

Amphibious mowers

Despite all the horrific examples from the past, some golf architects never seem to learn from past mistakes and perpetuate design faults which make subsequent greenkeeping a nightmare.

Common mistakes are the over-contouring of greens, resulting in minimising available pin places and creating virtually insoluble maintenance problems and bringing surrounding banks and slopes too close to the green, thus making it impossible to turn a triplex mower off the putting surface and on the surrounds which inevitably creates worn and scalped bare areas on the perimeter.

Another is to build the greenside bunkers so close to the putting surface that the narrow surround cannot be mown or worse still, the machine slides off into the bunker. Sand blasted out of such close bunkers creates serious maintenance difficulties.

Equally, when built-up slopes or batters of greens and tees are too steep and especially where there is a water feature at the foot of the slope, the machine ends up in the water.

It is hoped that architects or designers will listen to Course Manager and greenkeepers on the practical implication of their design – it is after all they who will have to maintain the course when completed. Gimmicky designs do not impress those with knowledge and experience and observance of a few sensible rules can avoid having to fit triplex mowers with snorkels – quite apart from the much more serious factor of injury to the operators.

Arne van Amerongen
Germany

Axe to grind

Re: Septembers's article on mower grinding.

Having read the article on grinding reels and bedknives, there are several points to clarify and correct. The article mentions 'relief angle' and 'single-blade' grinding as if they are two different techniques, they are not!

'Single-blade' grinding is the term used throughout the 1960s, 70s and 80s to describe the simple process of grinding each blade of a cutting cylinder individually. It was never intended to be accurate, just a simple way to 'true up' damaged or re-bladed cutting cylinders. The reason being that 'single-blade' grinding removes metal much faster than conventional 'spin grinding'.

'Relief grinding' as now performed, is similar to 'single-blade' grinding but on some machines much more accurate. It removes unnecessary metal from the 'heel' or back edge of each cylinder blade thereby reducing friction instantly. The benefits are enormous. Bottom blades last considerably longer, there is less need for regular adjustment as due to there being less metal to metal contact there is less wear. Lower fuel bills can be anticipated in addition to fewer problems with engines and transmissions. The grass being cut much 'cleaner' leaves less likelihood of 'yellow edges' or disease ensuing.

Drier summers experienced since around 1989 have exposed the short comings of spin grinding, which only 'true up' a worn cylinder by removing the 'heel' or high unworn section on the back edge of the reel blades. During dry spells, the bottom blades and reels heat up as there is no moisture to cool or lubricate them. The wear pattern of the bedknives often leave 'tram-lines' or stripes on the new cut grass.

Interestingly, Americans have ground reels with 'relief angles' for decades but as their grinding machinery and methods leave blades of discrepant heights, 'back-lapping' or 'spin grinding' is part of their grinding process to ensure that all the blades end up all the same height.

Time has moved on, we at Hunter Grinders have developed machinery and techniques which have raised standards of grinding throughout the grass machinery trade generally. 'Relief angle' grinding as we now teach is totally accurate, each blade cuts true and there is no need to spin or to back lap afterwards.

There are, in fact, three ways to grind a reel, and this is another area where the article has possibly confused readers.

Method One. 'Spin grinding' - The old fashioned established way, which grinds the high 'heel' from the back of each worn blade but which leaves a lot of metal to metal contact to create friction and 'rub' or wear out the bottom blades.

Method Two. 'Partial relief angle grinding' - Whereby metal is ground at an angle from the rear of each blade either prior to or after spin grinding. An improvement over total spin grinding but not as effective as Method Three.

Method Three. 'Total relief angle grinding' - A proven technique, possible on our machines whereby there is no need to spin or to back-lap after grinding. Each blade cuts true. In addition we have water coolant applied during the grinding process to quench the removed grinding dust and to prevent any heat distortion. Finally our machines are manufactured to grind reels perfectly parallel to a tolerance better than 0.004 over a 30" long reel. This eliminates any stress on the reel bearings due to grinding tapered reels. This accuracy is 'built in' and requires no thought or adjustment by the operator to obtain.

Finally, the article failed to mention that we do in fact produce two types of grinding machine. In addition to our JUNO machine, no mention was made of our heavier JUPITER machine installed in many golf course workshops. The JUPITER has the most versatile specification of any grinding machine. It offers a choice of either 'total relief angle' grinding, 'partial relief angle' grinding or fully automatic 'spin grinding' with the choice of 'In-Situ' or out of the mower grinding. The usefulness of water coolant is appreciated by our many clients in addition to the fact that our machines also precision grind the bed knives.

Eric and Michael Hunter
Eric Hunter Grinders Ltd



Education Update

BY KEN RICHARDSON

TORO/Lely/PGA European Tour Student of the Year Regional Finals

After more than 1000 miles and five days of intensive, stimulating but tiring interviews, the regional judges, Pat Murphy, BIGGA Vice Chairman, Peter Mansfield, Bob Bevan and David Cole, all from Lely (UK) and yours truly finally came up with eight national finalists.

This is the third year that I have had the privilege to be part of the regional panel of judges and I was, again, very pleasantly surprised by the extremely high standard of new entrants to the profession of greenkeeping and the high levels of enthusiasm, knowledge and character shown by all of the Regional Finalists. A full report on the National Finalists appears elsewhere in this magazine but I would like to congratulate all of the Regional Finalists and, especially, Alasdair McLean, Stephen Privett, John Donnelly, Fintan Brennan, John Bachelor, Noel Greene, Michael Hartney and Karl Weston for being selected for the National Final, which will take place on Sunday/Monday 27/28 October 1996 at Aldwark Manor.

Miracle Professional Premier Greenkeeper of the Year Competition

This year saw the largest number of entries, ever, for the Premier Greenkeeper of the Year Competition. After a long and difficult selection process by each Region, the judges finally selected their five National Finalists. They are Stewart McBain from Nigg Bay Golf Course, near Aberdeen, representing the Scottish Region, David Leach, from North Manchester Golf Course, representing the Northern Region, Cedric Gough from Broadway Golf Club, representing Midlands Region, Huw Morgan from Wilderness Golf Club, representing the South East Region and Paul Jenkins from Lilybrook Golf Club, representing the South West Region. All five golf courses will be re-inspected, this time by Pat Murphy, BIGGA Vice Chairman and Richard Minton, from Miracle, prior to the National final, which will be held at Aldwark Manor on 1/2 December 1996.

Regional Supervisory Management Courses

From some of the answers given during the recent Student Greenkeeper of the Year Competition, it was apparent that some Golf Clubs are still not complying with the requirements of the Health and Safety at Work Act. There are still a few places available on Regional based Health and Safety at Work Courses where you could find out if your club meets the requirements. Contact BIGGA immediately to reserve your place.

Aldwark Manor Supervisory Management Courses

Unfortunately, due to the very poor response to advertising of the Aldwark Manor Supervisory Management Courses Modules 3 and 4 have had to be cancelled. However, the response to Modules 1, 2 and 5 has been better than expected ensuring that these three modules should be a success.