

BITUMINOUS PAVER FINISHER

PF-90



Handling 15 ton trucks on a 12% grade on Pennsylvania County work.



Here's a sample of a beautifully finished top course.

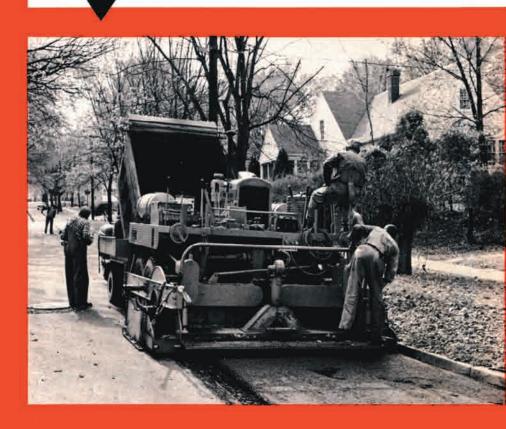


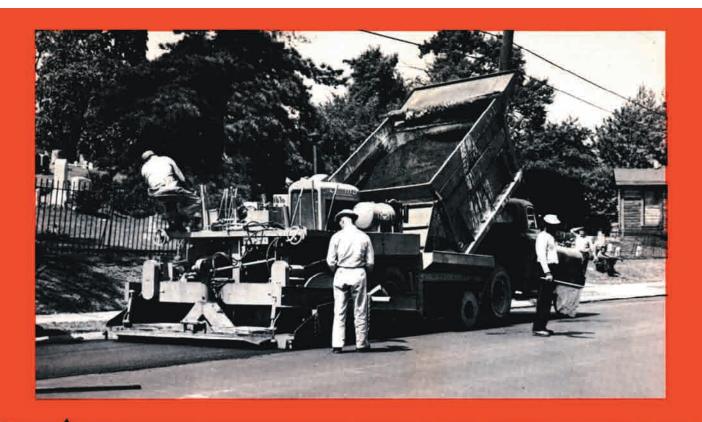
Returning with the crew alongside the finished course to new location.



Blaw-Knox lays right up to the curb.

Laying a narrow width on city street work.





On wheels it will pave for less

Thin courses or thick, they are all in the days work for the Blaw-Knox and spilled material is layed into the course without climbing.

Another shot on county work. Machine is unusually smooth for the operator as vibration is completely absorbed by tires.







If You Don't Have These Bituminous Finisher Advantages You Are Losing Money!

Wheel Steering with long wheel base eliminates the over-steering of crawlers and assures greater accuracy, a smoother course and better joints.

Wheel mounting eliminates the 500 to 700 parts characteristic

- Wheel mounting absorbs vibration, reduces chatter in screed and wear and tear on machine. Dual Controls—Handle machine
- from either side.

 Plenty of power to handle boxcar trucks with ease.

 Floating Screed and Tamper compact to uniform density and automatically measure and level.

 Long wheel base and leveling principle, combined with rubber tired flotation, equalizes ordinary subgrade irregularities.

Crowning device is simpler and more easily adjusted.

 Moves rapidly to new location and gets back to lay parallel course in a fraction of the time required for crawlers. Reduces

truck standing time. The only Bituminous Finisher with positive traction at all

Bigger, roomier hopper.

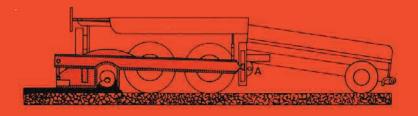
Modern automotive design and

All assemblies easily accessible for upkeep and adjustment.

The Blaw-Knox Model PF-90 Bituminous Paved Finisher brings the contractor for the first time the true, free rolling advantages of wheel operation combined with a floating screed. The simplicity of wheel operation frees the Blaw-Knox owner at once from the 500 to 700 parts characteristic of crawler design. He is freed from dished shoes, tread pins, roller pins and other crawler parts that call for care and adjustment, lubrication and the constant wear always present where hundreds of parts are in constant operation.

But, there is more to it than that! Wheel steering is smooth and accurate. There is no jerking or sliding and no danger of oversteering on the curves with its resulting need for correction, and positive traction, even while turning, is present at all times.

Rubber tire design takes up the road shocks and machine vibration that are in time destructive and cause wear in crawler mechanisms, but more than that rubber tired design absorbs the effect of base course irregularities and contributes to the smoothness of pavement for which the Blaw-Knox is rapidly becoming justly famous. Remember, on wheels it does it better and paves for less.





Front view of Blaw-Knox Bituminous Finisher. Note the clean design, wide conveyors and flow control gates at the rear of the hopper.

Here is the big hopper of the Blaw-Knox Model PF-90 Bituminous Paver Finisher. You can feed approximately 10 tons into this hopper at once. It is wide and roomy—takes care of the full truck width easily, without spillage. Important, too, from the standpoint of good operation and results, is the fact that practically the entire load of material is carried on the front wheels and therefore on the subgrade or rolled, finished course. Front wheels have solid rubber tires and will not deflect when the load is dumped to the hopper.

Here again care has been taken to provide ease of adjustment. Conveyor flight chains in the hopper are adjusted by adjusting screws on the front frame. Nothing to remove. Nothing to uncover. Flow control gates are provided at the rear of the hopper and these are easily raised and lowered by cranks at the front of the operating deck.

Pusher rollers, mounted on anti-friction bearings, are also standard equipment and are mounted on the front frame member. Rollers are adjustable up and down for variations in truck tire size.

SAVES TRUCK TIME

NO OTHER PAVER FINISHER

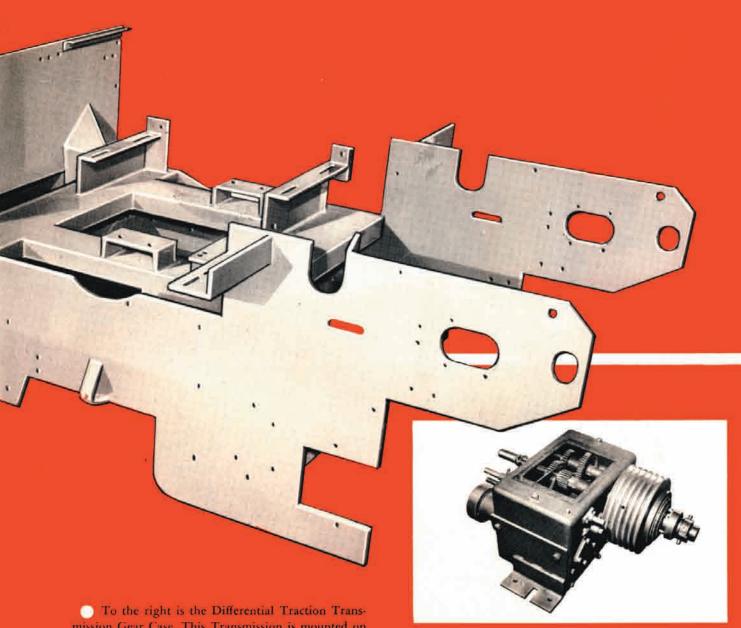
HAS A BACKBONE LIKE THIS



One of the big costs in the operation of the ordinary bituminous paver today is that of rebuilding. Asphalt finishers take a beating. Extensive travel, the shock of handling heavy loads, subject such a unit to destructive wear and tear.

Look at the Frame pictured above. The ruggedness is unique in paver design and construction. This is the backbone of the Blaw-Knox Bituminous Paver Finisher. No other bituminous finisher has a backbone like that. Here is the assurance of rigidity that maintains shaft and bearing alignment. Here is the strength that will relieve you of the costs of periodic rebuilding. Here is the stability that guarantees the maintenance of accuracy that will deliver a well laid job—not just as a new piece of equipment but day after day in years of service.

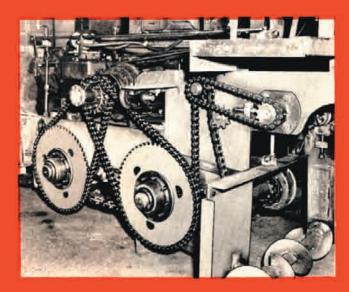
Again add to this the advantages of wheel operation, the elimination of hundreds of crawler parts and you have the best reasons in the world why your next black top paver should be a Blaw-Knox.



To the right is the Differential Traction Transmission Gear Case. This Transmission is mounted on the front of the operating deck just back of the hopper and is driven through a disc clutch. This is the transmission for the traction wheels and for driving the tamper. The design of the Traction Transmission is typical of the two transmissions on the Blaw-Knox.

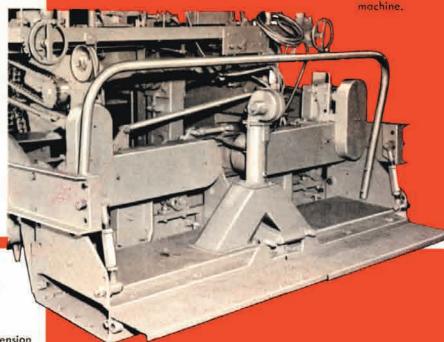
The other transmission is mounted at the rear of the operating deck and supplies the power to the Conveyor Flights and the Augers that distribute the material for tamper and screed. Both transmissions are the highest type of speed reducer consisting of heat treated and hardened gears with cut teeth, mounted on splined shafting on Timken Bearings—all fully enclosed and running in an oil bath. There is no better design.

High quality chain drives (right) transmit power to wheels and to Conveyors and Augers. Easy to adjust, easy to replace, easy to care for!

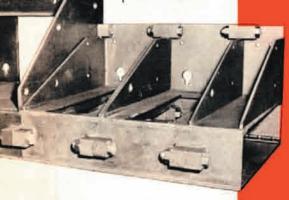


SCREED

• View of Screed from rear of



 Three Extension Sections bolted in place on screed.



 Bottom: Operator placing narrow Screed Extension in place for bolting. One section of tamper is in place and Auger Extension Socket is shown.

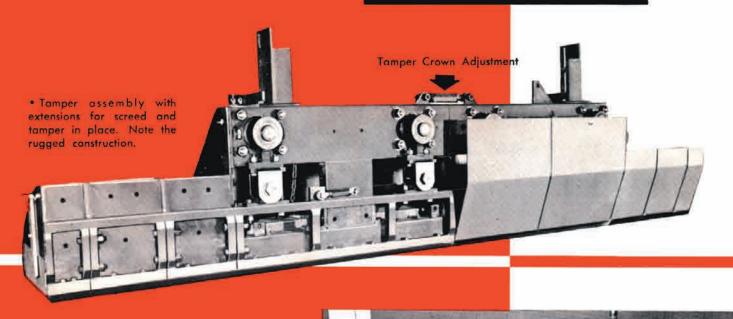


The Blaw-Knox Bituminous Paver Finisher uses a floating screed. With this design the screed automatically seeks the proper level for the course, based on the position of the adjusting screws.

The Screed itself is carried on arms which are mounted in a floating pivot forward of the large driving wheels at (A) (see diagram, page 4). Adjusting hand wheels can be seen at the rear of the operating platform above the screed. These hand wheels lift or lower the screed at (A) and the screed floats to the new level as desired.

Width changes are easily made. The Blaw-Knox Bituminous Paver Finisher will handle pavement widths from 8 to 13 ft. Screed extensions are unusually easy to install. Extensions come in fixed units and you are free from a multiplicity of parts that take time and trouble. Changes for width can be made in 15 to 30 minutes and take only a few simple steps. Insert auger extensions into recessed end of existing auger and fasten with the pin. Both tamper extensions and screed extensions bolt face to face. Bolting faces are machined to a true fit. Bolt holes are "jig" bored for accurate alignment. Simply put the extensions in place and take up the bolts.

TAMPER



Every possible effort has been made to provide all the requirements for producing the highest quality of work possible with any asphaltic material. In addition to the full control of materials in and from the Hopper, proper compaction and distribution is assured by the Augers and Tamper.

Two Augers (lower picture) are shown just back of the end of the Conveyor Flights from the Hopper. These Augers are just ahead of the Tamper (shown above) and the Screed. The Augers are large in diameter—larger than those employed on other bituminous finishers, and they can be adjusted vertically to meet the conditions of the material being laid. The large diameter of the Augers with the range of adjustment, plays a large part in the better distribution of materials and the higher output possible with the Blaw-Knox Bituminous Paver Finisher.

Proper compaction is supplied by the Tamper Bars (shown above). The Tampers are set just ahead of the Screed and feed the mix under the Screed. They are chain driven through eccentrics mounted on tapered roller bearings. In order to provide the utmost in simplicity, only two tamper bars are used.

Being in two sections the problem of road crown is easily cared for. Examination of the tamper bars (above) shows them to be rugged and capable of withstanding the punishment of heavy service.

 Looking at rear of paver with Screed and Tamper removed. Here is complete accessibility for lubrication and upkeep.

On wheels it will pove for less





 Heater is blower type. Fan is shown at the top. Fully enclosed! Safe!
 Turnbuckles below and back of heater are adjustments for crown.



 Rear control panel with gauge and controls for heater and spray equipment. Here is the Operating Deck of the Blaw-Knox Bituminous Paver Finisher. Controls are grouped and are dual. The seat can be installed on either side. Front wheels are hydraulically steered with a simple steering lever in front of each seat location.

Brakes are provided on each side of the rear wheels to aid in steering where turning in a small radius is a problem and when traveling free and unloaded as when returning for a parallel course. Thus, the Blaw-Knox operator is always in position and equipped to deliver the best possible job with his equipment.

- OHeat to the screed is provided by the Blaw-Knox Heater. This heater is a thoroughly modern blower unit and heats rapidly. It starts instantly with the push of a button on the back control panel. The Blaw-Knox Heater assures safe, even heat free from hot spots.
- Just below the Heater and immediately back of it will be seen the two turnbuckles that control the crown. This is all there is to it. There are no chains or ratchets to fuss with. Simply adjust the turnbuckles for the crown desired. Indicators are located below each turn buckle to show the amount of crown.

GENERAL SPECIFICATIONS

GENERAL -

Lays any asphaltic material, hot or cold.

Width of pavement 8 to 13 ft.

Depth of pavement 0 to 10 in.

HOPPER -

Capacity Approx. 10 tons

Equipment consists of two Bar Conveyors driven by chain drive. Bar Conveyors are separately controlled and are renewable. Two Gates also separately operated, mounted at the back of the hopper, give increased control of material. Two tire bumper rollers mounted in anti-friction bearings.

SCREED -

Of one piece box design. Leveling shoe has high strength, corrosion resisting smooth finish wearing surface. Hydraulic lift and adjustments for crown and wedge courses give full control on grade.

Leveling Shoe length 96	in.
Leveling Shoe width 24	
Auger (Diameter) 14	in.
Shoe and Tamper Extensions	
Multiples of 6 in. and 12	in.
	in.

TRAVEL -

Working Speeds . . . By varying engine speed and using 4 working speeds in traction transmission, various speeds between a minimum of 15 ft. per min. and a maximum of 60 ft. per min. can be obtained.

Travel Speed . . . 41/4 mi. per hr.

TRACTION TRANSMISSION -

All gears with cut teeth, heat treated and hardened. Shafts mounted on Timken tapered roller bearings all running in an oil bath in an oil tight case.

Clutch is a heavy-duty, double disc.

CONVEYOR-AUGER CONTROL TRANSMISSION —

Cut spur gears, heat treated and hardened, bevel gear and pinion, shafts on Timken tapered roller bearings all running in oil bath in an oil tight case. Clutches are heavy-duty, double disc.

CONTROLS -

Dual, within reach of operator from either side. Hydraulic for steering; for brakes on drive wheels; for lift on screed.

Calibrated manual control near operator maintains desired depth of finished material.

POWER PLANT -

Standard Engine Horsepow	er_71 @ 1800 RPM
Bore & Stroke	33/4 x 41/4 in.
Governed Speed	1800 RPM
Number of Cylinders	6

MASTER CLUTCH -

6-groove V-belt pulley

FRONT WHEELS -

Solid tires . . . 24x4x20, 3 per wheel, total tire width 12 in.

TANDEM DRIVE WHEELS -

Pneumatic tires . . . 10:00x20, 12 ply.

DIMENSIONS -

Length, over-all	
Height, over-all (exhaust pipe re	moved) 7 ft.
	10 ft.
Shipping width	approx. 8 ft.
Arrived at by removing side	arms and
front hopper wings.	
Steering wheel center to front dr	ive
wheel center	7 ft. 5 in.
Driving wheels-center to center	r 3 ft. 7 in.

SHIPPING WEIGHT -

Approx. 25,500 lbs.

In the interests of improvement the Blaw-Knox Company reserves the right to change these specifications without notice.

ASPHALT JOBS . . .





Spreading stone on suburban street work prior to laying asphalt surface.

Laying bituminous pavement on city work.

The Adnun Jr. Black Top Paver is the only tow-type paver that comes close to approaching the performance for accuracy of the larger, self-powered bituminous pavers specified for highway work.

The Adnun Jr. is far beyond comparison with the ordinary spreader box on wheels. It brings the city street department advantages that mean better control for meeting specifications and gives the contractor advantages that assure the delivery of a better job. Engine power makes it self-maneuvering without load. There is no wasting of truck time to put it in position. Rotating Breaker Bar and Oscillating Cutter Bar give better compaction and overlapping cutter bar action helps to make a tighter joint with a material reduction

in band work. Advanced design, anti-friction bearings throughout, transmission gears with cut teeth and running in oil, heavy box-type frame and other features assure ease of upkeep and long service.

Adnun Jr's, are serving on street work in both large and small cities everywhere. Ask for complete details and specifications on the Adnun before you buy a towtype rig.



Form 2475