

Old And New Mowers Mix To Provide Best



Kubota Verti-Reel.



Jacobsen walk-behind greensmower.

Jacobsen HR5111
rotary mower.



Trends in the mowing industry tend to be gradual. Commercial mowing equipment typically lasts five years or longer. In the past, there was little motivation to upgrade mowing equipment while it was still productive. That might be changing as an influx of new technology, closer attention to equipment and labor costs, and the specialized needs of the golf and sports turf industries are recognized.

If nothing else, the number of mowers to choose from has grown. There are models to fit all budgets, many different levels of turf quality, and the specific needs of various sports. That's not to say that older mower technology has been outdated. The new technology is focused largely on specific uses or sites. A mix of old and new technology might best fit the needs of a sports facility.

"The mower industry is more user-driven than ever before," says Larry O'Connell, chairman of Bunton. "The company that listens closely to superintendents and sports turf managers has a definite advantage. Equipment needs to be tailored carefully by engineers who can think like their customers."

One drawback from the user's standpoint is that each new mower model has few parts in common with existing models.

This forces the mechanic or servicing dealer to stock an ever increasing number of parts to make repairs quickly. O'Connell plans to make many of the parts on Bunton mowing equipment interchangeable in the future.

Lesco is addressing the parts issue with a service hotline and overnight shipping. "The person on the end of the phone has to be more than an order taker," states Jeff Mack, vice president. "He has to be completely familiar with each piece of equipment, its parts, and the way to service it."

Field testing of new equipment before it is placed on the market is essential, says Dennis Brown of Toro. "The best way to evaluate new technology is to let the superintendent or turf manager try it out before it goes into production," he remarks. "We refine our prototypes based on their feedback. Once in production, our distributors continue to pass on comments from buyers."

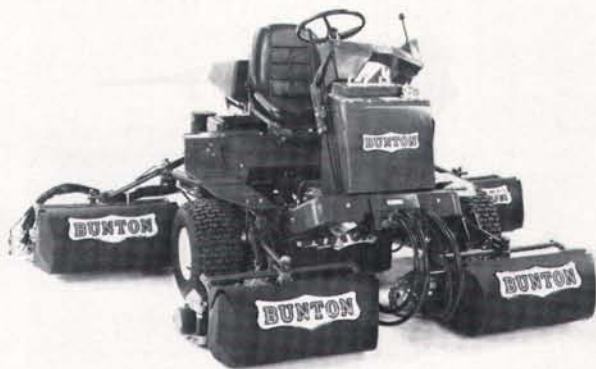
At Jacobsen, feedback from the field has taught engineer Bob Krick that customers' needs vary by region as well as by facility. "Our LF-100 [five-gang, lightweight fairway mower] was originally designed for northern fairways," reveals Krick. "Since it came out, sales have spread into the South. Clipping removal isn't as important in the South, but verticutting is."

Ransomes has discovered that the five-gang fairway mower market is split. "Some customers prefer slightly heavier, more durable units," says David Fondrie, executive vice president. "Larger reels and more power help them get through heavier grass on a daily basis."

By powering reels hydraulically and increasing the number of blades on each, manufacturers provide mowers with an exceptionally fine cut. For those facilities operating on tight equipment budgets, a number of companies offer hydraulically-operated, tow-behind reel units for tractors, such as Kubota's seven-gang Verti-Reel.

"Dedicated mowing units have certain

Technology Turf Quality



Lightweight
five-gang fairway mower
by Buntun.

advantages," comments Claire Peterson with John Deere. "Those advantages don't always justify the cost over tractor attachments. There will always be a market for multi-purpose tractors."

One area where reels may be losing some ground is on taller turf areas, such as golf course roughs and practice fields. When turf gets matted down by players or cart traffic, the foliage needs to be lifted prior to cutting. Rotary decks use suction to lift foliage up to the blades. The result is a more uniform cut.

Another advantage of rotaries is they can be attached to the front of tractors or prime movers which have a very small turning radius. This adds greatly to the maneuverability of mowers. Greater maneuverability translates into higher productivity. Mid-size riding rotaries have nearly eliminated the need for walk-behind trim mowers on large sites.

An increasing number of manufacturers are offering mowers with zero turning radius. Mowers in this category range from 32-inches-wide to 12 feet wide. The larger widths are made possible by attaching side-mounted cutting units which can be lifted for transport or for fitting through narrower spaces.

There are two ways to gain width with rotary mowers. The most common is to stagger the blades front to back so they can turn independently from one another. In this configuration, the blades can be powered separately by hydraulics or through a series of belts.

Walker Manufacturing uses a gear box to time the rotation of its blades so they can actually overlap. This allows the blades to be positioned in one line. "The advantage of our mowers is they are less likely to scalp," explains Bob Walker. "There is also no need to grease spindle bearings."

Jacobsen has also moved to reduce the amount of lubrication in rotary decks. Its HR-5111 rotary currently under development powers each blade with its own hy-

draulic motor. "The oil in each motor lubricates the spindle," states Krick. "This also eliminates belts and pulleys."

Regardless of the type of mower, more attention is being focused on site conditions. In addition to maneuverability, mowers are needed with better stability on slopes. Banks around greens, tees, and sports fields constitute acres of mowing.

Heavily mounded fairways require cutting units that can float with the contour of the surface without scalping. Increased emphasis on target golf is reducing the size of fairways. Striping of fairways has also become a sign of high quality. Fairway mowers must be able to negotiate narrower spaces yet have the maneuverability to make the tight turns required for striping. Operators need to lift cutting units easily and quickly.

Like many sports fields, fairways are not as free of debris or rocks as greens. The operator must be able to see such debris before it comes in contact with reels. Cutting heights around one inch or below require reel mowers. If this is the goal, then extra diligence is needed prior to mowing. A second option is the fine-cut flail if a turf area is likely to contain trash.

Ransomes' Fondrie summarizes trends in mowing equipment as stepping up from one site to another. "Riding triplex

greensmowers moved from the greens to fairways," he states. "With the advent of lightweight five-gang units for fairways, triplex units moved to tees and collars. Then out-front rotaries started replacing reel gangs in the roughs. Now the attention is being placed on equipment that can handle green banks, tee surrounds, and fairway mounds. Finally, many superintendents are going back to walk-behind greensmowers."

On sports fields, triplex and five-gang reels are taking over low-cut turf. Striping is as important for baseball and football fields as for golf courses. Stadium groundskeepers are starting to use walk-behind greensmowers for baseball infields.

For taller turf on athletic fields and surrounding areas, out-front rotaries do the job quickly and evenly. Fine-cut flails can be used where there is danger of rotaries throwing debris. A pattern can be given to the turf with rollers behind flail cutting units.

During the '90s, superintendents and groundskeepers aren't waiting for their existing mowers to reach the end of their useful life before trying new mowing technology. They find new uses for old equipment while taking advantage of new models. The end result is better quality turf, higher productivity, and a more professional approach to turf management.



Triplex trim mower
by National.