

A MANUFACTURER'S PERSPECTIVE

Making a better mower

Manufacturers
talk about the
key qualities
they consider in
their quest for
the perfect
mower design

hen it comes to designing the perfect mower, no one knows more than the manufacturers themselves. They all put comfortable seating, increased productivity, ergonomics, operator safety and quality of cut on the list of things they strive to improve upon with each new design.

"We try to achieve a balance of speed and performance with our walk-behinds," says Jon Vyn, director of equipment marketing, Lesco, Inc., Rocky River, OH. "However, if the operator is inclined to cut at a speed faster than the machine will tolerate, he'll end up with less than an acceptable cut."

To combat operator fatigue and boost productivity, manufacturers are offering several design features that are either standard or optional equipment on their mowers.

"We offer a stand-up platform and a sit-down sulky seat as an accessory option for our walk-behinds in an effort to reduce operator fatigue," says Ken Taylor, business unit manager for

LARGE CONTRACTOR

Name: John Dingus, Sr.

Title: District manager/landscape division

Company: Davey Tree Expert Co.

Location: Chantilly, VA

2000 revenues: \$315,000,000

Business mix: 70% residential.

30% commercial Employees: 135

hen you take care of a cemetery, you don't expect a lot of complaints, at least not from the tenants. But there's one cemetery that's under the watchful eye of an entire nation, so slip ups there never go unnoticed.

One big job

"We have a lot of bosses, from members of Congress right up to the President," says John Dingus, Sr., district manager/landscape division of The Davey Tree Expert Co. in Chantilly, VA, which cares for Arlington Cemetery. Arlington Cemetery is the "granddaddy" of all maintenance contracts, a tedious job that often requires painstaking mowing and removal processes not typical of other maintenance projects.

"We get more complaints there because you're taking care of someone's final resting place," says Dingus. "We have to strive for perfection because no one wants to see their loved one's headstone all beaten up."

Dingus's crew, which consists of up to 135 workers during peak season, has to mow more than 100 acres a day rain or shine and each year remove 300 loads of leaves and lay about 60,000 yards of sod one grave at a time.

"The leaf removal process is more difficult than the mowing because you can't drive on the graves," says Dingus.

The maintenance itself is a Herculean feat when you consider the thousands of visitors who walk this hallowed ground each year.

In addition to maintenance, Dingus's operation offers everything from design and



Having to maneuver around graves is one of many challenges for John Dingus, Sr. and his crews.

chemical application to snow removal to some of the busiest, historical landmarks in Washington, D.C., including the FDR memorial and the White House. His equipment arsenal consists of several bucket trucks, zero-turn and front-line mowers for greater speed and maneuverability, walk-behinds, a giant vacuum, backhoes, mowing tractors and spring trimmers. His company also owns a

Commercial Lawn & Garden, Husqvarna, Charlotte, NC. "In addition, we offer a deluxe seat that has a lumbar adjustment and an optional foot-assist deck lift accessory which makes curb hopping, deck lifting and/or trailering the unit easier."

A premium full suspension seat with weight adjustment is standard equipment on many commercial mowers today, including those manufactured by New Holland in New Holland, PA. According to Bob Warfel, product marketing manager for New Holland, the company's products feature high, reclining seatbacks with fore and aft adjustment so operators of any size can position themselves comfortably in relation to the foot and hand controls. Flip-up padded armrests are included as standard equipment.

Mike Kadel, marketing manager for Dixon Industries, Inc., Coffeyville, KS, says suspension is a design feature that manufacturers are paying more attention to. "You want operators to stay alert and not be worn out at the end of an eight-hour-plus day," he says. "We focus on a very comfortable seat and suspension system that keeps the operator separate from the movements of the mower."

"Similar to the seating arrangement on big semi-trucks,

our newest product features a big rig suspension fully adjustable seat," he adds.

Full suspension seats with hydraulic dampening and adjustable tension controls are also a must for zero-turn mowers manufactured by the Country Clipper Division of Shivvers Mfg. in Corydon, IA.

"Also important is our single-stick, 'point and go' control system which allows the operator to push faster in the direction he wants to go," says Carl Shivvers, director of marketing for Country Clipper. "As opposed to twin-steer control, the learning curve for the single-stick is quite short."

With New Holland's four-wheel drive, the operator can choose to select full-time four-wheel drive if conditions demand it.

In most applications, according to Warfel, the operator will choose the automatic mode whereby the system will automatically engage four-wheel traction when it senses slippage, then return to two-wheel drive when traction is regained.

"This takes the guesswork out of the operation, allows continued bottom page 48 school bus which hauls employees and a trailer full of spring trimmers to the job site.

Price not everything

Production is Dingus's number-one buying criteria, not price. "You don't want to have a yard full of equipment and have it just sit," says Dingus. "I want to get the most I can for my dollar."

Packaged equipment is a viable buy for contractors wanting equipment that can do multiple tasks. "For example, one commercial mowing manufacturer came out with a trencher equipped with different adapters so you can bore, and it comes already rigged up on a trailer," says Dingus, whose company usually buys their mowing equipment outright through corporate and local suppliers. "The convenience of having everything you need on that one trailer and the ability to do several things at once is a big plus."

When it comes to equipment purchasing, loyalty is key. "We are loyal to those people who are loyal to us when we need service and parts," says Dingus. "If I have a machine that's breaking down time after time and it's not our fault, I want the manufacturer to stand behind that product and fix it."

With so much equipment, sticking to brand names is essential. "We do our own service and repair work, so we stick with brand names because we cannot afford to inventory 19,000 truck filters," says Dingus.

Safety, of course, is also a consideration. "Our safety department has to clear every piece of equipment and check it out thoroughly before we can buy it," says Dingus. "We also provide a lot of training to our employees before they begin using it in the field."

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for the greatest fuel efficiency and greatly reduces the chance of turf scuffing," says Warfel.

Easy-to-reach controls are also important factors in boosting productivity levels.

"The controls and the handling of controls is important for comfort and minimizing fatigue," says Bob Walker, president of Walker Mowers, Ft. Collins, CO. "The speed control on our zero-turn radius mowers works like a cruise control — our machine sets the forward travel with the operator so the operator has his hands off the control, allowing for more relaxed operation. It also allows people with various degrees of handicaps — where they have limited use of their hands and arms — to operate the machine."

With its walk-behinds, Exmark Manufacturing Co. in Beatrice, NE, has developed a unique control system.

"Unlike the pistol-grip system, innovative topside positioning of the controls with this system keeps the operator's hands further away from obstacles, creating a safety zone that helps to protect hands from injury," says John Cloutier, national marketing manager at Exmark.

Seating position is also a critical consideration when it comes to working on hills and general maneuvering.

"In general, a lot of zero-turn radius mowers can be turned quickly, and it's important for the operator to sit on a pivot point," says Walker. "If your ahead or behind pivot, you'll get jostled side to side."

Vyn says Lesco has modified its operator controls over the last couple of model years to allow for greater operating ease and better balance.

"Engines, drive trains, spindles and wheel castors have

all been upgraded for greater dependability," says Vyn.

Shivvers says other design features that make mowers more productive are built-in hydraulic oil coolers, larger tires, larger wheel stands and larger engine options including more fuel-efficient, fuel-injected engines.

The quality of cut is also a factor in determining a mower's efficiency.

"Our blades provide a 50% increase in the time between sharpening," says Rick Cuddihe, executive vice-president at Great Dane Power Equipment, Inc., a manufacturer of stand-on mowers in Jeffersonville, IN. "This benefit sayes our customers time and money."

Noise is another factor that contractors need to consider when purchasing mowing equipment.

"Our commercial mowers feature smooth-running diesel engines with improved lower noise levels," says Warfel. "The engines are isolation-mounted and feature underhood exhaust for quiet, vibration-free operation."

-Cuddihe N

safety is

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Name your price

Oftentimes, a good price doesn't equate to a good product.

"My formula for the best value for a customer is a machine that has the lowest possible cost of ownership and is highly-productive," says Walker. "Low cost isn't necessarily low price on the front end. Sometimes you can pay more and have your actual cost of ownership turn out to be less if it requires less maintenance and less repairs and has higher retail value in the end as a trade-in."

"The astute businessperson will look at real cost of ownership and all the costs that will go into the overall cost of a machine," adds Walker.

MEDIUM CONTRACTOR

Name: Larry Burklund
Title: General manager
Company: World of Green
Location: Lincoln, NE
2000 revenues: Undisclosed
Business mix: 98% commercial,
2% residential
Employees: 50

ike Dingus, Larry Burklund, general manager of World of Green in Lincoln, NE, believes that manufacturer integrity is important. "The true measure of a company is how their service department stands up to its equipment if we need something fixed," he says.

"We only use three suppliers but have had great luck and much success with them," he adds. "Excellent customer service and 24-hour service on equipment are important to us."

Almost all of Burklund's accounts are

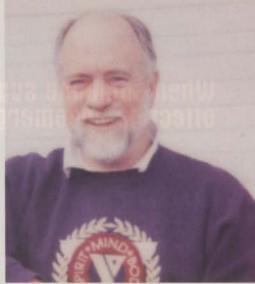
commercial maintenance, requiring a dozen or so crews of three to four workers per crew and several chemical operators during his busiest season. In summer, his crews operate trimmers, five walk-behind mowers, 20 push mowers and several outfront mowers, some with bags attached.

"We do a lot of townhomes, which is difficult at times because each is unique and residents think of them as their own private homes," says Burklund.

As far as purchasing equipment goes, Burklund says his company buys equipment outright rather than leases, which is often left as a finance option when buying their trucks.

Although price is important, Burklund said it's not everything. "We look for durability, quality of cut, the speed of equipment, safety features and operator comfort," he says.

World of Green's record speaks for itself as far as safety is concerned. As of the end of November, Burklund says his company has gone 594 days without a loss-



Lots of luck and success has allowed Larry Burklund to deal with only three suppliers.

time incident. He says new employees endure four hours of safety training before they start work, another day of hands-on training as soon as they start and then are under direct supervision for the next couple of weeks after that. He also employs management safety and employee safety personnel who make sure all safety measures are continually being met.

"If you don't put your guys in dangerous situations in the first place, you don't have any problems," says Burklund.

According to Dick Kilgas of Kubota, manufacturer of riders equipped with either out-front or mid-mount deck designs, "products that are designed to be better, stronger and more versatile typically last longer. Therefore, the business can amortize over a longer time so they don't have to purchase equipment as often. This also adds to their bottom line."

W. Dick Tegtmeier, president and CEO of Encore, Beatrice, NE, which manufactures commercial riding mowers, says "in almost all cases, developing lower-end products to meet a lower cost is not synonymous with stronger, longer-lasting products."

"We, as manufacturers, are squeezed to a margin that is almost embarrassing," says Tegtmeier, who has been in the industry for more than 25 years. "A 36-in. walk-behind that cost \$350 then still costs that much today despite increases in labor, material costs and horsepower."

"If contractors want it to be stronger and last longer, it's going to cost more for the end users," adds Tegtmeier.

According to Bill Shea, vice president of sales at Ferris In-

dustries in Munnsville, PA, commercial cutters must understand there are services attached to the price of the product.

"A machine may cost more at a dealer, but how much time will the contractor lose if a part isn't available, which is typical when purchases are made at big box stores?" says Shea.

Peter Whurr, vice president of product management at Textron Golf and Turf Specialty Products in Racine, WI, says it's also important for contractors to understand that a lack of "creature comforts" doesn't equate to lack of quality.

"The real test of a product is the value it presents to the end user at the end of the day," says Whurr.

So is it a matter of what a contractor is willing go give up? Whurr explains. "If you look at ride-on mowers and the zero-turn radius mowers, can you forego an electric lift for a manual one, or one fuel-tank instead of two? It's all a matter of de-featuring," he says. "We will make a product, whether it's de-featured or higher-end, of the same quality and longevity."

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Kurt Bienmueller, left, with co-worker Brett Chapman, listens closely to what his employees have to say about how his equipment is running.

SMALL CONTRACTOR

Name: Kurt Bienmueller

Title: Vice-president, part-owner

Company: Four Square Landscaping Co.

Location: Dallas, TX 2000 revenues: \$1,000,000

Employees: 18

Service mix: 80% commercial,

20% residential

urt Bienmueller, vice-president and part-owner of Four Square Landscaping Co. in Dallas, TX, says quality, not price, was the issue when he began his business five years ago.

"We wanted to get better and larger pieces of equipment to keep crews to a minimum," says Bienmueller, whose accounts are mostly commercial with 65% of services devoted to maintenance and the rest to design. "We bought mowers that would have a minimum amount of breakdowns and would be easy to repair. Also, their parts had to be easily available, and they had to meet or exceed voluntary safety standards."

"We also looked at the weight of the equipment so it didn't wear people down,

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Show me the money

Financing is a viable sales and inventory management tool for many mowing equipment manufacturers. At Husq-

Mower buying tips from the pros

The next time you're in the market for mowing equipment, consider the following guidelines contributed by John Dingus, Kurt Bienmueller and Larry Burkland:

- Be familiar with the dealer. Make sure it's a product name that you can depend on.
- Check on customer service and whether or not on-time delivery and immediate part availability are options.
- Productivity vs. price: How often do you want to turn your equipment.

over? Consider your cash-flow situation. Can you afford to spend the big bucks up front?

- Safety standards have been met and training materials are readily available.
- User friendly.
- Easy-to-maintain.
- Visit trade shows and read trade journals to find the latest and greatest in mowing equipment and accessories.

varna, for example, they offer "credit card/revolving charge plans, deferred financing plans and leasing options."

"We encourage our dealers to consider return on investment when discussing solutions to end users. A solution, then, may sometimes require a greater investment, but the return will also be greater," says Taylor. "The initial cost of a unit is not the greatest an end user will face. Losses related to a downed unit, productivity, etc. may, in fact, be greater."

According to Gregg Breningmeyer, marketing manager for commercial mowing at John Deere, Triangle Park, NC, they have found that interest rates have not been an important consideration in a customer's buying decisions.

"What is important is cash flow — how much money is needed as a down payment and how much money it's going to cost on a monthly basis," says Breningmeyer.

The value of dealers

In many industries, including the Green Industry, consolidation is an economic fact of life. Consolidation by mower manufacturers is paring down the number of dealers and, therefore, places to get equipment serviced. Manufacturers are responding by either making their dealers stronger, helping them service equipment more profitably or making mowers easier for contractors to fix themselves.

"We're consistently selling our product through the dealer channel only — avoiding the temptation of internet continued bottom page 54

continued from page 52 selling and big box stores," says Walker. "If you don't do that, you will not have a viable service system to take care of your customers."

"Finding reliable dealers who will even service mowers purchased at big box stores is becoming more difficult for landscapers," adds Carol Dilger, marketing services manager at Gravely, an Ariens Company in Brillion, WI that makes riding and walking lawn mowers. "Also, as the number of dealers continues to decline, it becomes even more difficult to find someone who will service the unit."

According to Kadel, manufacturers who go to big box stores are after quick sales numbers with a short term plan. "They end up ignoring the value of the independent dealer and the role he plays in keeping equipment going," says Kadel.

As a manufacturer of walk-behinds, Bill Shea, vice-president of sales at Ferris Industries in Munnsville, NY, says "manufacturers have to partner with those commercial dealers who put the commercial cutter at the highest priority on their customer list."

Taylor adds, "At the same time we must understand the challenges the contractor is facing and make sure we are responding with solutions to address them. For instance, is it the actual price that is driving the contractors to the big boxes or the convenience factor?"

"Some of the ways we work with our dealers are by identifying the buying habits, shopping patterns and what drives key decisions of contractors," he adds.

Ease of servicing goes hand-in-hand with productivity. Not only does an equipment owner want servicing to be fast so he can spend more time mowing, but he also wants servicing to be easy and convenient so it actually gets done.

According to Warfel, the following are specific design features that make self-servic"Manufacturers must work with dealers to help them understand that service is a key factor to continued business success. While we are working to build equipment that will require less daily maintenance, dealer training is essential."

Dilger

ing of products easier:

- ➤ The rear hood can be fully raised to provide full access to the engine area.
- ▶ All routine maintenance points can be serviced from the right side of the tractor.
- ▶ Engine oil can be checked without raising the hood. This is especially convenient if the unit is equipped with a grass collector system.
- ➤ A maintenance decal is located under the hood, making it easy to check for routine service intervals.
- ▶ Electrical components are located together to make troubleshooting and servicing quick and easy if a problem should occur.
- ➤ Engine oil filter, transmission filter and fuel filter are all accessible and replaceable.
- ▶ All mower decks can be flipped up for safe, simple, easy servicing and cleaning. No need to disconnect the PTO drive shaft when flipping up the deck and no tools required.

To mulch or not to mulch

Mulching is a hot subject among professional these days. According to Cuddihe, Great Dane is testing new designs so their customers have the best mulching capabilities available.

"We don't believe mulching has been perfected yet, but we think our mulch systems are the best there are," says Cuddihe.

Kilgas says many people have a misconception of mulching. "Yes, it's good for the soil and grass. However, most people want things done right now — they don't want the job to take any longer than it would if they were to use a side discharge mower," Kilgas says. "The only way to improve the mulching system is to provide a secondary chamber where the mulching process takes place."

Cloutier has his own ideas about the perfect mulching system. "It's not just closing off your discharge chute," he says. "It truly is a system of combining flow control baffles with the placement of mulching baffles, mulching blades and discharge cover."

The safety factor

Breningmeyer says watching a contractor disconnect the safety switch in a seat makes him cringe.

"Safety is of paramount importance with us," he says. "It costs more money to test and make sure products meet certain safety requirements which are voluntary, and few of our competitors meet that standard. Maybe they don't think they can compete from a financial standpoint and consider themselves suitproof."

Whurr says manufacturers need to pay more attention to legislation as it relates to noise pollution and alternative fuel systems. "We have to make sure we design our products to meet the various standards of the marketplace today."

"We believe professional landscape contractors are also concerned about safety, and while everyone wants to go faster, safety is foremost," adds Cuddihe.