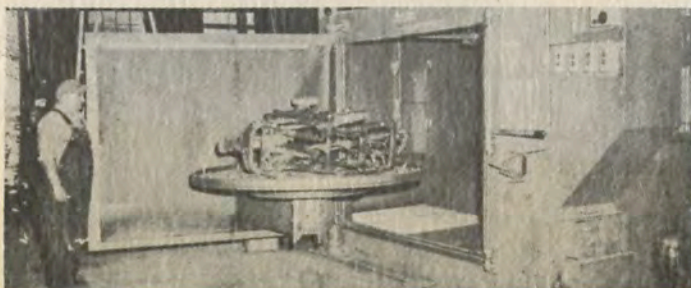
This is one of four machines devoted to the finishing of delicate castings, machined gears, small parts and close tolerance machine tool dies. This process blends directional polishing lines and produces a finish that will "break-in" quickly and "wet" easily with lubricants.



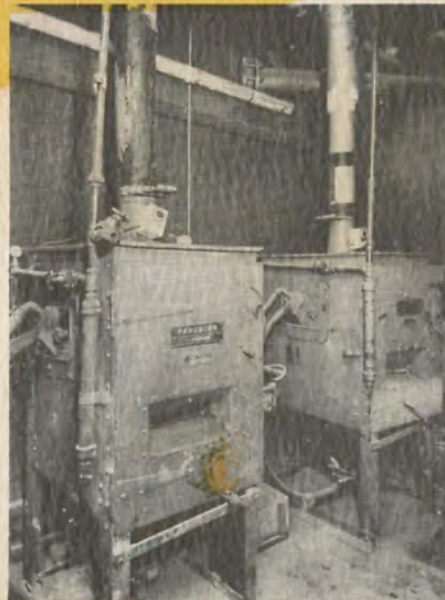
Automatic Blasting Table



Used primarily for uniformly removing scale and rust (as well as dirt) from large castings, forgings, weldments and items such as gear blanks, these machines have large appetites — up to 5 ton capacity.

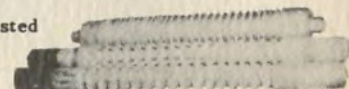


Pangborn Automatic Roto-Blasting Barrels



For truly fine-blast finishes of close-tolerance stampings, gears, screws, nuts, bolts and weldments, ACE has these units known for their thorough cleaning action. All small holes and pits are completely cleansed of all rust and oxides, perfectly preparing the surfaces for plating, polishing and painting.

Plated and Subsequently Blasted
Plated only
Removed from Service and Degreased



General Sandblasting
Wheelabrator Work
Vapor Honing
Corn Cob Blasting
Shot-Peening



Sub file 4-4

Ace Sandblast Co.

4330 W. MELROSE ST.

SPRING 7-6654

CHICAGO 41, ILLINOIS

December 18, 1956

International Harvester Co.
Manufacturing & Research
5225 So. Western Avenue
Chicago, Ill.

Atten: Phil Cari

MET. RESEARCH LAB.				
	N	F	T	SEE AS1
A.E.M.				
J.A.H.				
P.E.C.	X			
A.L.E.				
C.W.D.				
R.A.C.				
R.P.P.				
F.R.C.				
M.H.H.				

Dear Sir:

DEC 19 1956

Our company is the best equipped and largest sandblast and shotpeening plant in Chicago.

We would like to have an opportunity to show you the quality and service we can render.

Yours truly,

ACE SANDBLAST COMPANY.

R. Chval
R.Chval

RC:dm