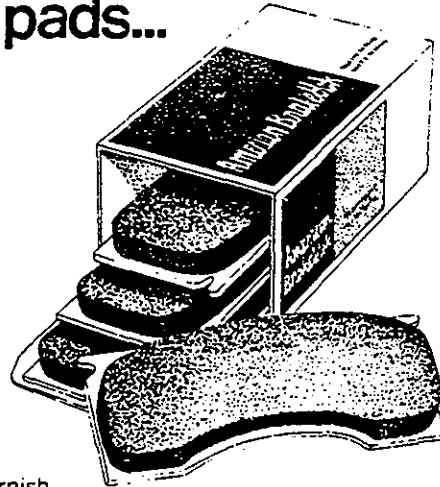




Get higher braking
performance with Abex[®]
disc pads...



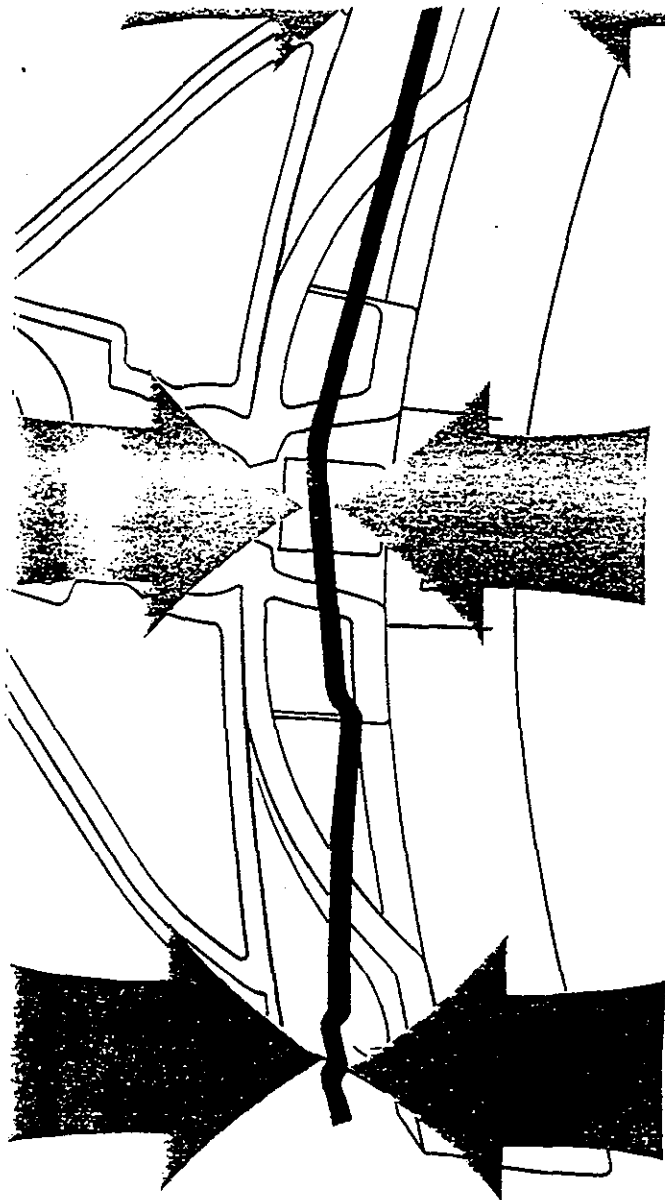
We also furnish
passenger drum-brake lining and thick blocks for trucks,
buses and off-highway equipment. Founded in 1902,
Abex is the leader in friction research and markets
braking materials in more than 50 countries.

Abex
CORPORATION

530 Fifth Avenue, New York, N. Y. 10036

Ad. No. AB-74-2 AUTOMOBILE INTERNATIONAL (English)

SPIM 0094



Lockey

reduces shoe breakage
stops brake head wear

Here's a simple way to extend the life of your brake shoes, heads, and beams. When a car comes into the shop or the repair track, apply a Lockey in place of the worn standard key. The Lockey with its powerful spring action will firmly clamp the shoe to the head and eliminate destructive play between the parts.

If it makes good sense on new cars—the great majority are equipped with Lockeyes—it makes good sense to install them on equipment in service. Lockeyes will stop brake head wear and eliminate the need for replacing brake heads and beams.

Loose, worn keys not only cause brake head wear, but they also cause shattered brake shoes. The Lockey will eliminate this and pay for itself in reduced brake shoe breakage alone, within the first year!

Why? Because the Lockey is a *spring*—a specially designed spring, heat treated for long life and tremendous power. What's more, its installation is simple: a few raps of a hammer and it's there to stay. Remove with a few raps in the opposite direction and it can be used again.

A-3301

Brake Shoe

BRAKE SHOE DIVISION
Montreal, Quebec

This advertisement appears in:
CANADIAN TRANSPORTATION—March and October, 1959
A-3301

SPIM 0095

Why American Brakeblok thick blocks are best for heavy-duty replacement.

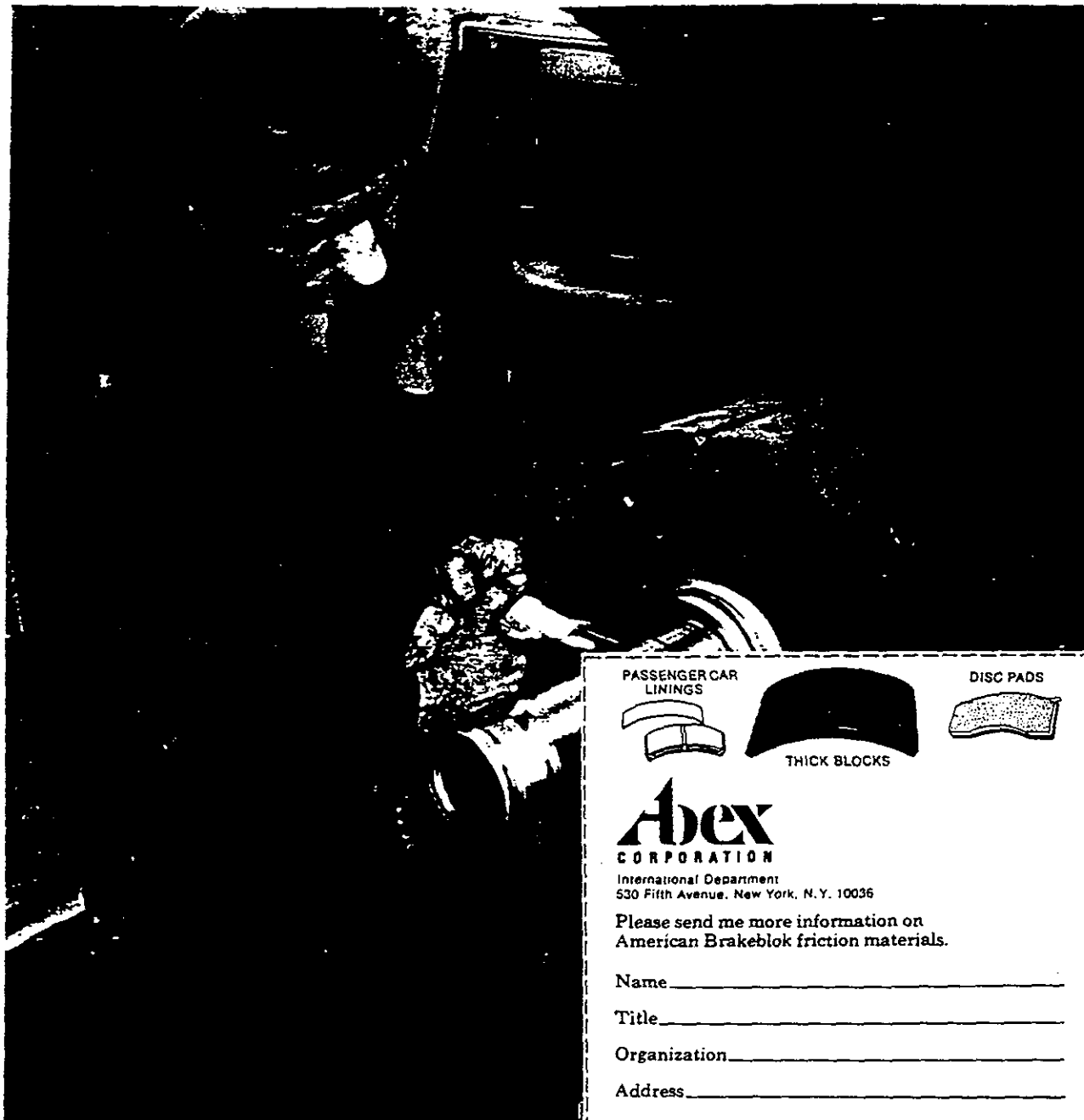
They give the greatest return on investment to bus and truck operators. Because they are "Friction Engineered" specifically for city transit systems... or tough hauls over steep mountain roads.

That's why American Brakeblok thick block sales to both original equipment manufacturers and the replacement market have increased year after year.

Behind this superior performance is Brakeblok's unique method of manufacture, which assures the most consistent quality and friction level possible.

Each block is individually molded...rather than cut from slabs...to guarantee uniform density. Thus the blocks resist fade, recover quickly from heat and moisture. Smooth, long wearing qualities protect drums, require fewer adjustments and relines. And balanced friction characteristics in every axle set assure top performance for every type brake system.

All good reasons why bus and truck operators in more than 50 countries rely on American Brakeblok thick blocks for long life and low maintenance costs.



PASSENGER CAR
LININGS



DISC PADS



THICK BLOCKS

Abex
CORPORATION

International Department
530 Fifth Avenue, New York, N.Y. 10036

Please send me more information on
American Brakeblok friction materials.

Name _____

Title _____

Organization _____

Address _____



how continuous wave **AMSCO**[®] liners can help cut your milling costs!

In plant after plant* the proof has piled up. Amsco's *continuous wave* mill liners improve grinding efficiency, reduce liner cost up to 19% on a per ton basis.

Here's why: With ordinary liners in your ball or rod mill there's more charge slippage. This wears down liners by abrasion. Grinding efficiency is lower, too.

Amsco's continuous wave liners *substantially reduce* slippage. They also give a cascading, anvil-type action that enables your mill to grind more charge in a given time.

Result: Production efficiency improves. You can use a thinner liner. (This increases mill capacity.) And, because of their design and metallurgy (available in manganese and chrome steels), continuous wave liners resist breakage, last far longer than other liners.

To cut your grinding costs, try continuous wave liners by Amsco. For additional information or quotation see your local Amsco representative—or write to the address below.

**Names on request.*

A-8317



EXPORT DIVISION

530 Fifth Avenue, New York 36, N.Y., U.S.A.

Cable Address: Brakeshoe Newyork

*This advertisement appears in:
WORLD MINING—August, 1960
A-8317*

SPIM 0097

how continuous wave
AMSCO liners
can help cut
your milling costs!

In plant after plant* the proof has piled up. Amsco's continuous wave mill liners improve grinding efficiency, reduce liner cost up to 19% on a per ton basis.

Here's why: With ordinary liners in your ball or rod mill there's more charge slippage. This wears down liners by abrasion. Grinding efficiency is lower, too.

Amsco's continuous wave liners substantially reduce slippage. They also give a cascading, anvil-type action that enables your mill to grind more charge in a given time.

Result: Production efficiency improves. You can use a thinner liner. (This increases mill capacity.) And, because of their design and metallurgy (available in manganese and chrome steels), continuous wave liners resist breakage, last far longer than other liners.

To cut your grinding costs, try continuous wave liners by Amsco. For additional information or quotation see your local Amsco representative—or write to the address below.

*Names on request.



A-8517 R1

AMERICAN
Brake Shoe
COMPANY

EXPORT DIVISION

530 Fifth Avenue, New York 36, N.Y., U.S.A.

Cable Address: Brakeshoe Newyork

This advertisement appears in:
WORLD MINING—January, 1962
A-8517 R1

Why American Brakeblok disc pads are best for replacement.

We pioneered in the development of disc pads when disc brakes first became available on European cars years ago. And we're still the leading manufacturer of disc pads for original equipment on the continent.

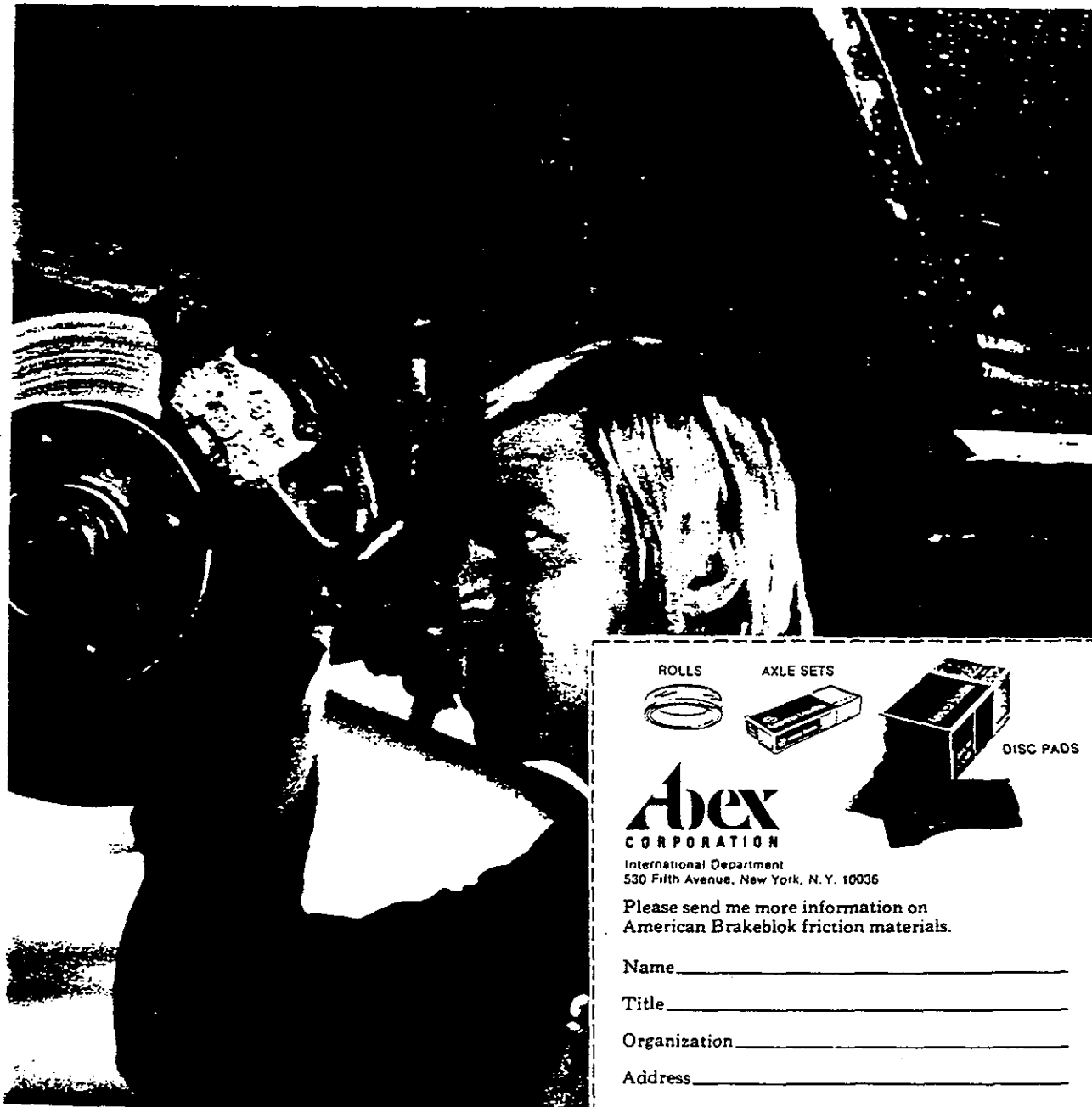
When Detroit car makers eventually adopted the disc brake, these American Brakeblok disc pads were modified for the bigger and heavier American cars.

Both European and American operators have discovered that American Brakeblok disc pads provide the minimum compressibility necessary for high unit pressures and short brake travel. They have high

physical strength, high friction properties, and are extremely heat-resistant. And they are pre-bonded to the proper steel backs and shipped in boxed sets for all U.S. and European cars.

We also furnish American Brakeblok heavy-duty blocks, rolls, drum-brake passenger car linings and axle sets...all consistent in their friction level and durability.

Because of this superior quality, operators in more than 50 countries depend on American Brakeblok friction products to keep vehicles rolling.



ROLLS

AXLE SETS

DISC PADS

Abex
CORPORATION

International Department
530 Fifth Avenue, New York, N. Y. 10036

Please send me more information on
American Brakeblok friction materials.

Name _____

Title _____

Organization _____

Address _____



EL "NICO MANG" DE AMSCO

para reconstrucción por recargue y reparación en el sitio de acero inoxidable, y para soldar manganeso al acero al carbono. Ahorra dinero, produce mejores resultados, se corta fácilmente con soplete. Proporciona alto recargue, máxima resistencia a la tracción, inmunidad a la fisuración.

EL NUEVO X-53 DE AMSCO

un electrodo mixto para gran velocidad, capaz de ejecutar el 90% de sus trabajos de revestimiento duro. Produce resultados excepcionales en piezas sometidas al choque y la abrasión. Elevado régimen de deposición, cordones de características excelentes, facilidad de empleo en cualquier posición de soldar.

¿DEMASIADAS VARILLAS?

Normalícese con el "Par contra Desgaste" de Amsco para revestimiento duro y soldadura manganésica

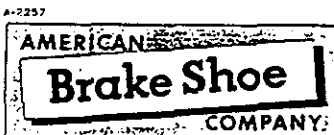
No hay necesidad de "comprar el catálogo", porque el "Par contra Desgaste" de Amsco puede efectuar el 90% de sus trabajos de reconstrucción y revestimiento duro. Utilice el "Par contra Desgaste" dondequiera que necesite gran resistencia al choque y la abrasión. Normalícese con él.

Pruébelo... y compruebe cómo el "Par contra Desgaste" efectivamente merece su reputación respecto a facilidad de empleo, utilidad y rápida deposición de cordones de buena apariencia. Notará Ud. que el "Par contra Desgaste" le da a usted los mejores resultados que jamás haya obtenido. Escribanos ahora mismo en solicitud de boletín técnico.

Disponible en paquetes manuales de norma de 50 lbs. y en rollos semiautomáticos de 50 lbs.

¡DATOS TECNICOS GRATUITOS!

Escriba por nuevo boletín con detalles completos: composición, características, propiedades mecánicas y especificaciones conexas. Sirvase dirigir sus solicitudes de datos a la dirección siguiente, Depto. No. 17.



DIVISION DE EXPORTACION

530 Fifth Avenue, Nueva York 36, N.Y., E.U.A.

Cablegramas: Brakeshoe, Newyork

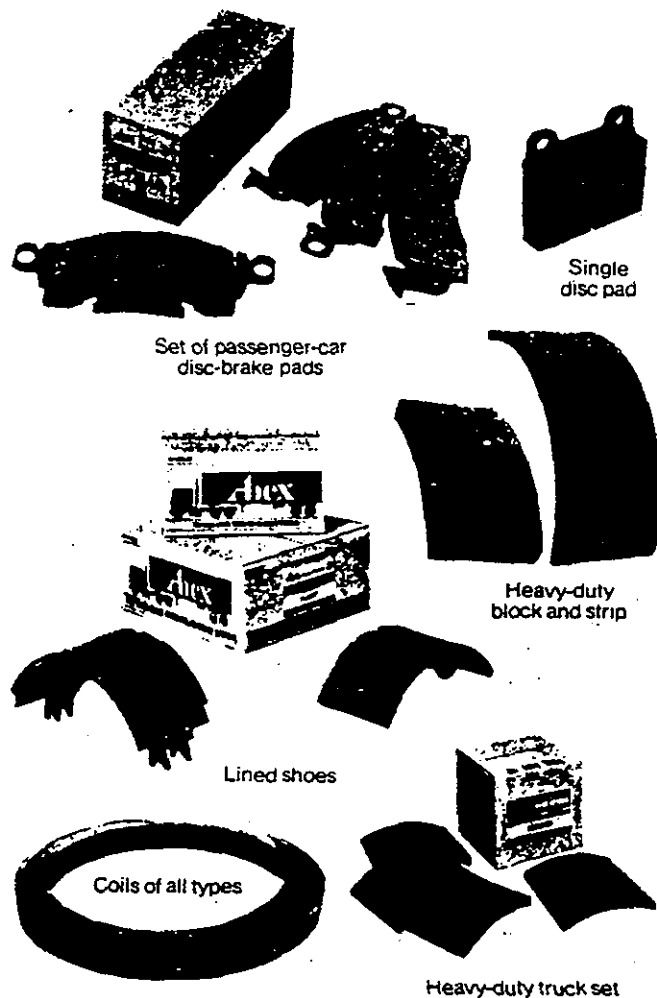
This advertisement appears in:
INDUSTRIAL WORLD EN ESPAÑOL—May and September, 1961
INGENIERIA INTERNACIONAL CONSTRUCCION—June and December, 1961

Abex can stop anything you start

For nearly half a century, the Friction Products Group of Abex has been making consistently superior braking materials. Today, we're the largest manufacturer of coil linings, disc brake pads and assemblies, drum brake linings, and heavy-duty blocks in the world, with a full range of braking products for passenger cars, trucks, recreational vehicles, buses, and tractor trailers.

Abex Corporation
530 Fifth Avenue, New York, N.Y. 10036

**ABEX • AMERICAN BRAKEBLOK • PAGID
FREN-DO • STOPPER • NECTO**



Abex

An **IC Industries** Company

**Export
Division**

LANDING
GEAR
SYSTEM
for
U. S. ARMY CHINOOK*

Includes two forward landing gears, two aft landing gears and one electro-hydraulic 360° steering system per ship. Designed and built by our Jarry Hydraulics Division. The Chinook was designed by Boeing's Vertol Division, which is now producing the aircraft in quantity.

For better design in the components, packages and systems you require, call on Brake Shoe. We design, manufacture and service in the United States, Canada and Europe.

Sales and service representation in the United States is available through American Brake Shoe Company, Aerospace Division, at 3161 West Fifth Street, Oxnard, California.

A-5333



JARRY HYDRAULICS, LTD.
3600 Rachel St. East, Montreal, Canada
514 LA 7-4351

*We also furnish the flight control system pumps and the Boeing-designed stability augmentation system servo actuators.

How much of your
working capital is tied up
in welding rod inventory?



Even a small welding shop can easily find itself with several hundred dollars in welding rod inventory that will probably be thrown away — rods purchased because of an attractive discount on a large quantity — special purpose rods — broken rods — partially filled boxes.

There's a way to stop this waste and handle 90% of your hardfacing, build-up and repair work with *just two electrodes* — Amsco's famous "Pair for Wear."

Nicro Mang*, the 14% manganese electrode that welders like to use, will do all your manganese steel build-up and repair. If you're using stainless rod for welding manganese to carbon steel, Nicro Mang can save you dollars — it sells for about half the cost of stainless.

X-53 is a complete electrode for all-purpose hardfacing. It goes down fast, is easy to run and gives superior service life on parts subject to impact and abrasion.

We have a sample kit containing these two rods for you. You don't have to buy another 50 pounds of electrodes to find out how these two rods can cut your costs. Amsco makes a complete line of manual and semi-automatic rods for every hardfacing need.

*Trademark registered

1961



AMSCO

AMERICAN MANGANESE STEEL DIVISION
CHICAGO HEIGHTS, ILLINOIS

Buy through
your local
welding supply
distributor



Other plants in: Denver • Los Angeles • New Castle, Del. • Oakland, Calif. • St. Louis
IN CANADA: Joliette Steel and Manitoba Steel Foundry Divisions
Welding products distributed in Canada by Canadian Liquid Air Co., Ltd.

PRINTED
IN U.S.A.

This advertisement appearing in the January 20, 1962 issue of *Skilling's Mining Review*, the January issues of *Rock Products*, and *Welding Engineer*.

SPIM 0103



THE Abex BLOCKBUSTERS

We admit it. Abex tries to bust blocks. We try to bust brake blocks. We figure that if we do, we'll find out what the load factor is and make sure that you don't bust 'em. We make sure that you get that advantage on the heavy-duty blocks that Abex manufactures. The Abex Blockbusters are part of the world's largest friction materials research complex. This complex is where we develop and check automotive, truck and railroad friction materials. This is where what we learn is put into our products and passed along to you and your applications. A good idea? We think it's a blockbuster. For further information about the Abex product line or the name of your nearest Abex distributor, please call or write: **Abex Corporation, Friction Products Group, 3001 W. Big Beaver Rd., Troy, Mich. 48064, (313) 643-4400.**



Friction Products Group

An **IC Industries** Company

STOP WATCH

From the moment you spot an obstacle in the road to the instant your vehicle comes to a complete halt, time is the only thing that really counts. You know that your rig...even your life... can depend upon fractions of a second. An inferior brake lining may take more time than you can afford. Abex brake linings always get the job done on time because they're built to stop faster and last longer than other brake linings. Abex brake

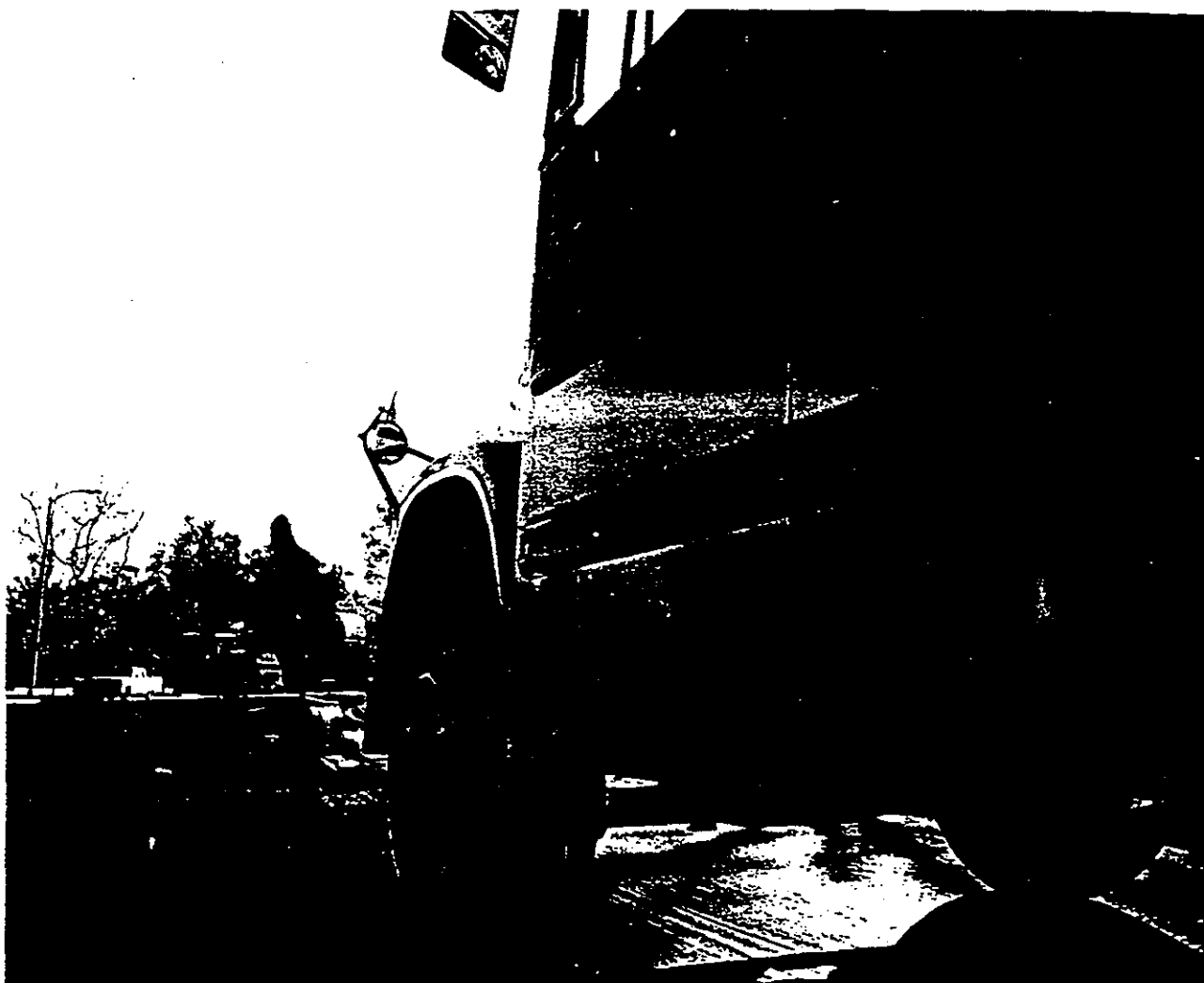
linings resist fading and require less recovery time to give you consistently better braking power from installation to replacement. Let Abex prove its stopping power to you where time counts the most...on your rig...on the road. For further information or the name of your nearest Abex distributor, please call or write: Abex Corporation, Friction Products Group, 3001 W. Big Beaver Rd., Troy, Mich. 48064, (313) 643-4400.

Abex...
where we
put a stop to
braking problems.



Friction Products Group

An **IC Industries** Company



Can your brakes handle a stop your route doesn't call for?

Stop n' go. Stop n' go. Stop n' go. Basically routine...until the unexpected happens. That's when safety—even lives—depend upon the quality and stopping ability of your brake linings. You no longer have to rely on linings designed for standard truck brake systems.

The Protector was specially engineered by Abex to meet the challenge of severe stop n' go conditions. Made of a highly stable material, the Protector has excellent fade and recovery characteristics with longer lining and drum life. For more reliable, safer stopping power...get the Protector. For further information or the name of your nearest Abex distributor, please write or call Abex Corporation, Friction Products Group, 3001 West Big Beaver Road, Troy, Michigan 48084. (313) 643-4400.

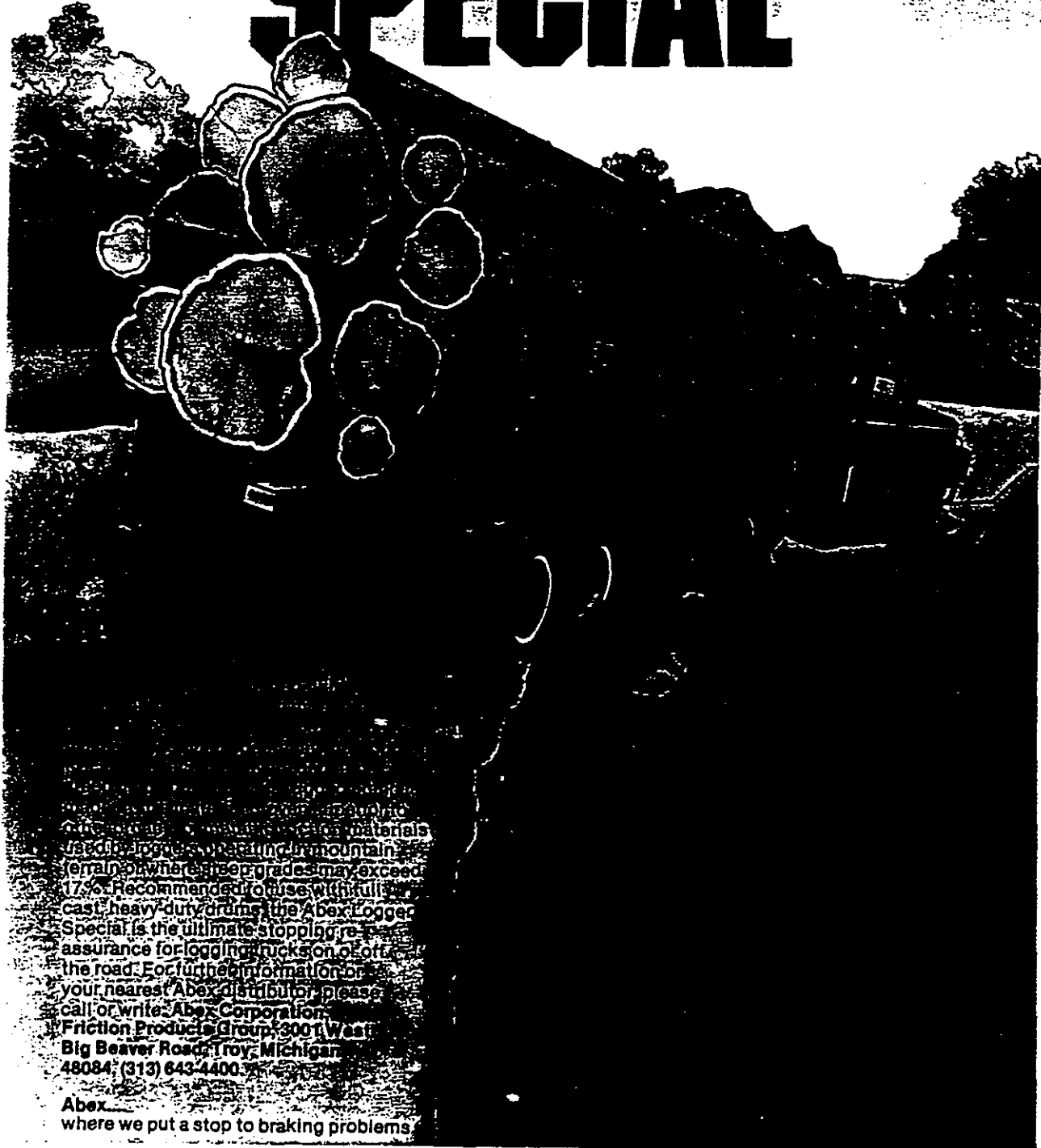


Friction Products Group

An **IC Industries** Company

SPIM 0106

THE **LOGGER** **SPECIAL**



Abex Corporation is a leading manufacturer of heavy-duty drums and other materials used in logging operations in mountainous terrain where steep grades may exceed 17%. Recommended for use with full cast heavy-duty drums, the Abex Logger Special is the ultimate stopping reinforcement for logging trucks on or off the road. For further information or to find your nearest Abex distributor, please call or write: Abex Corporation, Friction Products Group, 3001 West Big Beaver Road, Troy, Michigan 48064 (313) 643-4400.

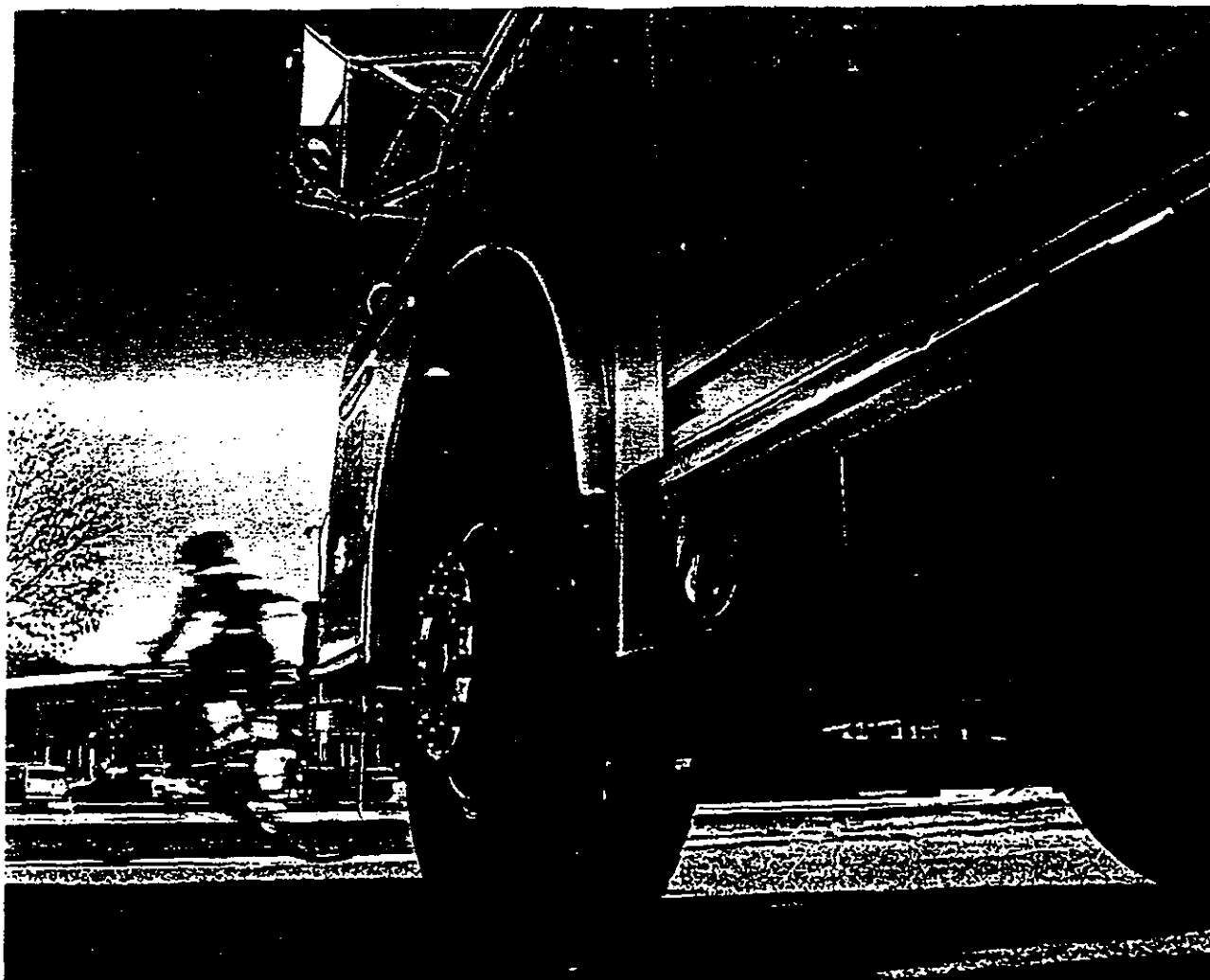
Abex
where we put a stop to braking problems.

Abex

An IC Industries Company

Friction Products Group

SPIM 0107



After consecutive, day-long, stop n' go conditions...are your brakes up to the one that counts?

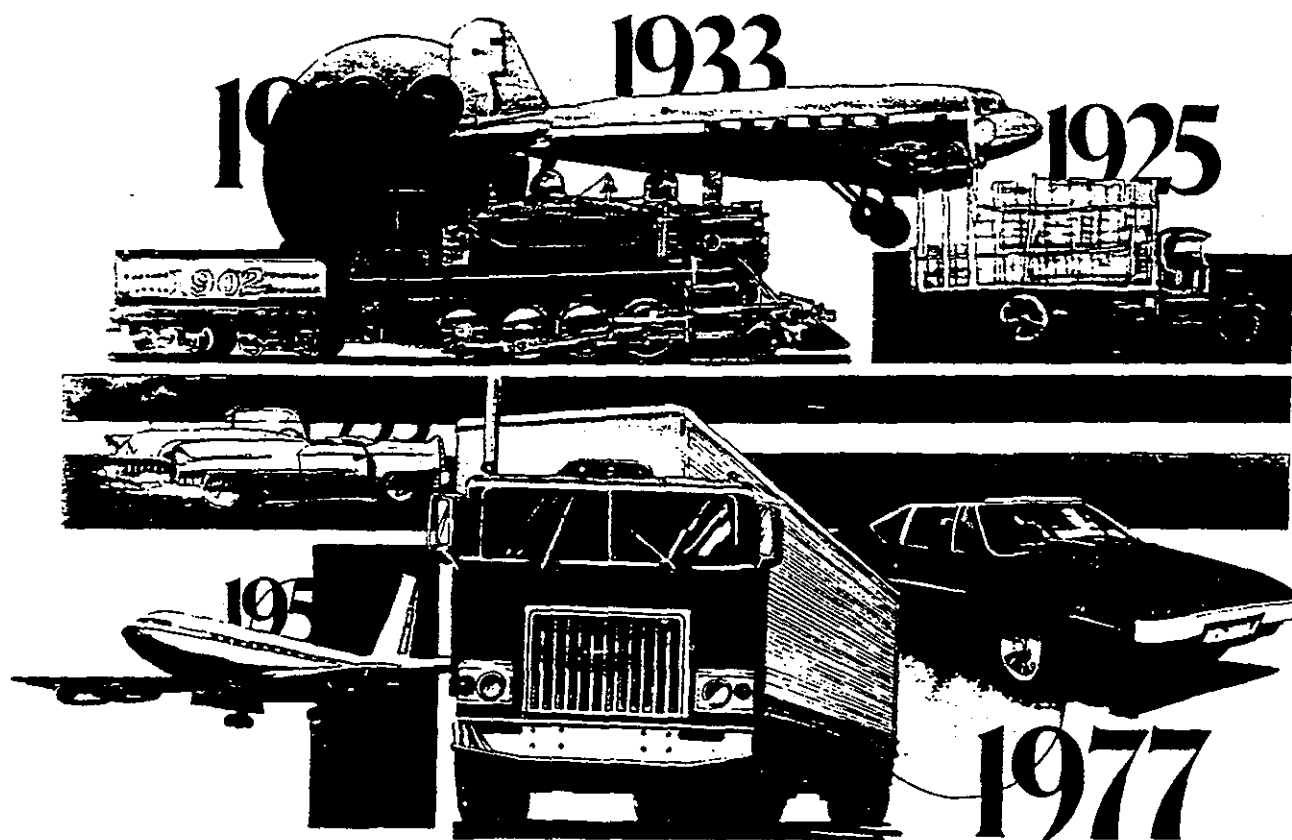
That's when safety—even lives—depend on the stopping ability of your brakes. You no longer have to rely on linings designed for standard truck brake systems. The Protector was specially engineered by Abex to meet the needs of severe stop n' go conditions. The Protector gives you safer, more reliable stopping power, with longer lining and drum life, too. Made of a highly stable material, the Protector has excellent fade and recovery characteristics—characteristics that help your vehicle stop quickly and safely when stopping is routine...and when it isn't. For further information or the name of your nearest

Abex distributor, please write or call **Abex Corporation, Friction Products Group**,
3001 West Big Beaver Road, Troy, Michigan 48084. (313) 643-4400.



An **IC Industries** Company.

Friction Products Group



75 YEARS OF PROGRESS

Quality is a combination of knowledge, experience and standards of excellence. Abex friction materials are no exception. They represent 75 years of continuous quality assurance testing and development. Ever since Abex began manufacturing brake shoes for railroads in 1902, the search for the best possible friction material has gone on. In fact, Abex operates the world's largest friction material development center, in an effort to continually improve their product. The result is that today... trains, planes, cars, buses and countless lives rely on Abex for safe, sure stops. For further information please call or write: Abex Corporation, Friction Products Group, 3001 W. Big Beaver Rd., Troy, Michigan 48064, (313) 643-4400.

Abex
...where we put
a stop to
braking problems.

Abex

An **IC Industries** Company

Friction Products Group

SPIM 0109

Come Hell or High Water

Guaranteed Stopping Power.

We can say it because at American Brakeblok we have more quality control people than any other outfit in the industry.

Fact is, 1 out of 10 is an inspector at Brakeblok. And we don't believe in just spot checking. *Every single brake lining that leaves an Abex plant gets a thorough going over.*

It all means that you can count on

American Brakeblok come hell or high water. Does it cost more to specify brake linings this good? Not on your life. For more information write: American Brakeblok, 900 W. Maple Road, Troy, Michigan 48084.

Abex
CORPORATION

Why we're No.1 in service.

Back in 1926, when we went into the brake lining business, we decided to *specialize* in it. Over 40 years later, we're still concentrating on brake lining. And we've learned a lot.

Today, we have extensive research facilities...a team of highly trained brake lining specialists...and a reputation for quality no one can challenge.

They're at your service.

Abex
CORPORATION

American Brakeblok Division, 900 WEST MAPLE ROAD, TROY, MICHIGAN 48064

American Brakeblok—"America's safety brake lining for over 40 years."

J. M. Mathes, Inc.

ABS-140A

Automotive Publications—1967

1 Page, 4 1-8 x 7 inches

Q-751 Second Proof April 17, 1967

Tips From A Top Fleet on . . . SAFE BRAKES



SECOND INTERVIEW OF A SERIES:

Question: "As a large over-the-road fleet, covering the entire Eastern part of the U.S., you have an excellent safety record—and correspondingly low insurance rates. Why?"

Answer: "Because safety is important to us. Not only do we wish to protect lives, but with the high cost of insurance, a good safety record determines how much profit we're going to make."

Question: "You give your tractors and trailers a routine inspection about every 3000 miles—and a major overhaul about every 100,000 miles. What do you do that some fleets don't?"

Answer: "We give them a *complete overhaul* . . . and inspect them *thoroughly* whenever they're in the shop."

Question: "How does that affect the brake system?"

Answer: "Everything's completely overhauled, the cam bushings, the diaphragms, and all. We check all bushings, pull-back springs, and the springs in the diaphragms. If new cams are needed, we put them in, and check them every 3000 miles."

"Some fleets don't check their diaphragms and springs when they overhaul a job. They leave the old diaphragms in till they leak! *We pull them!*"

Question: "What would you advise them to do?"

Answer: "If a tractor or a trailer needs brakes, it's bound to have

something else wrong. So you might as well start from scratch. On brakes—start from the bottom up. Check your air. Tear them apart—replace rusty springs and diaphragms."

Question: "How would you sum that up?"

Answer: "Put it back the way it was when you bought it!"

Question: "Is it important to keep brake systems balanced?"

Answer: "Yes! Some men will pull the diaphragm off—and find that a spring's broken . . . and they'll put *one* spring in it. *Now that's wrong!* You'll get all your braking on the rest of the wheels and *that* one will be off. You'll wear out one lining faster than another."

Question: "Do you need a balance between tractor and trailer?"

Answer: "Sure, otherwise you're braking your trailer (for example) all the time . . . until your trailer brakes are gone . . . and sliding your tires all the time on the trailer."

"With balanced units (same-sized diaphragms and everything) you save on tires and you save on general wear. You save on everything—and most of all, you increase safety."

Question: "What about brake lining?"

Answer: "It's important! We try to get the best we can for the money."

Question: "What about drums?"

Answer: "If the drum is worn any amount, over so many miles, we replace the drum whether it's broken or not. *We don't grind them.* We buy new drums because it doesn't cost much more than to remachine old ones. And a remachined drum might still have cracks in it. We replace in sets . . . linings . . . drums . . . springs, etc."

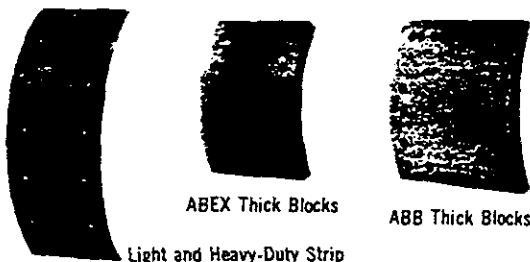
Question: "How important are drivers in 'over-all' brake safety?"

Answer: "Very important. We train them, and we keep a constant check on them. All tractors have a 24-hour electric clock that records everything—speed—mileage. We check these daily and keep the records for six months. We also have safety men on the road. They have radar, two-way radio and telephones—all the latest electronic controls to make sure our drivers live up to our policy of safe driving practices."

Question: "How would you sum up your ideas on maintenance and safety?"

Answer: "You spend money on maintenance in order to *save* money in the long run. And it really pays off. We'd be out of business if we didn't do a good job. *Regular Inspections* and a *complete job* are what really count. We know that when a tractor or trailer goes out . . . it's right!"

As a service to fleet operators—in the interest of safety—American Brakeblok presents a confidential interview with a Top Fleet Maintenance Executive. Names are withheld to protect the fleet and the executive. Reprints of this Field Report are available from American Brakeblok. Ask for Field Report No. 361.



American Brakeblok



P. O. BOX 21 • BIRMINGHAM, MICHIGAN

A COMPLETE LINE OF AMERICA'S SAFETY BRAKE LINING—BY AMERICAN BRAKEBLOK—AVAILABLE FROM YOUR NAPA JOBBER.

SPIM 0112



in the air...



on the rails...

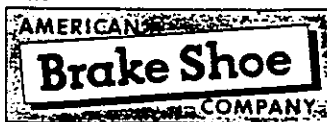


over the road...

BRAKE SHOE SERVES TRANSPORTATION

With quality products . . . developed through research . . . engineered for the application . . . and proved in service. FOR AIRCRAFT—braking materials and hydraulic systems. FOR RAILROADS—journal bearings, Absco® lubricating pads, Diamond S brake-shoes and Lockkeys®, Southern® cast steel wheels, Racor® trackwork and track specialties. FOR CARS, TRUCKS AND BUSES—dependable automotive brake linings. For full information on dependable Brake Shoe products write: G. W. Price, 530 Fifth Avenue, New York 36, N. Y. . . . American Brakeblok Division. Colin T. Moore, 530 Fifth Avenue, New York 36, N. Y. . . . Railroad Products Division.

A-4175



530 Fifth Avenue, New York 36, N. Y.

This advertisement appears in:
NEW ENGLAND TRANSIT CLUB—1961-1962 Edition
 A-4175



Will he stop in time?

Did you know that, although it takes ONE MINUTE for a 100 horsepower engine to accelerate from 0 to 60 mph, brakes must be capable of decelerating from 60 to 0 mph in SIX SECONDS—equivalent to 1000 horsepower.

American Brakeblok—producer of America's safest, quality brake lining—has been working closely with highly skilled engineers of the automobile industry who are constantly seeking a brake lining that will stop a car faster and with greater safety, for thousands of miles longer.

Its research center, staffed with heat, wear

and friction specialists and equipped with the most modern development facilities, is constantly developing a wide range of materials that give automotive designers greater freedom in drawing specifications.

These materials, thoroughly tested and proven, are available to meet the most rigid braking requirements of modern automobiles and trucks. Do your customers a real service—by making their driving far safer—install American Brakeblok, America's SAFETY brake lining. Riveted and bonded exchange—from your NAPA Jobber. Call him now!



See us in Booth 2532 at the Pacific Automotive Show

AMERICAN BRAKEBLOK

P. O. BOX 21 • BIRMINGHAM, MICHIGAN

Come Hell or High Water

Guaranteed Stopping Power.

Why do fleet operators prefer American Brakeblok? For two good reasons.

First, there's *frictional stability*. An American Brakeblok lining has frictional stability throughout its full thickness and at all operating temperatures.

Second, there's *total uniformity*. Only American Brakeblok manufactures a brake lining that is uniform in physical dimensions *and* density and weight.

This total uniformity makes possible the establishment of a brake

maintenance program with one constant—American Brakeblok.

Come hell or high water, you can depend on American Brakeblok. For more information write: American Brakeblok, 900 West Maple Road, Troy, Michigan 48084.

SPIM 0115

