



Super-wide cylinder mower can cut 9 hectares an hour

Responding to requests from turf growers, Turfmech has developed a 13-gang cylinder mower with a cutting width of more than 9 metres (9.06m or 29ft 8in to be exact).

Known as the MaxiMow 13, the hydraulically-powered machine is designed for precision mowing of wide open grass areas, producing workrates of up to 9 hectares an hour (22 acres/hr) at a forward speed of 10 km/h (6.2mph).

Designed and built at Turfmech's factory in Hixon, Staffordshire, the trailed machine is believed to be the widest commercially-available mower of its type in the world. Yet, folded width is just 2.5m, enabling safe and easy movement between fields and along the public highway, assisted by an hydraulically-braked transport axle.

Requiring a tractor of at least 100hp, Turfmech's MaxiMow 13 can be specified with the choice of proven 200mm (8in) or 250mm (10in) diameter cutting cylinders from Ransomes Jacobsen. Equipped with six knives, the 250mm diameter cylinder is mounted within a fixed head cutting unit supported by a smooth rear roller. Height of cut range of this unit is from 13mm to 61mm (0.5in – 2.4in).

The smaller 200mm diameter cylinder is offered with the option of four, six, eight or 11 knives and is available in fixed or floating head configuration. The fixed cutting unit has a single smooth rear roller while the floating version has a smooth roller at the rear and a grooved roller at the front. Height of cut on all cutting units fitted with 200mm diameter cylinders is from 13mm to 89mm (0.5in – 3.5in).



To satisfy the demands of growers of cultivated turf and others maintaining large areas of regularly-mown grass, the MaxiMow 13 has been designed from the ground up to deliver a consistently even and very high quality of cut.

The mower's heavy-duty construction, articulated frame and computer-designed arm geometry ensure that all cutting units remain firmly and squarely on the ground, even at high speeds across undulating terrain. Tight turns can be made without damaging the PTO shaft thanks to the use of a swivel gearbox which moves in line with the drawbar. The result is a zero uncut circle when turning sharply.

For transport, the cutting units can be raised to produce a ground clearance of 375mm (14.75in), minimising risk of damage.

Being hydraulically driven, the MaxiMow 13 can mow using just the centre five mowing units or either of the four-unit wing units or a combination of centre and wing, all actuated by cab-mounted controls. Back-lapping can be carried out in-situ using a hand-controlled lever.

The design features and output of Turfmech's MaxiMow 13 are expected to make it a winner very quickly across the UK, Ireland and mainland Europe.

One-man turf harvesting proves a winner



To maintain its position as Ireland's most progressive grower and supplier of cultivated turf, Co Derry-based Emerald Lawns has invested steadily in new tractors and equipment over the past few years.

Among the major new arrivals at the firm's base in the village of Campsie, near Londonderry, is the first Brouwer RoboMax 1200 automated self-stacking turf harvester to go to work in Ireland – and the second such machine to be supplied to a UK turf grower by distributor, Turfmech. The first was purchased by Cambridge firm, Shelford Turf Farms.

The moment the RoboMax went to work for Emerald Lawns, the number of staff required on the turf harvester was cut from two to one with a correspondingly sharp increase in output.

Instead of the eight pallets an hour achieved previously by the firm's conventional manual stacking machine, the RoboMax 1200 is able to average 14 pallets an hour, each pallet containing 64 rolls (64 sq yds/53.5 sq m) of turf.



The robotic arm on the Brouwer RoboMax 1200 picks up five newly-formed rolls of turf and transfers them to the pallet, stacking them neatly on top of the rolls below. When 64 rolls (five layers of 12 + four on top) have been stacked onto the pallet, the harvesting and stacking sequence pauses to allow the loaded pallet to be lowered onto the ground to be replaced automatically by an empty pallet. Harvesting then re-commences.

Conn and Colin Sherrard with three pallets of auto-stacked turf ready for collection and delivery to a local landscaper.

In a normal day, the RoboMax operator is capable of cutting, stacking, loading and delivering 60 pallets of turf entirely on his own. With an additional team member operating the forklift, outputs of more than 110 pallets a day have been recorded. Previously, that would have required two turf harvesters and four staff in the field!

Founded in the mid 1980s by father and son, Conn and Colin Sherrard, Emerald Lawns is managed today by Colin and his wife Adrienne, with Conn now devoting much of his time to supervising field operations to ensure high standards

"Although we sold our first roll of turf in September 1989, it was in 1991 that the business really hit the headlines when we re-turfed Dublin's Lansdowne Road stadium, the home of Irish rugby," recalled Colin. "Overnight, the company was known to a lot more



Driver's-eye view of the RoboMax's programmable control unit and stacking sequence display unit positioned to the right of the tractor seat.

people and we benefited also from the golf course boom of the early to mid 1990s, when we supplied thousands of rolls of seeded turf to new courses throughout Ireland."

Most of those rolls were harvested by a Brouwer 1555 machine which was the very first tractor-powered turf harvester bought by Emerald Lawns. In 1995, that machine was replaced by the updated and more powerful Brouwer 1560 model. However, with the arrival of the new millennium, Colin



The rear wheels on Emerald Lawns' RoboMax harvester have been replaced by half-tracks which provide better flotation and more grip.

was determined that Emerald Lawns move forward at pace and adopt the latest harvesting techniques centred on automatic stacking systems.

"It was clear that two-man harvesting was no longer the most efficient nor cost-effective method of lifting turf," said Colin. "Stacking is not a pleasant job and none of us is getting any younger."

In 2004, having looked at a number of one-man harvesting systems, Colin decided to order a Brouwer RoboMax 1200 for delivery in December 2004. That decision was based on his good past experience with Brouwer harvesters and confidence in the technical and service support provided by Turfmech.

One aspect of the new machine's specifications that provided food for thought was its 24in width of cut compared with 16in on a standard two-man harvester. "We carried out our own

market research among a number of larger Irish landscapers and received generally favourable feedback on the wider turf," commented Colin. "We also had previous experience handling 24 inch wide turves as this is the size produced by our Brouwer RollMax big roll harvester which we purchased second-hand from Turfmech in 2004 to meet an increasing demand for big rolls."

One major modification carried out on the RoboMax harvester shortly after its arrival was the replacement of the tractor's rear drive wheels with half-tracks – at a cost of around 25,000 euros plus delivery and fitting.

Colin Sherrard pointed out that this was a cost that he had anticipated from the start. "Annual rainfall in our part of Ireland averages 45 inches and we are harvesting in wet conditions more often than not," he said. "Half tracks are a far better option than tyres for our needs, preventing sinkage and helping maintain grip."

"Stacking turf has always been a very tiring and labour intensive job," concluded Colin. "With the RoboMax, we are now able to satisfy most customers' demands without stress or loss of efficiency in the field. The real beauty of the machine is that it keeps working at the same speed and the same stacking consistency hour after hour. It has proved to be a tremendous investment for the business."

Big rolls boost golf course projects



A move to laying turf supplied exclusively in 61cm wide big rolls is helping landscaper, Steve Senior, keep pace with booming demand for his golf tee construction and renovation services.

First ordered by Steve in October 2005 from York-based turf grower, Inturf, the 15 square metre (160 sq ft) big rolls have now superseded totally the conventional 1 sq m (10.8 sq ft) rolls of turf that used to be delivered to site on pallets, moved by wheelbarrow and laid by hand.

Measuring 61cm (24in) wide by approximately 25m (82ft) long, each big roll of turf is moved and laid accurately in the required position using a self-propelled Roll Mate big roll handler from Turfmech.

Thanks to the ease and speed of handling the big rolls of turf, the time taken to build a golf tee has been cut by half compared with small rolls. Additionally, just two staff are now required on each tee contract instead of the three or four previously employed.

Based in Stalybridge, about 10 miles east of Manchester, Senior Golf Construction was founded by Steve Senior in 2003. Formerly a greenkeeper and golf course manager, Steve offers a wide range of golf course and sports-ground landscaping services but has been occupied almost full-time since autumn 2005 on rebuilding, renovating and extending tees throughout the UK.

"Demand has accelerated since Inturf introduced us to their 61cm wide big rolls," he explained. "Previously, the

company had offered 1.2m and 75cm wide big rolls to complement conventional one square metre rolls. Handled and laid using a largish tractor, the original extra-wide big rolls are superb for large area projects such as stadiums but are not best-suited for laying on laser-graded golf tees."



Inturf has two Brouwer RollMax turf harvesters producing big rolls.

Like many landscapers, Steve Senior opted for conventional one square metre rolls which, although fairly easy to handle, consumed a great deal of time and effort when being used to cover even an average-sized golf tee.

That all changed in October 2005 following the purchase by Inturf from Turfmech of two Brouwer RollMax 2400 big roll turf harvesters, each capable of producing rolls of turf measuring a consistent 61cm (24in) wide and between 25m and 30m (82ft – 98ft) long, to meet requirements.

In addition to being better suited for small to medium scale landscaping applications than the previous 1.2m or

Steve Senior oversees the laying of a big roll of turf on a newly laser-graded golf tee.

75cm wide big rolls, the turf lifted by the two new RollMax machines requires just one man on the harvester.

A further important point for landscapers is the fact that the RollMax harvester can be set up to perforate at 1m intervals the turf as it is being lifted. The result allows short, easily-handled lengths of turf to be removed cleanly and quickly from the roll for use in locations that would be difficult to access with either a purpose-designed handler or a compact tractor with linkage-mounted big roll handling frame.

Although Steve Senior considered buying a three-point linkage mounted handler for the 15 sq metre (61cm wide x 25m long) rolls now being supplied to him by Inturf, he opted instead for Turfmech's self-propelled Roll Mate unit. "The machine is light, manoeuvrable and has wide tyres, making it ideal for moving and laying turf on the finely graded root-zone material we use for golf tees," he commented.

As to the future, Steve points out that he is unlikely to use small rolls of turf ever again for golf tee or landscaping projects. "We lost money in the past due to the amount of time, effort and labour involved," he explained. "By switching exclusively to big rolls laid with the help of a purpose-designed handler, we can complete a golf tee in half the time using half the staff."

"Having now worked with Inturf's new big rolls for some time, I can see no disadvantages over conventional turf rolls for the professional landscaper. They are perfect for larger projects, are very easy to install and can be cut easily down in size to produce manageable turf slabs for laying in awkward or smaller areas."



TURFMECH®

Turfmech Machinery Ltd

Hangar 5, New Road, Hixon,
Stafford ST18 0PJ, United Kingdom
Tel: 01889 271503 Fax: 01889 271321

E-mail: sales@turfmech.co.uk

Web: www.turfmech.co.uk