



Model WC-17 Compactor Dozer

FWD WAGNER COMPACTORS

Combine speed, weight, unmatched maneuverability

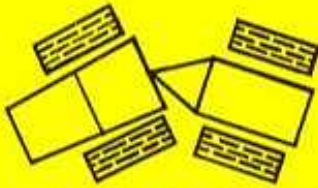
THE COMPLETE LINE
OF INDUSTRIAL TRACTORS



FWD WAGNER COMPACTORS

with center pin
Pow-R-Flex steering

FWD Wagner 4-wheel drive self-propelled
Compactors actually "turn in the middle."



UNIFORM COMPACTION

Constant double compaction, even in turns.



TWO AXLE OSCILLATION

Wheels always on the ground for sure-footed
power and constant compaction.



WC-24 Sheepsfoot Compactor built for Bureau
of Reclamation work, dams, levees, etc.

Leadership Cannot Be Copied

FWD Wagner experimentation preceded competition by five years. These development, job-testing and refinement years have made WC-17 and WC-24 Compactors industry leaders. In product engineering, the company with a head-start . . . stays ahead.

Gets Compaction Quicker

FWD Wagner dual purpose compactor-dozers are designed from the wheels up as self-propelled compactors. Approved compaction times reduced as much as 50%.

Air Cushion — High Speed

Pneumatic tire wheel mountings provide FWD Wagner Compactors with earth-shaking compaction through intensified impact at higher speeds. Higher densities now obtained with same weight of equipment previously used. Drive train shattering metal contact eliminated.

Shuttle Transmission

Dual operator controls and full swiveling operator seat permit quickest turnabouts in the industry . . . because there's no need to turn around! *Operator always faces forward.* This greater FWD Wagner maneuverability makes operation in confined areas, near culverts, curbs and construction a high-speed breeze. Torque converter, full reversing and 3-speed transmission are standard on all models.

Earth shaking . . . high speed



First Choice of the Nation's Largest Contractors



Speed compaction at low speed operating costs!



POWER FOR PRODUCTION

The FWD Wagner WC-17 has the most useable horsepower of any compactor now on the market. NO power is used up to overcome steering brakes or lost thru steering clutches. The power used to actuate the hydraulic steering is so small that you can not even tell the difference in the exhaust tone. In other words, practically all of the engine power is available for compaction, whether it be flat grades and light "lifts" or grades up to 20 percent and heavy "lifts" of gumbo type soils.

VERSATILITY:

While the WC-17 was engineered primarily for compaction, it is not entirely a single purpose unit. It has ample power and traction to spread its own fill, on many jobs it has eliminated the need of a "fill cat," and, or, a motor patrol, or blade. And the changing of wheel assemblies, from "air-cushioned" compactor to 26.5-2516 PR conventional earth-mover tires and rims gives you a 320 HP pusher unit to work on the job until the compaction phase is reached. And it can move reasonable distances to another job on its own power at speeds of up to 20 MPH.



WHEELS WC-17

The unique design of the wheel used on the FWD Wagner Compactor Model WC-17 is the key to the efficiency of the unit. It is the "Head of the Hammer," that delivers the "Impact" resulting from the force, or energy, developed when the approximately 50,000 lb. unit is moved at rubber tire speeds over the material to be compacted. By incorporating a tire between the axle hub and the outer padded rim, an *air cushion* is provided to protect the rest of the unit from the tremendous vibration resulting from the "INTERRUPTED CONTACT" operation. This air cushion absorbs the shock in much the same manner as the handle of a hammer.

The approximately 50,000 lb. weight of the unit times the square inches of wheel contact would represent the P.S.I. static, or standing, load. The square inches of contact will vary from an extremely small area on very hard surface, with a corresponding high P.S.I. to a relatively large contact area and lower P.S.I. on soft material. The efficiency of the unit results from the combination of weight per square inch of contact plus speed of travel. Doubling the speed results in far more than doubling the impact force.

Each wheel has 48 pads spaced around the rim, with a total of 192 pads on the 4 wheels. Rolling at only 5 MPH, the result is 5,412 impacts per minute. The working speed of

the WC-17 is from 2 up to 10 MPH depending on conditions, such as depth of the "LIFT," type of soil, and moisture content. At 10 MPH the rate of impacts would be 10,824 per minute plus the greatly increased force due to the increased speed.

- 48 pads per wheel 61½" diameter equals 193,208" circumference.
- 4 Wheels equals 192 pads equals Number of impacts per wheel rev.
- 5,280' divided by 193,208" equals 328 Rev. per mile.
- 328 x 198 equals 64,944 Impacts per mile divided by 60 equals 1082.3 per min. @ 1 MPH.

When working at 10 miles per hour, simple arithmetic shows that 40 square inch of surface per pad results in approximately 6500 square yards of compaction area per hour per single pass! (NOTE: This does not include the over-lap, due to offset of the wheels, of approximately 8").

WC-17 BRAKES

Full air brake system on all 4 wheels with treadle valve controls placed in convenient locations for operator when driving in either direction. 16½ x 6" bolt-on block lining with 768 square inches of friction area giving ample capacity for emergency stops and normal braking. Air reservoir capacity 1790 cubic inches. Ample for normal operation and emergency stops without overworking the compressor, which is a 12 CFM unit.



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