

## CYLINDER MOWERS

**C**YLINDER Mowing started in 1832 with the Buddings Patent pedestrian machine being manufactured by Ransomes in Ipswich. Since then a number of different methods of cutting grass have been developed, all of which have their place. It has to be said though that the cylinder mower is still the most efficient way of cutting grass and of course for fine turf is the only way. In a fast changing world it is often unwise to predict what will happen in the future but I am confident that the cylinder mower, although it will be steadily improved, will continue to be the most efficient method of cutting grass for a long time to come.

Since those far off days of the Budding Patent the cylinder mower has developed out of all recognition. Many of the major developments have been pioneered by Ransomes. Take for example the introduction of the first mower with an internal combustion engine in 1902, the first mains driven mower in 1926 and, much more up to date hydraulic driven gang mowers in the 1960s and now, high output machines with electronic control systems. In 1990 the professional user of grass cutting machinery has a bewildering array of types and specifications of machine to choose from. With the increase in leisure time (for some of us), areas of amenity and fine turf will increase. That will inevitably attract more companies in wanting to get in on the scene. Those of us who have been in the industry for a number of years are wondering where it is all going to end?

Whatever area and type of grass needs to be maintained there is a cylinder mower to do the job. For cutting fine turf on greens there are pedestrian mowers or sophisticated ride on units. Both types are now very often available with a Verti-groom type reel mounted in front of the cutting cylinder. This really is the ultimate in "grooming" the turf. The Verti-groom unit is an invaluable aid to control thatch and eliminate grain by cutting internal growth resulting in a faster and more consistent putting surface.

For other areas on the golf course such as fairways, tees and surrounds, there is a wide choice of equipment. Fairways in particular in recent years have been maintained to a very much higher standard than in the past. Whether a tractor mounted or trailed machine is required or a multiple unit ride-on is preferred cut-



*Ransomes Quality Audit Engineer, Mr. Barry Saunders, checking the hydraulic oil pressure while carrying out a quality audit on a triple mower off the production line.*

ting units with multi blade cylinders to give a very fine finish are available. The normal number of knives in cylinders used on golf courses in the UK and Europe is 6 or 8. Our colleagues in the USA very often will specify 11 knife cylinders. The difficulties of coping with undulating fairways have been much reduced with the introduction of floating headed units which float in all directions to ensure that scalping is kept to a minimum and that grass in hollows is cut to the same

height as the rest of the fairway.

Cylinder mowing is not restricted to golf courses. Multiple unit machinery with 3 or 5 cutting units hydraulically driven are now commonplace with local authorities and contractors. The efficiency of the cylinder mower, with its relatively high cutting speed and low fuel costs has been fully appreciated by those people responsible for the upkeep of roadside verges, parks and open spaces. With reduced

costs constantly being sought to cope with the challenges of Compulsory Competitive Tendering or Privatisation as it is often mistakenly called, the high output multiple unit cylinder mower is often the first choice. The output of these machines is impressive to say the least. Take the Ransomes Motor 350D 5 unit ride-on.

Yes it is a lot of money, retailing at over £21,000. When the output of 8 acres per hour is taken into account with each one of those acres only costing

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around £1.40 to cut it can be easily seen that the initial purchase price of any product should not be the first consideration. There are very few machines that could reach anything like the cost effectiveness of the Motor 350D.

The manufacturing of grass cutting machinery today is extremely advanced.

In today's very competitive works designs and manufacturing efficiency must be constantly improved to ensure that the customer gets the right product at the right price.

These investments will inevitably lead to innovations in grass cutting machinery in the future. It is very unlikely though that a better and more efficient way of cutting grass will be found than with the cylinder mower for many years to come, if at all.

**RICHARD BISHOP**  
UK Sales Manager  
Ransomes

## DRAGON 5 AND 3 GANG MOWERS BY ROCRAFT

**T**HE Rocraft Red Dragon is a British designed and manufactured power

driven gang mower incorporating a robust frame of high-stress structural steel and a straightforward assembly of simple components which reduce breakdowns and maintenance to a minimum.

The 5 gang unit with a full 11ft 6in width of cut and low power requirement make it an ideal choice for mowing large areas economically with smaller lightweight tractors.

The Red Dragon can be attached in minutes to most towing vehicles equipped with P.T.O. drive giving a wide flexibility of choice of towing unit.

Transport between sites is made easy by folding the cutting units which can be raised either hydraulically or manually.

### FEATURES

- Unlike ground driven machines the P.T.O. drive will maintain a constant cylinder speed independent of forward speed enabling efficient cutting in the wet when other machines slip.
- Lighter than many hydraulic machines therefore reduces damage to wet ground.
- Automatic tension of independent 'V' belt drives to each cutting unit transmits

maximum power to the cylinders but provides flexibility to permit slip should obstacles be encountered.

- Full articulation of each cutting unit allows the Red Dragon to follow ground contours on its rear roller.
- A unique fully floating head system is available with full width front and rear rollers to give consistent height of cut over severe undulations without scalping and is particularly suitable for golf course fairways.
- Floating heads can be locked into a fixed head position with a simple lever and front rollers easily removed.
- Quick height adjusters are fitted as standard and make changes simple for those golf courses requiring one machine for both fairway and semi-rough mowing. For finer adjustment screw type adjusters are available.
- A third wheel is available as an option for any specially difficult contours to be mowed allowing complete articulation of the whole mower frame from the tractor drawbar but it is not recommended for highway duties.

## STIGA-BELOS BEST ON SLOPES

**M**ULTI-use tool carriers like the Belos are often criticised for not performing individual operations as well as a dedicated machine. Professional mower users report that the opposite applies on the 4 wheel drive Belos 1500.

Triple cylinder mowing on banks is a case in point. With its fully hydrostatic four wheel drive plus electrically selected limited slip differential, the traction and steering ability on slopes has to be tried to be fully appreciated. And because the 1500 has three double acting hydraulic power circuits in its standard specification, when fitted with the 83" wide Belos front attached triple cylinder, actual cutting performance is equal to the best dedicated out front triple cylinder rider.

Golf courses, country parks, landscaped sites, etc. often have slopes dotted with trees and shrubs which are ideal for the unique manoeuvring ability of the centre pivoting, fully articulated Belos. Add the highly sophisticated hydraulic

# Rocraft Limited



## RED DRAGON 5 AND 3 GANG MOWERS

- POWER DRIVEN TO CUT IN THE WET
- SIMPLE TO MAINTAIN-NO COMPLICATED ELECTRICS OR HYDRAULICS
- STRONG CONSTRUCTION FOR LOCAL AUTHORITY WORK
- THE MORE FLEXIBLE HEAD FOR GOLF COURSE CONTOURS
- CHOICE OF FIXED OR FLOATING HEAD
- CHOICE OF 4, 5, 6 OR 8 BLADED CYLINDERS
- CHOICE OF MANUAL OR HYDRAULIC LIFT
- OPTIONAL EXTRAS INCLUDE TRAILER LIGHTING, SPARE WHEEL, ETC.
- OPTIONAL SCARIFIER HEADS
- MANUFACTURED IN GREAT BRITAIN

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## CYLINDER MOWERS



Capable of all kinds of work the Ransomes cylinder mower.

4 wheel drive, and you get the unique combination of wheel grip and tight turning without damaging the turf. With diff-lock engaged, individual wheels cannot lock and damage the turf. With a hydraulic wheel motor in each

hub, oil is diverted to the relevant wheel to give more traction.

The low centre of gravity on the Belos gives extra stability and safety, especially on grass slopes, and also on the subject of safety, a special all-weather

safety cab is available as an optional extra.

In Sweden Stiga products are famous for quality, and their long lasting reputation is one WestMac will be wanting to build on, with this unique versatile machine from

Sweden.

Model 1302 two wheel drive, centre pivot power unit retails at £10,977.90 and model 1500 four wheel drive, centre pivot power unit retails at £14,371.55 (both prices include VAT).

## EDUCATION UPDATE

### ELMWOOD AWARD WINNERS COME FROM NEAR AND FAR FOR THE ANNUAL AWARD CEREMONY

WITH over two hundred greenkeepers at Elmwood College it is perhaps not surprising that there should be award winners from such a wide geographical area, studying courses from apprentice to supervisory management level.

Richard Barker from Leicestershire, winner of Elmwood's distance learning supervisory course is flanked by equal second's right: Brian Story from Cumbria (who remarkably was also the award winner for the first year

greenkeeping course attended by over 55 students) and Bruce Cruickshank from Crail, Fife.

Darren Easingwood from Dunbar Golf Club with the coveted Gleneagles Challenge Trophy awarded for his outstanding project work as part of his SCOTVEC national certificate course.

Paul Seago from the Royal West Norfolk Golf Club, Brancaster, Norfolk, this year's most "far flung" award winner, with his certificate which recognises him as top student in his SCOTVEC third year course. No mean achievement considering there were over sixty trainees competing for the award.

The head greenkeeping supervisory management course offered at Elmwood is believed to be unique in the United Kingdom. James McKenzie, head greenkeeper at Renfrew Golf Club, produced written work of an outstandingly high standard to win this year's award.

### JAMES M. LATHAM BIOGRAPHICAL INFORMATION

JIM Latham is the Director of the Great Lakes Region of the United States Golf Association Green Section.

He was born in Hillsboro, Texas and attended High School and Junior College there. After a tour of duty in the Marine Corps, he attended Texas A&M University where in 1952, he received a Bachelor of Science degree in Soil Science and in 1954, a Masters Degree in Agronomy (Plant Breeding).

After working as a Turf Specialist on warm-season species at the Coastal Plain Experiment Station in Tifton, Georgia, and additional graduate study at Rutgers University, he served on the USGA Green Section Staff as Northeastern Agronomist in 1956 and Southeastern Agronomist from 1957 until

1960. From that time until 1985, Latham was on the agronomic and Milorganite marketing staff of the Milwaukee Metropolitan Sewerage District.

Mr Latham is a Certified Professional Agronomist and a member of the American Society of Agronomy. He received the Distinguished Service Award from the O.J. Noer Research Foundation following his tenure as Research Director. He is also a member of the Council for Agricultural Science and Technology and holds Honorary Memberships in several Golf Course Superintendents Associations.

The Great Lakes Region is a nine-state area just south of the Canadian border, some 2,000 road miles east-west and 800 miles north-south. During the April-October period, the staff makes 220 half-day Turf Advisory Service visits to 175 subscribing clubs and courses. Until April 1, 1990, the technical staff has been one person.