



NORTH AMERICAN COMPACTION ROLLERS

The Finest on Earth

*Rugged dependability is built into
North American Rollers...Part by Part*

FRAME

Heavy wall structural tube construction is used on all frame members. This provides a rigid and structurally sound frame work for long and durable service. Ample frame oscillation provides uniform compaction pressures according to the terrain, throughout the length of the drums. The use of structural tube maintains structural integrity all around the frame. Frames remain square for the life of the roller. This helps prolong the life of bearings, oscillating bolts, and axles because they are not operating in a binding position.

BEARINGS

Trouble free double rows of tapered roller bearings are used instead of single row bearings. Positive isolation prevents the ballast material from entering the bearing. Grease seals are installed so that no damage can be done by using high pressure lubrication equipment.

TONGUE AND HITCH

The tongue's heavy wall structural tube construction with the universal swivel clevis and eyebolt, are designed to pull rollers in tandem under severe twisting and turning conditions.

WEDGEFOOT

The steel feet are "full-wedge" design, that is, they are wedge shaped in all four directions giving complete wedge action to the compaction job. This easier-pulling "full-wedge" design reduces drawbar horsepower necessary for pulling the roller. When feet wear down, replaceable tips can be installed by cutting off the old tip, and welding on the new. This saves the cost of having to order the entire foot. Why replace the whole foot when only 2" is needed? For longer wear, hard facing rod may be specified and applied to the feet at our plant.

DRUMS

The drums are pressure tested all welded construction ruggedly built from 1/2" plate. Openings for loading or removing ballast material are located at the end of each drum. By varying the amount or kind of ballast material, a wide range of compaction pressures may be obtained.



PNEUMATIC TIRED ROLLERS

Engineered to give uniform compaction at speeds up to 15 mph on earth fills, road bases, shoulders, asphalt surfaces, and airport runways.

OSCILLATING BOLTS

Oscillating bolts which allow the frames to oscillate independently are made from quality steel for strength and durability. These bolts assure longer wear, and hence much more, maintenance free, running time.

AXLE

One piece cold rolled steel axles span the frames and are secured in machined pillow block, base and cap, castings. The shaft remains stationary while the roller drums revolve around them. An inner axle sleeve guards the axle and axle bearings from the ballast material.

REAR DRAFT BAR

The same heavy wall structural tube construction found in the frames and the tongue, is also found in the draft bar. A heavy rear hitch is provided so rollers may be worked in tandem. Ballast material may be added to the pressure tested rear draft bar to help counterbalance the tongue for easier tractor hook-up.

CLEANER TEETH

For forward travel, efficient rugged cleaner teeth are attached to the rear of the roller's frame, and for reverse travel required a large part of the time, identical front cleaner teeth are recommended and optional. For efficient cleaning, the cleaner teeth have replaceable steel tips.

STAGGERED WHEELS

Designed so that the wheels overlap to give complete coverage on each pass and full-width rolling up to the very edge.

ROCKER ARM AXLES

Self oscillating axles give equal compaction and uniform density in a minimum number of passes. Easily lubricated by zerk fittings.

OVERSIZE HOPPER

Reinforced ballast box is specially constructed to give even weight distribution over all tires. Low center of gravity.

FRONT BOLSTER

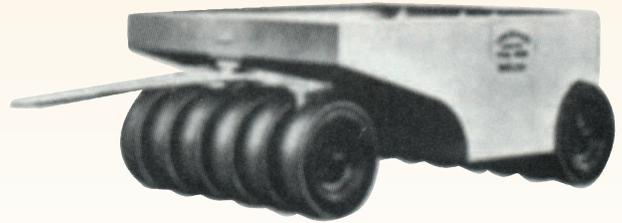
Extra strong king pin assembly firmly supports the all steel hopper body. Permits short turns yet prevents upsetting on slopes.

SUPER-WIDE TIRES

Standard equipment on all models. Smooth flat tread means greater coverage and more uniform pressure for "finished" rolling.

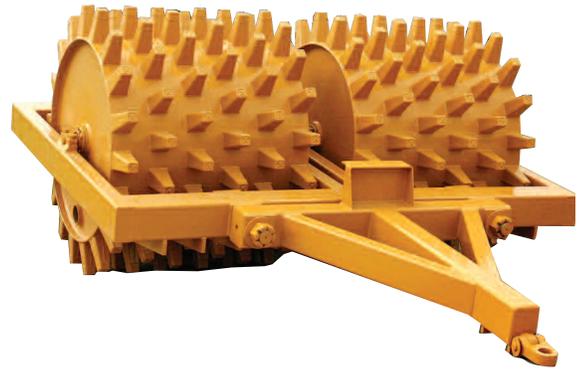
FULL ROLLING COVERAGE

Fewer passes essential for tamping economy. Equal wheel spacing from uniformity in engineering gives longer roller life.



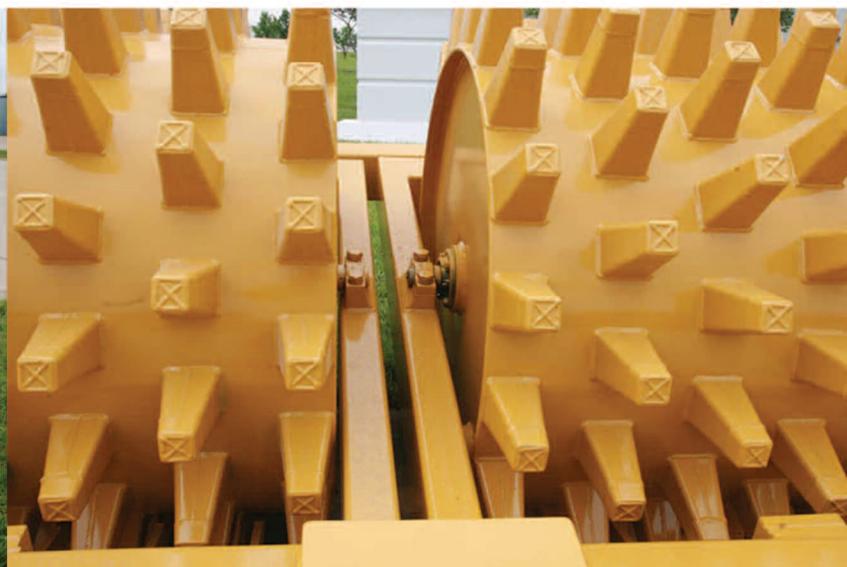
| Model | PT-4W | PT-9W | PT-13W |
|---|---------|--------|--------|
| Overall length | 25'-8" | 15'-3" | 15'-3" |
| Overall width | 9'-6" | 5'-2" | 7'-4" |
| Overall height | 7'-5" | 4'-0" | 4'-0" |
| Rolling width, front | 8'-11" | 3'-11" | 6'-1" |
| Rolling width, rear | NA | 5'-1" | 7'-2" |
| Number of tires, front | 4 | 4 | 6 |
| Number of tires, rear | NA | 5 | 7 |
| Tire size | 18x25 | 7.5x15 | 7.5x15 |
| Weight for shipment, pounds | 19,500 | 2,750 | 3,700 |
| Weight filled with sand, pounds | 100,000 | 25,560 | 36,920 |
| Total ballast volume, cubic feet | 627.2 | 86 | 114 |
| Rolling pressure per inch width of tire, empty | 256.6 | 38 | 35 |
| Rolling pressure per inch width of tire, loaded | 1315.8 | 355 | 355 |





WEDGEFOOT ROLLERS-DOUBLE DRUM

| Model | DD-4048 | DD-4848 | DD-6048 | DD-6060 |
|--|---------|---------|---------|---------|
| Number of drums | 2 | 2 | 2 | 2 |
| Overall length | 12'-9" | 13'-9" | 14'-8" | 14'-8" |
| Overall width | 9'-10" | 9'-10" | 9'-10" | 11'-10" |
| Length of each drum | 4'-0" | 4'-0" | 4'-0" | 5'-0" |
| Drum diameter without feet | 3'-4" | 4'-0" | 5'-0" | 5'-0" |
| Drum diameter over feet | 4'-6" | 5'-2" | 6'-2" | 6'-2" |
| Length of feet | 7" | 7" | 7" | 7" |
| Bearing surface each foot, sq. in. | 5.5 | 5.5 | 5.5 | 5.5 |
| Number of feet on ground | 8 | 6 | 6 | 8 |
| Number of feet per drum | 88 | 108 | 90 | 120 |
| Total number of feet | 176 | 216 | 180 | 240 |
| Total empty weight, pounds | 6,585 | 8,470 | 9,750 | 11,850 |
| Pressure per sq. in., empty | 150 | 257 | 295 | 269 |
| Weight filled with water, pounds | 10,282 | 13,860 | 18,299 | 22,583 |
| Pressure per sq. in., filled with water | 233 | 420 | 554 | 513 |
| Weight filled with wet sand, pounds | 13,695 | 19,356 | 26,190 | 33,522 |
| Pressure per sq. in., filled with wet sand | 311 | 587 | 793 | 762 |
| Total ballast volume, cubic feet | 59.25 | 86.5 | 137 | 172 |
| Recommended min. draw bar horsepower | 35 | 40 | 50 | 57 |



WEDGEFOOT ROLLERS-SINGLE DRUM

| Model | SD-4048 | SD-6060 | SD-6084 | SD-6096 |
|--|---------|---------|---------|---------|
| Number of drums | 1 | 1 | 1 | 1 |
| Overall length | 11'-10" | 13'-9" | 13'-3" | 13'-3" |
| Overall width | 5'-7" | 6'-7" | 8'-0" | 9'-1" |
| Length of each drum | 4'-0" | 5'-0" | 7'-0" | 8'-0" |
| Drum diameter without feet | 3'-4" | 5'-0" | 5'-0" | 5'-0" |
| Drum diameter over feet | 4'-6" | 6'-2" | 6'-2" | 6'-2" |
| Length of feet | 7" | 7" | 7" | 7" |
| Bearing surface each foot, sq. in. | 5.5 | 5.5 | 5.5 | 5.5 |
| Number of feet on ground | 4 | 4 | 5 | 6 |
| Number of feet per drum | 88 | 120 | 150 | 180 |
| Total number of feet | 88 | 120 | 150 | 180 |
| Total empty weight, pounds | 3,450 | 5,850 | 7,380 | 8,500 |
| Pressure per sq. in., empty | 156 | 266 | 196 | 226 |
| Weight filled with water, pounds | 5,298 | 11,213 | 15,180 | 17,610 |
| Pressure per sq. in., filled with water | 241 | 509 | 405 | 469 |
| Weight filled with wet sand, pounds | 7,004 | 16,683 | 22,380 | 26,020 |
| Pressure per sq. in., filled with wet sand | 318 | 758 | 596 | 693 |
| Total ballast volume, cubic feet | 29.62 | 86 | 125 | 146 |
| Recommended min. draw bar horsepower | 30 | 35 | 60 | 60 |

SPECIAL DESIGNS



Typical special applications:

- Power plant coal pile compaction
- Bureau of reclamation projects
- Landfill compaction

Our staff has the knowledge and experience to design a wide variety of compaction needs. If you require a specific size, weight, or compaction, we can probably design a roller to meet your needs.

Young's Welding, Inc.

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