



The brainchild of Ko Rodenburg, the Koro range of machinery came to market in 1997, with the Field TopMaker (FTM) as the key machine in a renovation programme designed to improve pitch quality and extend playing hours on natural turf soccer pitches. The acquisition of the manufacturing rights by Imants BV in 2009, and the fine-tuning of the "Fraize Mowing" renovation practices, has led to the design of a new range of rotors by Campey Turf Care Systems and Imants BV.

Campey Turf Care Systems have been at the fore in developing the Koro by Imants Field Topmaker into a system that can be used on a wide range of surfaces for a number of different renovation practices. "Koro-ing" is now an established renovation practice worldwide!

4 different models now available









A model to suit any size tractor 35hp +



The Koro Field TopMaker when fitted with the Scarification Rotor, can be used for conventional scarification / verticutting, conveying the excess thatch into an adjacent trailer / truck. The extra collection capacity is far more efficient than an integrated hopper and greatly increases productivity, especially if two or more trailers can be utilised.

The Scarification Rotor can be fitted with either 1/8" (3mm) tungsten tipped blades (for all models of FTM) for fairways and sports fields, while the rotor for the FTM1200 and FTM1500 can be fitted with 1/16" blades for finer turf. Integrated adjustable brush strips are fitted to improve collection and surface hygiene. A midmounted, anti-scalping roller is available for undulating ground.

When scarifying large areas like sports fields and golf course fairways with a conventional scarifier / collector, emptying the hopper is often the job that takes the longest time. Using a Koro Field TopMaker with elevator, in conjunction with a larger trailer will minimise the down-time. Using two or more trailers prevents work being interrupted, and allows the scarifying to continue while alternate trailers are being emptied.



The conveyor and elevator belts on the latest FTM2000 and FTM2500 models are now 40% wider, thus increasing capacity and therefore productivity dramatically.

Universe® Rotor - Patent No. W02013/027005

2012 / 2013 saw the introduction of 2 new rotors for the Koro FTM; Universe® and Terraplane®. The first blades designed for the Universe® rotor where 3/8" (10mm).

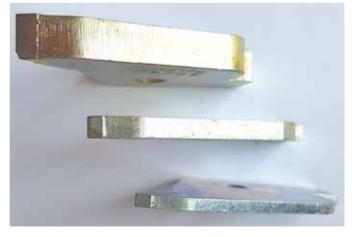


Universe® rotor configuration

3/8" (10mm) blade #026709

Further research and testing on different sports turf and grasses, to see how long the recovery time was in different situations, lead to the development of different thicknesses of Universe® blades. 3/16" (5mm) and 1/8" (3mm) blades were developed for Koro Universe® Finesse mowing, which will deliver a more refined finish, the working depth of the rotors can be set with infinite precision.

All 3 blades can be used on natural turf, on both cool and warm season grasses for Koro Universe® Finesse Mowing, or Koro Universe® Fraze Mowing.



3/8" (10mm), 3/16" (5mm) and 1/8" (3mm) blades

Universe® Rotor For Synthetic / Hybrid Surfaces

The Universe® rotor was initially developed for the removal of the organic build up from the surface of the semi-synthetic natural turf pitches that are now common in professional stadiums around the world.





The Universe® rotor (fitted with 3/8" (10mm) blades) achieves excellent surface hygiene without damaging the exposed synthetic / hybrid fibres. In one pass the whole annual renovation process to include dressing with 40/50 ton of sand, fertilising and overseeding could be carried out in one day instead of 4/5 days, with the process known as Koro Universe® Fraize Mowing.

Universe® Fraize Mowing on synthetic / hybrid surfaces allows the Turf Professional to maintain the original quality of the surface.







Universe® Rotor For Different Playing Surfaces

The Universe® has been used on different playing sport surfaces i.e. golf, cricket and tennis with amazing results achieved.







Universe® Fraize Mowing

Patent No. W02013/027005

Koro by Imants Field TopMaker 1500 fitted with Universe® Rotor fraize mowing Bermuda grass fairway.

A modern approach to managing excessive thatch build-up in warm season grasses is "Universe® Fraize Mowing".

Most warm season grasses are prone to the rapid accumulation of thatch in the sward. Conventional verticutting and scarification only removes around 7 – 10% of the surface matter, and unless done on a regular basis cannot keep up with the build-up of thatch.

A radical approach is to remove all the organic build-up in one pass. The unique feature of the "Universe® Rotor" is that it can be set accurately to leave rhizomes and stolens in place, thus eliminating the need to re-sprig.

Once exposed to sunlight by removal of the canopy, re-generation is rapid, often with full recovery in 3-4 weeks. Removing the thatch and organic debris minimizes water retention at the surface, ensuring that any available water passes directly to the rootzone.

In transitional zones, "Universe® Fraize Mowing" is used to speed up the transition from winter grasses to warm season grasses. The Universe® Rotor will take out the cool season grass and any organic build – up, leaving rhizomes and stolens in place. By removing the competition for water and nutrient, and exposing them to light, the transition period is dramatically reduced.











Universe® Finesse Mowing

The 3/16" (5mm), Universe® Finesse blade is a heavy-duty, tungsten-tipped blade, which can be fitted to;

- every holder 5cm cut 5mm spacing
- every blade holder on alternate spirals giving 3/16" (5mm) cut at 9/16" (15mm) spacing
- alternate blade holder on alternate spirals giving 3/16" (5mm) cut with 1 3/8" (35mm) spacing

The 1/8" (3mm) Universe® Finesse blade is a tungsten-tipped blade, which can be fitted to;

- every holder 3mm cut 7mm spacing
- every blade holder on alternate spirals giving 1/8" (3mm) cut at 11/16" (17mm) spacing
- alternate blade holder on alternate spirals giving 1/8" (3mm) cut with 1 7/16" (37mm) spacing



Universe® Finesse Blade Options For Universe® Rotor

Model	Blade	Thickness	Spacing		Qty
FTM1200	#030044	5mm / 3/16"	Every holder on alternate spiral Alternate holder on alternate spiral *	15mm / 9/16" 35mm / 1 3/8"	60 30
	#029654	3mm / 1/8"	Every holder on alternate spiral Alternate holder on alternate spiral *	17mm / 11/16" 37mm / 1 7/16"	60 30
FTM1500	#030044	5mm / 3/16"	Every holder on alternate spiral Alternate holder on alternate spiral *	15mm / 9/16" 35mm / 1 3/8"	75 38
	#029654	3mm / 1/8"	Every holder on alternate spiral Alternate holder on alternate spiral *	17mm / 11/16" 37mm / 1 7/16"	75 38
FTM2000	#030044	5mm / 3/16"	Every holder on alternate spiral Alternate holder on alternate spiral *	15mm / 9/16" 35mm / 1 3/8"	100 50
	#029654	3mm / 1/8"	Every holder on alternate spiral Alternate holder on alternate spiral *	17mm / 11/16" 37mm / 1 7/16"	100 50
FTM2500	#030044	5mm / 3/16"	Every holder on alternate spiral Alternate holder on alternate spiral *	15mm / 9/16" 35mm / 1 3/8"	125 63
	#029654	3mm / 1/8"	Every holder on alternate spiral Alternate holder on alternate spiral *	17mm / 11/16" 37mm / 1 7/16"	125 63

^{*} May require counter-balance weights.

Percentage Removed With Different Blades And Configurations Of The Universe® Rotor

3/8" / 10mm blades

- With the 3/8" (10mm) blades on 4 spiral you remove 100% of the surface
- With the 3/8" (10mm) blades on 2 spiral you remove 50% of the surface, with 3/8" (10mm) gone and 3/8" (10mm) still there.

3/16" / 5mm blades

- With the 3/16" (5mm) blades on 4 spiral you remove 50% of the surface, with 3/16" (5mm) gone and 3/16" (5mm) still there.
- With the 3/16" (5mm) blades on 2 spiral you remove 25% of the surface, with 3/16" (5mm) gone and 9/16" (15mm) still there

1/8" / 3mm blades

- With the 1/8" (3mm) blades on 4 spiral you remove 30% of the surface, with 1/8" (3mm) gone and 1/4" (7mm) still there.
- With the 1/8" (3mm) blades on 2 spiral you remove 15% of the surface, with 1/8" (3mm) gone and 11/16" (17mm) still there





The Terraplane Rotor® now leads the way in accuracy of cut, blade durability and surface hygiene. Coupled with the Field Topmaker's infinitely fine, depth adjustment (accurate to 0.1mm), the Terraplane® Rotor will shave off the precise amount of organic material required, leaving a clean, smooth and even surface. The durability of the tungsten-faced blades prolongs the accuracy of cut, and reduces the down-time associated with changing blades. The unrivalled surface hygiene of the Terraplane® Rotor eliminates any clean-up pass and saves time, labour and fuel costs.





Depth setting is accurate to 0.1mm, via a digital display read out

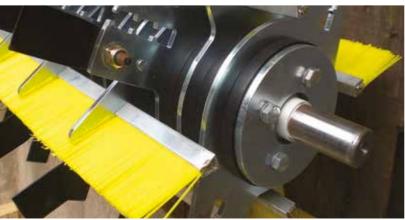


Optional Rotors For All Models









Universe® Rotor

- Removing organic debris from semisynthetic grass pitches.
- Modern fraize mowing on warm and cool season grasses.
- 3 different thicknesses of blades available
- Tungsten-tipped blades for increased durability.
- Universe® rotor International Publication Number WO2013/027005

Terraplane® Rotor

- Accurate planing of surface down to 2" (50mm) deep.
- Unrivalled surface hygiene for a clean, smooth surface.
- Tungsten faced blades for increased durability & reduced down-time.
- Terraplane® rotor N2008947

Digging Rotor

- Original digging blade for fraize mowing & surface removal.
- Suitable in lower quality turf areas.
- Ideal for stripping prior to re-turfing.

Scarifying Rotor

- For conventional scarifying & verticutting.
- Available with 2mm or 1/16" tungsten tipped blades.
- Includes adjustable brush strips for increased surface hygiene.

Koro by Imants - Field Top Maker Model Options

Specification

MODEL	1200	1500	2000	2500		
Working width	1.20m / 47"	1.50m / 60"	2.00m / 79"	2.50m / 98"		
Overall / transport width	1.60m / 63"	1.80m / 71"	2.55m / 100"	2.95m / 116"		
Approx weight*	1,065kg	1,150kg	1,695kg	1,955kg		
Working depth		0 to 50 mm	/ 0 to 2"			
Elevator discharge height	Approx 1.50m / 60"		Approx 2.0mm / 79'	,		
Recommended tractor	35 - 50hp	45 - 65hp	70 - 100hp	95 - 120hp		
Tractor mounting C	at I or II, 3-pt linkage		Cat II, 3pt linkage			
Tractor requirements 2 x double	2 x double acting spool valves - 30L/min 2 x double acting spool valves - 40L/min Creep speed gearbox or hydrostatic drive 540 PTO drive					
Operating speed	0 - 2kph / 0 - 1.2mph for Digging and Terraplane® rotors 0 - 4kph / 0 - 2.4mph for Universe® rotor 0 - 6kph / 0 - 3.72mph for Scarifying rotor					
OPTIONAL ACCESSORIES						
Mid-Mounted Roller	Optional	Optional	Optional	N/A		
OPTIONAL ROTORS						
Digging Rotor	Available	Available	Available	Available		
Number of Blades	40	52	64	80		
Terraplane [®] Rotor	Available	Available	Available	Available		
Number of blades	36	45	60	75		
Universe [®] Rotor	Available	Available	Available	Available		
Number of 3/8" (10mm) blades (on every holder)	120	150	200	250		
Number of 3/16" (5mm) blades (on every holder)	** 120	150	200	250		
Number of 1/8" (3mm) blades (on every holder) **	120	150	200	250		
Scarifying Rotor	Available	Available	Available	Available		
3mm (1/8") Tipped Blades	Optional	Optional	Optional	Optional		
2mm (1/16") Tipped Blades	Optional	Optional	Not recommended	Not recommended		
Number of Blades	70	88	112	148		
	34mm / 1 5/16"					

^{*}depending on rotor

Campey Imants

Email: info@campeyimants.com

Web: www.campeyimants.com

www.korofieldtopmaker.com



Campey



CampeyTurfCare



CampeyMachinery





^{**} different configurations are available