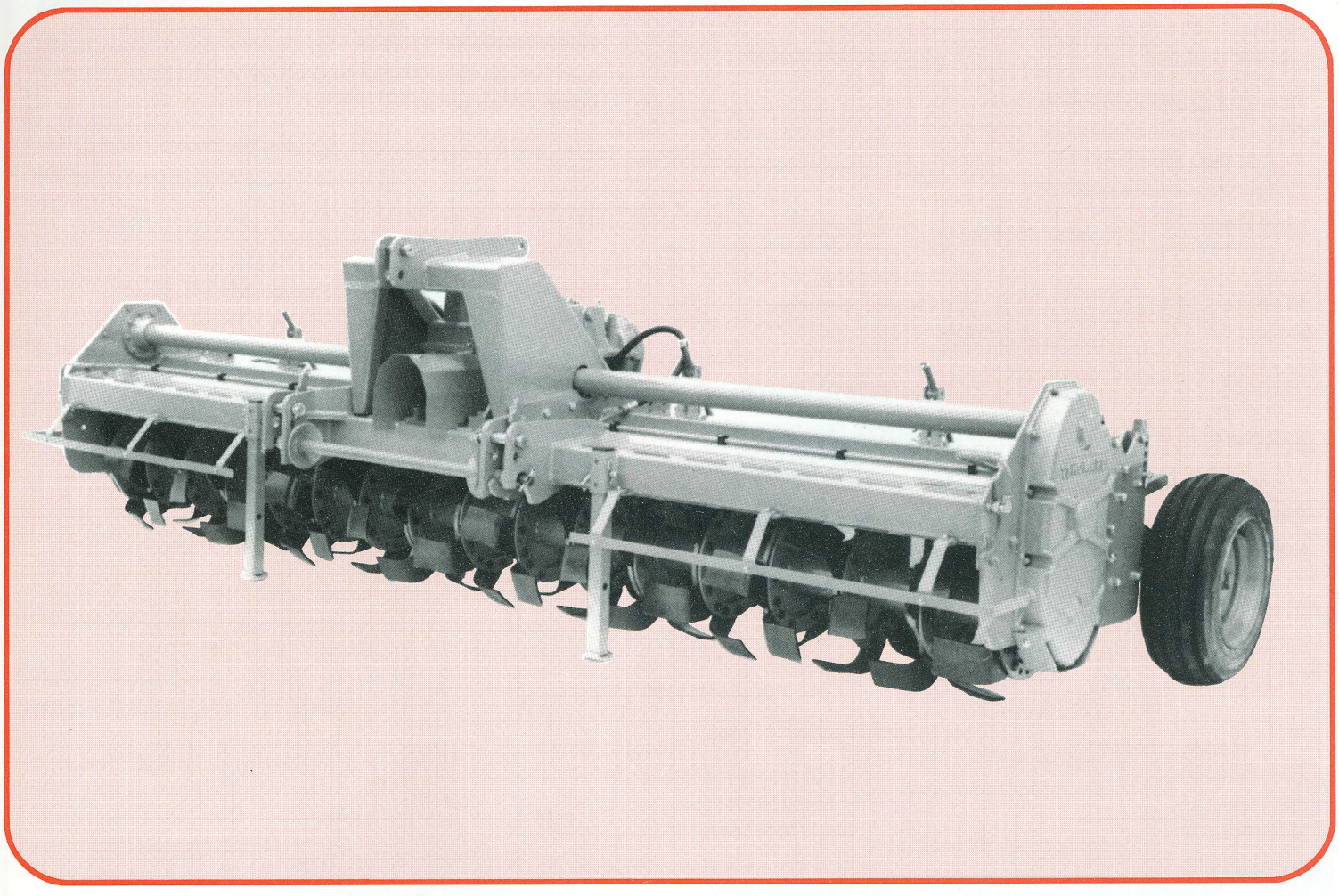
HOWARD®

Rotavators



- **Models to suit tractors from 100-250 hp**
- **Robust construction ensures long life, reliability and outstanding performance in the toughest conditions**
- **Each is designed for many tillage tasks and will incorporate crop residues, mix in fertilizer, control weeds and prepare seed beds**

Units to suit Farmers, Contractors, Market Gardeners, Municipalities, Cane Growers, Landscapers

HR 30 Series

POWER RANGE: For Tractors from 45-100 HP with 540/1000 PTO.

TILLAGE WIDTHS: 50", 60", 70", 80", 90".

HITCH: Cat. I and II.

TILLAGE DEPTH: Adjustable to 8" via standard skids or optional wheels on 50", 60", & 70" models. Standard wheels or optional crumble roller on 80" & 90" models.

TRANSMISSION: Power supplied by Bondioli Series 7 with 1⅜" 6 spline yoke and adjustable slip clutch to multispeed gearbox. 1⅜" 21 spline yoke for 1000 speed gearbox available.

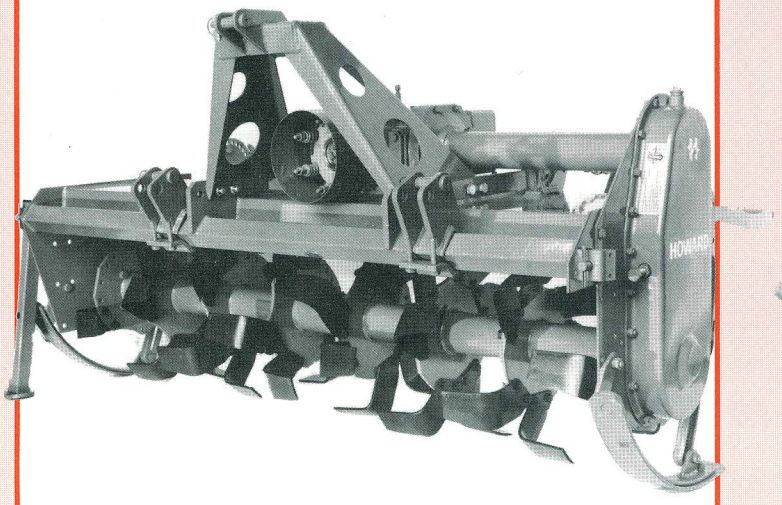
SIDE DRIVE: Single chain driven side drive running in oil bath.

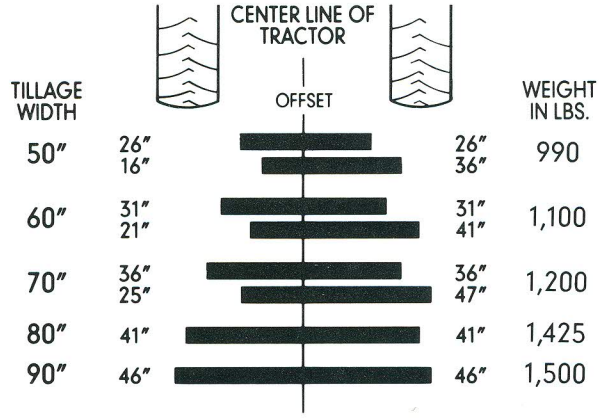
ROTOR: Closed ended with flanges on 10" centers. Drilled for 4 or 6 blades per flange.

BLADES: 'L' blades standard. Speed ('C') blades optional.

ROTOR SPEED: 170, 190, 213 and 235 rpm with 540 PTO. 195 and 245 rpm with 1000 PTO.

OPTIONAL EQUIPMENT: Front depth wheels. Crumble Roller and Rotalabour (SPIKE) Rotor.





TILLAGE WIDTH				WEIGHT IN LBS.
50"	26" 16"		26" 36"	990
60"	31" 21"		31" 41"	1,100
70"	36" 25"		36" 47"	1,200
80"	41"		41"	1,425
90"	46"		46"	1,500

HR 40 Series

POWER RANGE: For Tractors from 85-135 HP with 1000 PTO.

TILLAGE WIDTHS: 80", 90", 100", 120".

HITCH: Cat. II.

TILLAGE DEPTH: Adjustable to 8" via standard wheels.

TRANSMISSION: Power supplied by Bondioli Series 8 with 1⅜" 21 spline yoke and adjustable slip clutch to multispeed gearbox.

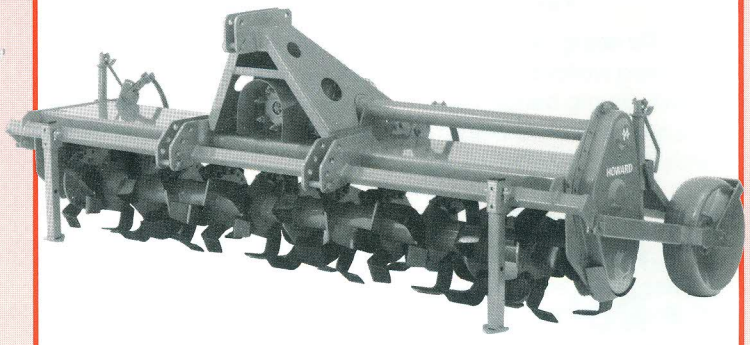
SIDE DRIVE: Single gear driven side drive running in oil bath.

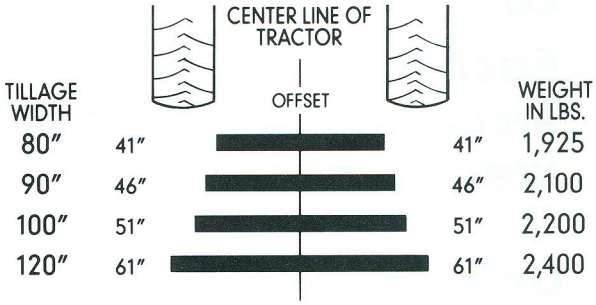
ROTOR: Closed ended with flanges on 10" centers. Drilled for 4 or 6 blades per flange.

BLADES: Speed ('C') blades standard. 'L' blades optional.

ROTOR SPEED: 175, 195, 215 and 235 rpm.

OPTIONAL EQUIPMENT: Rotalabour (SPIKE) Rotor and Crumble Roller.





TILLAGE WIDTH				WEIGHT IN LBS.
80"	41"		41"	1,925
90"	46"		46"	2,100
100"	51"		51"	2,200
120"	61"		61"	2,400

Rotalabour (SPIKE) Weights: 100" = 2,425 lbs. c/w Roller; 120" = 2,800 lbs. c/w Roller.

HR 50 Series

POWER RANGE: For Tractors up to 180 HP with 1000 PTO.

TILLAGE WIDTHS: 120″ and 160″.

HITCH: Cat. II and Cat. III.

TILLAGE DEPTH: Adjustable to 9″ via standard wheels.

TRANSMISSION: Power supplied by Bondioli Series 10 with 1⅜″ 21 spline yoke and adjustable slip clutch to lever change multispeed gearbox. Gearbox has oil cooling system.

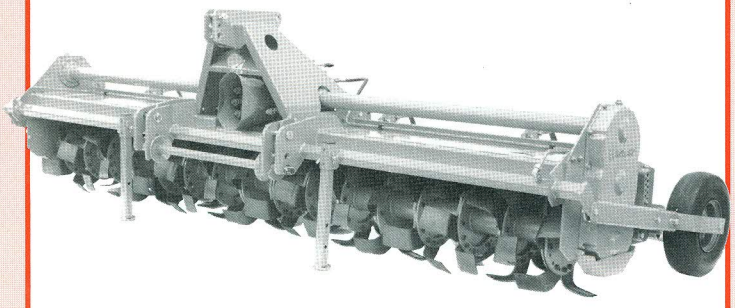
SIDE DRIVE: Dual gear driven side drives running in oil bath.

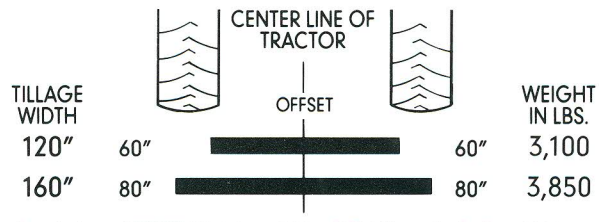
ROTOR: Open ended with flanges on 10″ centers. Drilled for 4 or 6 blades per flange.

BLADES: 'L' blades standard. Speed ('C') blades optional. Blades fixed onto rotor with double flanges.

ROTOR SPEED: 185, 210, 235 rpm standard. Optional, 219, 246 and 277 rpm.

OPTIONAL EQUIPMENT: Rotalabour (SPIKE) Rotor and Crumble Roller.





TILLAGE WIDTH				WEIGHT IN LBS.
120″	60″		60″	3,100
160″	80″		80″	3,850

Rotalabour (SPIKE) Weights: 120″ = 3,700 lbs. c/w Roller; 160″ = 4,400 lbs. c/w Roller.

HR 60 Series

POWER RANGE: For Tractors up to 250 HP with 1000 PTO.

TILLAGE WIDTHS: 160″.

HITCH: Cat. III and Cat. III Quick Hitch.

TILLAGE DEPTH: Adjustable to 9″ via standard wheels.

TRANSMISSION: Power supplied by Bondioli Series 120 with 1¾″ 20 spline yoke and adjustable slip clutch to lever change multispeed gearbox. Gearbox has oil cooling system.

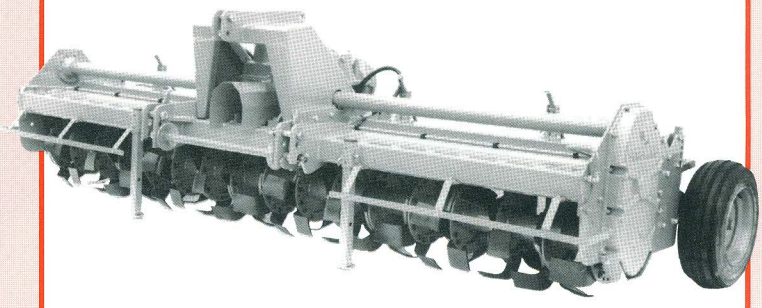
SIDE DRIVE: Dual gear driven side drives running in oil bath.

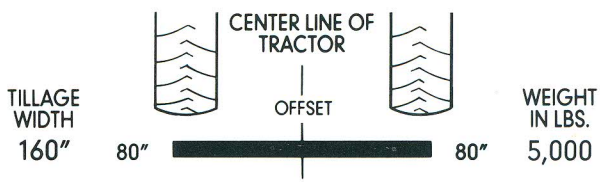
ROTOR: Closed ended with flanges on 10″ centers. Drilled for 4 or 6 blades per flange.

BLADES: 'L' blades standard. Speed ('C') blades optional. Blades fixed onto rotor with double flanges.

ROTOR SPEED: 175, 200, 218, 248, 251, 286, 311, 356 rpm.

OPTIONAL EQUIPMENT: Rotalabour (SPIKE) Rotor and Crumble Roller.





TILLAGE WIDTH				WEIGHT IN LBS.
160″	80″		80″	5,000

Rotalabour (SPIKE) Weight: 160″ = 5,500 lbs. c/w Roller.

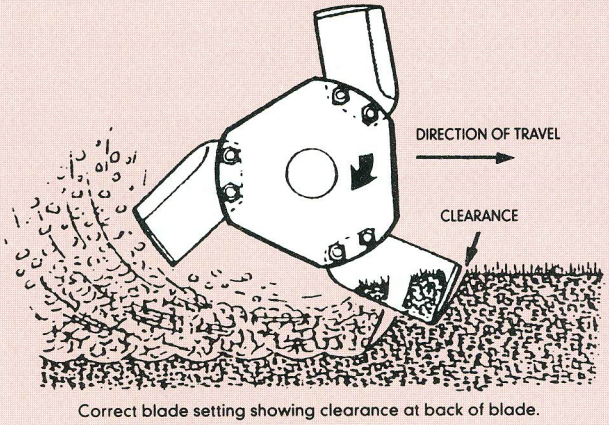
ROTAVATION — Answers to often asked questions.

Why do I need a Rotavator?

Reducing tillage operations cuts the cost of crop production. A Rotavator, by producing a seedbed in the least number of passes over the soil, will cut tillage costs. A Rotavator will do more work all year round than any other implement, such as chopping stalks, weed control, reclaiming waste land, renovating pastures and cleaning headlands. A Rotavated seedbed which holds moisture and warms up quicker gives better germination.

Does a Rotavator cause a soil pan like a plough?

Due to the downward pressure it exerts, without doubt the largest creator of a pan is the moldboard plough, and many other soil working implements are prone to this criticism. The point to remember about a Howard Rotavator is that the rotating blades exert no downward pressure — the weight of the machine is taken on the control skids/wheels/crumble roller. Rotavator blades are scientifically shaped to have a cutting and lifting action with the heel of the blade never wholly touching the soil at any stage.



Correct blade setting showing clearance at back of blade.

Diagram of the action of the Howard Rotavator blade. Note the clearance (arrowed) at the back of the blade.

Do I have to plough if I have a Rotavator?

Generally speaking, 'No.' Many of the conventional implements will not be needed on a farm equipped with a Rotavator. The periodical use of a Howard Paraplow, either before or after the Rotavator will complete the essential tillage requirements.

How fast can I Rotavate?

The criticism is frequently heard that the Rotavator is slow and therefore uneconomical for normal seedbed preparation. This criticism had some truth many years ago and many do not realize that the situation has radically changed.

With the advent of higher horsepower tractors and the use of the Selectatilth gearbox this is not so. With a 100" Rotavator outputs of up to 3 acres per hour can readily be obtained under average soil conditions. Compare the time required for a Rotavator to produce a seedbed with that of the time of all other implements to produce the same result. In some cases, one pass with a Rotavator may be equivalent to four or five passes with other implements.

DEALER

How does the Rotavator affect the soil?

The Rotavator will improve soil structure and enable the farmer to achieve his purpose with fewer operations. Rotavation will destroy and bury vegetation trash. Rapid decomposition will build soil structure and increase the humus content. Trash and crop residue mixed with the soil will hold it open and protect it from heavy rain and extreme temperatures.

Does Rotavation cause erosion?

No. The Selectatilth gearbox provides slow rotor speeds to leave a cloddy formation essential for the maximum rainfall to enter the soil and reduce erosion to the minimum.

Does the Rotavator assist in moisture retention?

Yes. Less moisture is lost when preparing a seedbed because only a few passes with the Rotavator are needed. A seedbed produced by a Rotavator will absorb and retain three times as much water as a seedbed prepared by traditional implements.

Are there special cases where shallow Rotavation is necessary?

Yes, in orchards and in soft fruit plantations where shallow Rotavation at controlled depth can mulch and at the same time avoid damage to feeder roots. In saline areas, shallow Rotavation can prevent salt from being brought up.

Does the Rotavator increase weeds?

Yes, deliberately by producing ideal growth conditions. Allow ten days after the first pass for land to "green over," then kill annual weeds by a shallow pass 2" deep directly ahead of the planter. Eradicate perennial weeds during a fallow period. The Rotavator will bring roots to the surface to wither and die. Quick passes at two week intervals will eradicate dock, nettles, thistles and other troublesome varieties. The Rotavator will also control couch and bracken.

How does the Rotavator deal with pasture?

A Rotavated pasture decomposes faster and the "green kill" is more thorough than by any other method. One shallow pass with the trailing board raised will cut up the old matted growth, leaving the residue on the surface to die. After a period of 10-14 days a second pass will mix the residue into the soil where it will rot down into valuable humus.

What will the Rotavator do in crop residue?

The Rotavator will chop and mix intimately with the soil organic and inorganic matter, thus increasing the supply of plant food. The Rotavator will deal with almost any cover crop or residue you care to mention.

How deep should I Rotavate for seedbed preparation?

Sufficient tilth to surround the seed and provide moisture and aeration is all that is required. A seedbed need be little deeper than drilling depth.

HOWARD®
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THRIGE AGRO GROUP

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