

Toro's new Workman 2100 utility vehicle offers a big payload capacity and the Toro-exclusive 'twister' Active In-Frame Suspension

This consists of a unique rubber joint that attaches the front operator platform to the rear section containing the engine and cargo bed. The 'twister' suspension allows 15 degrees of flex in both directions, so the vehicle can travel over uneven terrain and still keep all four wheels on the ground.

These features and more make the vehicle ideal for use in a host of different working environments such as golf courses.

The vehicle has a roomy operator platform with excellent leg room. There's also more storage space in the Workman operator platform, including a centre tray for storing items such as hand-held radios, clipboards and tools. A 12-volt outlet allows for the recharging of radios and other equipment.

The front axle of the Workman uses independent front suspension which allows for the tight turning radius of just 2.9m with 70-degree steering. The Fuji rear axle is powered by an automatic, constantly variable transmission.

A pedal-start accelerator and pedal-stop brake make the vehicle as easy to drive as a golf car.

The Toro Groundsmaster Contour 66 is a new version of the Groundsmaster rotary. But this time it is fitted with the company's ground-breaking Sidewinder system that enables all three cutting decks to shift from side to side up to 61cm.

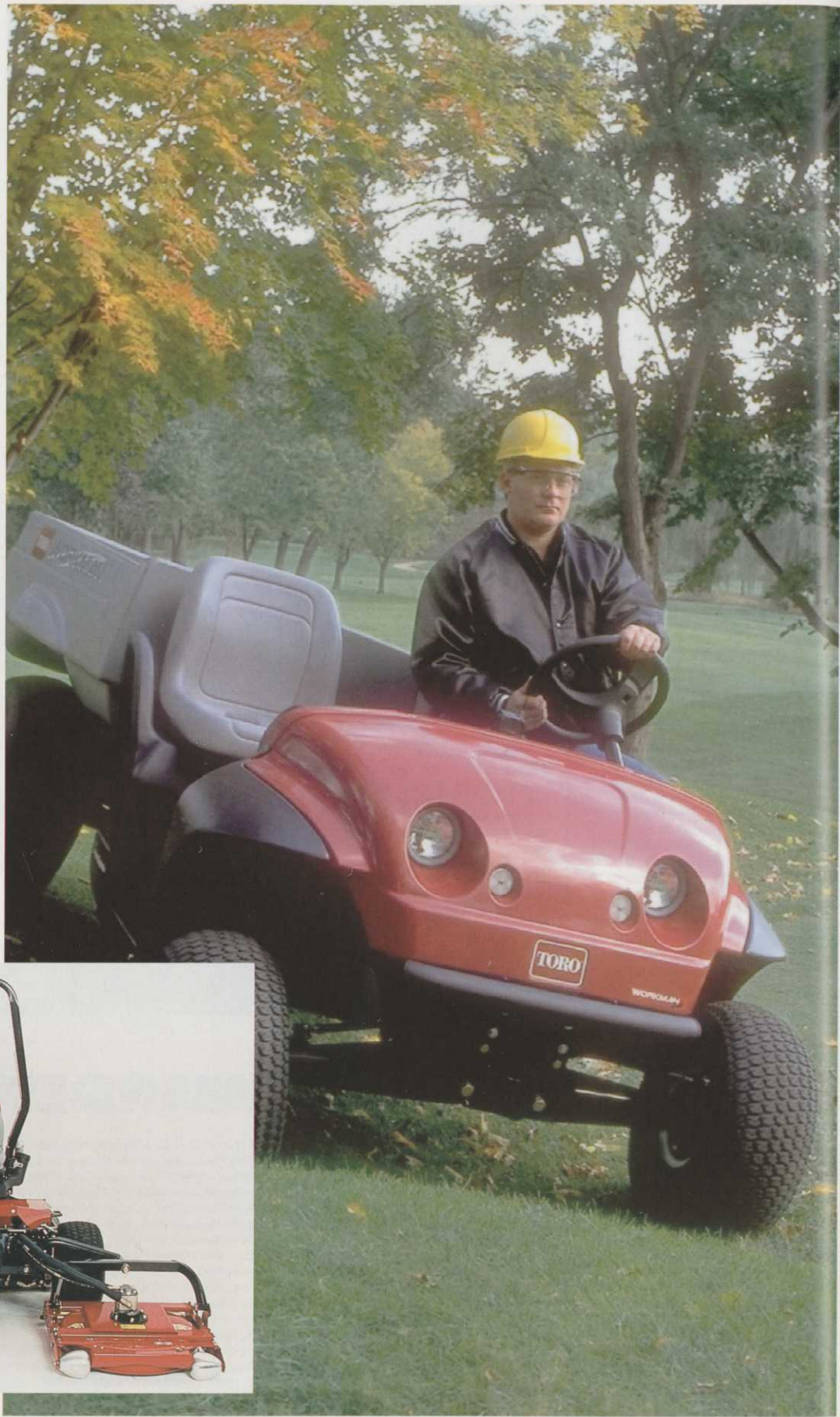
It follows on from the Reelmaster Sidewinder fitted with cylinder cutting units, which is receiving outstanding universal acclaim after its introduction to UK golf courses last season.

All three rotary decks can shift from side to side up to 61cm by the use of a joystick control. Shifting the cutting units to the sides means they can mow bunker overhangs, fringes, approaches and edgings that might otherwise need tackling with a push-mower or strimmer.

Such a greater mowing range substantially increases productivity on all fronts.

Additionally, jobs that traditionally needed follow-up mowing can be completed by the Groundsmaster Contour 66 because the operator can shift the mowing deck positions without leaving the seat.

The ability to shift the decks sideways also varies the tracking of the mower's wheels so reduces tyre tracks and turf damage.



Developed by Greenkeepers for Greenkeepers, the new Intake Range of Foliar Feeds offers the perfect complement to existing granular and liquid feed programmes. It will be distributed in the UK by **Amenity Technology**.

The range has been developed in the United States by Gary Grigg, Master Greenkeeper and former President of the GCSAA, and is backed up with over 20 years of research.

The "organic facilitators" or chelates used in each of the Intake products mimic the plants natural chelating actions and increase nutrient penetration into the plant's cells.

The foliar action of the range has shown to be of dramatic benefit on low cut turf where a poor rooting systems can be an inherent problem. Intake bypasses root uptake and delivers readily available nutrients direct to the leaf blade, rapidly correcting nutrient deficiencies.

The latest development from the Koro Design and Manufacturing Centre in Holland is being shown for the first time on the **Richard Campey Ltd** stand. The now established Recycling Dresser has given birth to a 'Mini' version for specific work on Golf Greens and Tees. The GT model, RD130KR has been produced to provide the same remarkable benefits to surface management in the Golf sector, as in the general sports and amenity areas, already transformed over the past few years. As with its father' version, the 'son' alleviates the need for top dressings by recycling the original soil. The equipment is 3 PT. linkage mounted for attachment to 30 35hp Compact tractors. In addition to Richard Campey Ltd in the UK, the machine will be available on an international basis from Hummer Sports Turf (USA), Manoeuvre Mow Pty (Australia) and Barthela Motorgerate (Germany).

Parent company **Textron** announced a new generation of Ransomes compact tractors was on show for the first time at Harrogate with the introduction of the TT series.

Replacing the smaller models in the CT range, the TT series offers a more ergonomic control layout; improved engine technology producing greater power and quieter performance, a new hood design for improved accessibility and a more rounded shape to aid operator visibility. This new Class 1 series is available with hydrostatic or mechanical transmission for the 18hp and 21hp derivatives and hydrostatic transmission on the 24hp option.

Also introduced was the MowerCaddy, a walk-behind mower trailer for transporting mowers from one job to the next quickly and easily.

Designed for durability it features a lift and lower level with a comfortable rotating padded handgrip that makes loading and unloading easier.

Textron also introduced new side discharge cutting decks to the Ransomes AR250 rotary mower.

Complementing the existing 'Envirodeck' - the patented twin blade mulching system, the new side discharge deck will prove popular with greenkeepers that require less frequent mowing regimes. The cut grass is discharged immediately from the side of the deck enabling higher heights of grass to be cut compared to the 'Envirodeck'.

Another feature when cutting around bunkers is the two-position setting for the front caster wheels on the left-hand deck. When the inner position is used it prevents damage to the bunker wall. With a choice of two decks and a wide range of cutting heights, the Ransomes AR250 will provide a quality cut on driving ranges, semi-rough and deep rough, whatever your cutting regime.



Making its first appearance at BTME was the Kubota AM3000 ride-on triple cylinder mower with its hopper grass collection system which can be emptied without the driver having to leave the seat. Powered by a low emissions 33hp Kubota diesel engine, the AM3000 features on-demand four-wheel drive which engages

automatically when loss of traction is detected. All three cutting units are positioned ahead of the wheels and are offered with either five or seven bladed 200mm diameter cylinders. Instead of the standard grooved front rollers, the cutting units can be specified with side rollers which allow the heads to still follow ground

contours, yet without flattening the grass before it is cut.

Other new Kubota products making their debut at the show were the GiS GlideCut - the world's first triple-bladed through-cut mower with integral rear grass collector - and the I4hp B1410 compact tractor with mid-mounted rotary cutter deck.

Charterhouse Turf Machinery, who announced sales of over £100,000 on the second day of the show alone, launched the new higher horsepower Ergit TTR Series from Antonio Carraro.

The new TTR 9400 fitted with an 87HP, turbo charged 4 cylinder diesel engine is capable of reaching speeds of 40kph and is well suited for a variety of applications in the amenity market.

With standard features such as ACTIG (full chassis with oscillation), with up to 30 degrees ensures grip and traction, four equal sized wheels with wide track gives good stability, balance and safety when operating in the most testing of conditions.

The short wheel base and steering characteristics of this tractor gives accurate manoeuvrability and a high work rate when working on areas with severe gradients, such as elevated fairways, golf greens and motorway bankings. Four oil bath disc brakes add to the all round safety of this tractor.

The synchro-shuttle transmission giving 16 forward and 16 reverse gears is added to with the addition of a 'Hi LO' transmission which reduces each gear by 20% and is operated through an electro-hydraulic control switch.

The latter is a standard feature on this model, as is the 'RGS' reverse guide system allowing the operator to change the direction of operation and use many attachments in front mounted mode.

The TTR range is also available in 60 and 64hp.

A new form of biological treatment for use in the professional turf and landscape market and developed and manufactured by **Biotal** was on display. The products are available through the recently-formed Pentagon Group.

The health of the grass plant is directly linked to the microbial health of the soil. Microbes are involved in the processes of recycling and processing of nutrients as well as natural defence mechanisms against potentially pathogenic disease. Biotal's 'Restore the Balance' programme is a three part natural solution that utilises standard cultural methods to enable environmentally aware greenkeepers to selectively enhance the microbial profile of their soil.

Combining three products, the programme reintroduces, feeds and boosts beneficial microbial concentrations in fine turf. The three products known as Microbalance, Biofeed and Microbooster, are also available for application separately. Microbalance is a blend of microbes researched, developed and produced in the UK. Selected for its ability to re-balance the soil micro-flora, Microbalance replaces protective microbes destroyed by intensive use of toxic chemical treatments. Biofeed is a natural seaweed extract used as a soil and foliar feed and specifically selected for natural surfactant content. Microbooster is an organic plant extract, which creates a suitable environment for the development of beneficial microbes within the soil profile.

Vitax's new Vitax Vitaliser was launched at the Show after trials by the STRI. This 100% organic, naturally slow release fertiliser, is designed for use all year round but, according to Clive Williams, Commercial & Amenity Sales Manager for the company, the product comes into its own before Spring sowing.

"Vitax Vitaliser has naturally occurring trace elements combined with a balance of both quick and slow acting nitrogen which means that the product avoids rapid leaching of nutrients during heavy Spring rains and nurtures the young shoots of an emerging sward rather than encouraging flushes of growth," he said. Vitax Vitaliser is a rich source of humus which improves soil texture and retains moisture, while also providing good colour.

John Deere Limited exhibited four new machines at the show, two of which - a wide area mower and a hydraulic top dresser - are being seen for the first time in the UK. The 1600 wide area mower is John Deere's first commercial rotary machine to use hydraulic mower drive, while the TD100 top dresser is a new hydraulic attachment for the heavy duty Pro Gator utility vehicle, which is being featured alongside the super quiet E-Gator electric model. Designed for easy servicing and increased productivity on golf courses and in parks and public areas, the new 1600 wide area mower incorporates an Eaton axial piston pump, which transfers power more efficiently compared with gear type pumps and motors, especially in tough working conditions. John Deere's two pedal forward and reverse foot control combines with a three lever mower deck lift control for easy operation. Good traction is also provided by the two speed transaxle with standard differential lock and mechanical four wheel drive on demand. The new John Deere 1600 wide area mower, is available from February 2000, priced at £25,600.

Barenbrug introduced three new varieties at the Show. Barpearl is a new slender creeping red fescue from the same breeding programme as Barcrown which has been shown in tests to have excellent shoot density, short grown characteristics and good resistance to Red Thread. It has also been shown to have good fusarium resistance in both summer and winter. Bar Fescue contains 25% Barcrown, 23% Barpearl, both slender creeping red fescues; 30% Bargreen and 20% Baroxi, both Chewings fescues. Bar Fescue has been shown to have good shoot density, drought tolerance and disease resistance while is extremely fine textured and displays slow re-growth. Bar Platinum is 30% Bareine (perennial ryegrass); 25% Barcrown and 25% Barpearl, 10% Baroxi and 10 Heriot (browntop bent). It displays rapid establishment, good wear tolerance and slow regrowth while it is tolerant of mowing down to five mm. It is the first mixture in Europe to contain perennial ryegrass for applications on golf greens.



Bernhard & Co launched its new Anglemaster 3000 at this year's BTME exhibition. Being at the forefront of 'Preventative medicine' for golf green management across the globe, demands that Bernhard & Co., continue to provide a range of equipment which maintains their premier position in this sector. The new Bernhard/Atterton Anglemaster 3000 has been developed to match the accuracy of the Express Dual to one thousandth of an inch. This provides easy loading, flood cooling and an auto cue system angle finding. Other major aspects include a unique central grind position to

minimise error plus an independent 'end feed' and single point advance. To provide stress free grinding a magnetic load assistant has been included plus a quad coolant dispersal and separation system. A worthy twin to the Express Dual 3000, the Anglemaster 3000 bottom blade grinding system is a result of five years research and development. Faster and more convenient than its predecessor, the Anglemaster 3000 has all the power and 'split thou' accuracy and convenience of the Anglemaster 2000. The Anglemaster 3000 is so called because it allows the mechanic to read

and set the exact angle for perfect bottom blade grinding. As the newest version of the world's finest precision grinders, this refined machine is even faster and easier to handle and provides leading golf courses with further affirmation of quality and performance. Also being launched is the Anglemaster 3000 DX, which has an up-rated control and feed system to standard AM3000. Incorporating a digital electronic auto cue control and feed with an 'auto line' feature, this 'high spec' version has a work centre case and operating height control.



Sisis launched the Robbi ride-on brush at the show. The Robbi is used on the golf course to disperse the dew; to lightly brush in top dressings; to lift grasses prior to mowing; to improve the presentation of the greens in the winter months. It can also be used on synthetic surfaces to lift the pile; remove scuff marks; level the sand. It features specially designed brushes to

give improved brushing and "float" over contours, which are also ram-assisted to hold them down in use and to lift and fold them back when not in use. Handle bar steering with twist-grip accelerator and axle brake. Fold over seat with suspension springing and carrying box below. wheels have low ground pressure slicks to the rear and low ground pressure ribbed tyres at the front for traction on slopes. 6 forward gears, one reverse and one neutral.



Above: John Akers and Dave Phillips of Advanta Seeds at this year's BTME

BTME saw the Mommersteeg and Sharpes brands of amenity mixtures re-launched under the **Advanta** brand name. These will be available in two distinct ranges - Advanta MM's and Designer from Advanta. "By combining the product portfolios of Mommersteeg and Sharpes International, we now have the strongest ranges of grass seed mixtures in the UK sports and amenity market," said John Akers, UK commercial Manager for Advanta Seeds.

"The merger of the two companies has allowed us to streamline operations, increasing efficiency, while retaining the product and service quality that the two original companies were well known for" explains John. "Our customers will now benefit from a much greater pool of production and research resources and experienced personnel. Advanta's aim is to continue developing new cultivars appropriate to our customers' needs, now and in the future."