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 designs do not impress those with knowledge of discreet 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 add water as there is no moisture to cool or lubricate 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 specifications for 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.

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