3 ranges of Power Harrows suitable for tractors from 50 to 180 H.P. and working widths of 2 to 4 metres.



Howard Power Harrows



- Suitable for Spring or Autumn, deep or shallow cultivation.
- ***** 2 Year Transmission Warranty.
- * Ideal for combination tillage.
- * Choice of Packer, Crumble or Coil Roller.
- * All models fitted with safety clutch.
- * Choice of blade.
- * 3 Ranges of quality machines to choose from.

THRIGE AGRO

HOWARD POW "MACHINES FOF

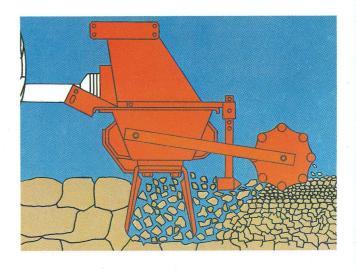
The Howard Power Harrows are a rugged and extremely versatile range of powered cultivators designed to meet farmers' and contractors requirements of preparing consistently high quality deep or shallow seedbeds, in a wide variety of soil types in high moisture or dry conditions and as an independent cultivator or in combination with a seed drill.

As illustrated, the vertical rotating rotors are fitted with low power requirement blades which reduce the largest clods to a fine tilth, whilst maintaining the ideal soil structure. The rear levelling bar retains clods within the cultivation chamber and uniformly levels the surface prior to the rear roller which further levels and firms the seedbed.



- ▲ HK20/300 fitted with Packer Roller.
- ▼ HK30/300 shown with Crumble Roller.





HK20 50-95 HP

The HK20 range of Power Harrows are suitable for use on tractors with a PTO of 540 or 1000rpm up to 95 hp and are available in either 1, 1.25, 1.5, 2, 2.5 or 3 metre working widths. They feature a selectatilth* gearbox protected by a safety clutch, with pick off gears providing a choice of rotor speed and therefore seedbed tilth. These models are fitted as standard with 25cm x 15mm high carbon steel blades and are available with a choice of rollers. The rear levelling bar is optional as is the stoneguard which is recommended when the HK20 Power Harrow is used in soil conditions with a high stone content.

The HK20 is suitable for use in combination with seed drills.

* Single speed on 1, 1.25 and 1.5 metre machines.

HK30 70-140 HP

HK30 Power Harrows are available in 2.5, 3, 3.5 and 4 metre working widths and are designed to cultivate in heavy conditions where higher horsepower tractors may be required.

The 1000 rpm gearbox which is protected by a safety clutch provides 3 speeds and these are selected through a simple lever change.

All HK30 Power Harrows feature as standard the front stoneguard. This prevents the ingress of stones to the blade carriers, thereby protecting them from damage or excess wear.

The blades are manufactured from high carbon alloy steel and are designed to enable them to cut through the soil as well as ride over stones and other obstacles. The HK30 is fitted as standard with a 25cm × 15mm blade for all normal cultivations. However, a larger 30cm blade is available for deep

root crop seedbed preparation.

The floating rear levelling bar is a standard fitment

and a choice of rollers are available.
All HK30 Power Harrows are suitable for use in combination with seed drills.

ERHARROWS ALL SEASONS"



HK40/400 shown with Packer Roller.

HK40 100-180 HP

For demanding conditions and extremely heavy land where high horsepower tractors are necessary to achieve high productivity, the HK40 Power Harrow is the ideal choice.

The 4 speed lever change gearbox is suitable for 1000rpm tractors up to 180hp and is protected by a safety clutch.

Bracing struts are fitted to the hull which provide increased strength enabling the machine to be used by farmers and contractors in the most arduous con-

A choice of blades are available, either 25cm \times 15mm for cereal seedbed preparations or 30cm × 15mm for deep rootcrop seedbed.

The HK40 is suitable for combination tillage with seed drills, and is available in 3 or 4 metre working widths.





All Power Harrows are available with a choice of rear roller. The Open Centre Crumble Roller is suitable for most normal soil conditions and assists in tilth preparation whilst consolidating

Is suitable for most normal soll conditions and assiste many productions that product the seedbed surface.

The Packer Roller has adjustable cleaning scrapers between the fluted discs which enables the machine to be used in soils with a high moisture content. It is equally useful in very dry conditions where the flutes further crush the clods and surface consolidation provides moisture

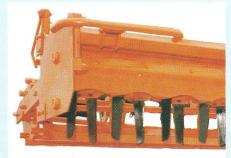
conservation.
Floating side guards allow boulders and other objects to pass safely away from the cultivation chambe



The HK Power Harrow blades are manufactured from high carbon alloy steel and are designed to efficiently cut through wet or dry soils with a minimum horsepower requirement. The design also protects the blade bolt from wear enabling easy replace-ment. All HK blades are protected by the Howard blade warranty.



The HK30/40 gearboxes all feature a through PTO shaft (optional on HK20) for use in powering, for example, pneumatic drills. All gearboxes offer a choice of rotor speeds to produce the optimum seedbed.



A stoneguard kit is standard on HK30 and 40 (optional, on HK20) and prevents the ingress of stones to the blade carriers, thereby protecting the transmission from shock loadings and wear. This also provides wear protection of the blade bolts and nuts allowing easy replacement.



The gear trough on all HK Power Harrows features a totally immersed gear bearing lubrication design which ensures all moving parts

are continually lubricated.

The rotors are driven by heavy duty gears and tapered roller bearings are utilised on the HK30 and HK40 machines. The single housing design ensures accurate bearing alignment and increased reliability.



COMBINATION TILLAGE

The HK Power Harrows are ideal for use in combination tillage with seed drills, either pneumatic or conventional, using a choice of rear linkages.

The Combi Hitch is a full floating system designed to carry a seed only lightweight drill which is lifted simultaneously with the Power Harrow. The Hydraulic Combi Hitch allows the drill to float independently and the twin hydraulic cylinders lift the drill up and over the power harrow which is then raised in the normal manner. This system enables a medium horsepower tractor to adequately handle the combination unit.

Pneumatic drills may be fitted using the Combi Hitch or the rigid Quick Hitch 'A' frame system.





The hydraulic linkage system raises the drill well over the Power Harrow therefore reducing the overhang weight. This provides safer use when manoeuvering in difficult situations and allows a medium hp tractor to adequately handle the combination.



The Nordsten CLM or CLP drills are specifically designed to mount on Power Harrows and are compatible with the Howard HK series.



Specifications												
	HK20						HK30				HK40	
•	100 -	125	150	200	250	300	250	300	350	400	300	400
Tillage Width	1m	1.25m	1.5m	2m	2.5m	3m	2.5m	3m	3.5m	4m	3m	4m
Number of Rotors/Blades	4/8	5/10	6/12	8/16	10/20	12/24	10/20	12/24	14/28	16/32	12/24	16/32
Weight with Crumble Roller kg	410	450	520	630	790	850	895	1000	1130	1240	1190	1800
Packer Roller kg	480	520	600	750	840	950	1025	1150	1275	1410	1340	1950
Weight of hydraulic Combi Hitch kg	-	-	-	150	150	150	150			150		
Horsepower range			25-	95			70-	70-120 90-140		100-180		
Rotor Speeds 540rpm	280	280	280		215	+ 360	N/A			N/A		
1000rpm	360 opt 400					270, 330, 400			260, 300, 350, 390			
Depth of Tillage standard blade	25cm						25cm			25cm		
optional blade	N/A						30cm			30cm		
Rear PTO shaft	Optional						Standard			Standard		
Depth Control	Rear Roller						Rear Roller			Rear Roller		
Mounting Category	Cat II						Cat II (Cat III optional)				Cat II or III	
Safety Clutch	Standard						Standard			Standard		
Rear levelling bar	Optional						Standard			Standard		
Stoneguard Kit	Optional						Standard			Standard		
Transport System	N/A						Optional			Optional		
Combi Hitch	Optional						Optional			Optional		
Hydraulic Combi Hitch	Optional						Optional				Optional	
Accord/Vicon Hitch	Optional						Optional				Optional	

Dealer

GUY MACHINERY 15219 US HWY 14 • P.O. BÓX WOODSTOCK, IL 60098

Please note all machines are supplied with guards complying to current regulations.



Thrige Agro Limited Wymondham, Norfolk NR18 9LR Tel: (0953) 605151 Telex: 97186 Telefax: (0953) 607818