

*Mowers get lighter, faster and more efficient as the years go by. Next step: plug in to efficient electrics.*

**F**or Jacobsen's and Bunton's take on equipment technology over the years, we have excerpts from interviews with Tony Saiia, vice president of customer service and technical support for the Jacobsen Division of Textron, Golf Course Equipment; and Joe Santangelo, Bunton's senior regional service manager. Jacobsen purchased Bunton in September of 1996.

turf damage."

**Q.** *How were fairways mowed 30 years ago?*

**Saiia:** "When I joined Jacobsen in 1971, the predominant method for cutting fairways was with gang mowers, pull-type mowers, and ground-driven mowers like the Jacobsen F-10 turf tractor. Everything was mechanical. There were no hydraulically driven lightweight fairway mowers like there are today. All greens were mowed by hand with



**Tony Saiia: looks forward to electric drive technology.**

**Q.** *Has cutting height and quality always been important?*

**Saiia:** "If you look at turf practices 30 years ago, a quar-

# Mowers: lighter, more productive, better cuts

**Q.** *Tony, what has happened in the golf course equipment industry over the past 30 years?*

**Saiia:** "The entire industry has been evolving to meet changing demands in turf equipment and developments in turf practices. Key drivers in this have been the push toward higher productivity and the need to improve the life and reliability of the equipment.

"There have also been changes to make the equipment fit better with turf. Mowers have become lighter to prevent turf damage. Environmental concerns have also grown to affect the turf equipment market—including emissions from engines, noise pollution, the potential for equipment leaks, and anything that could cause

walk-behinds. Then Jacobsen introduced the first riding triplex greens mower, the Greens King, in 1969. We also later introduced the first diesel-powered Greens King. That wasn't as easy as it sounds because everyone was concerned with the amount of weight on the greens.

"Diesels were notorious for being very heavy. We could solve the weight problem on the gas-powered Greens King with large tires and lightweight components. With the diesel models, we had to pioneer the use of new lightweight, compact diesel engines."

ter-inch was a typical cutting height, even on greens. And maybe three-quarters of an inch on fairways. The demand for lower cutting heights on greens and fairways came from the golfer. If you want faster green speeds and a more manicured look on fairways, you need to cut lower.

"Mowing equipment had to meet that demand. And turf maintenance practices had to change, along with the development of aeration and vertical mowing equipment.

"The Jacobsen Turf Groomer is an example of an innovation that helps deliver



faster green speeds while providing relief for shorter and shorter cutting heights. The idea for the Turf Groomer came from the industry--from a superintendent who saw the need. We partnered with him to bring the product to market in 1987."

**Q.** How have walk-behind mowers changed in 30 years?

**Sailia:** "Now they have the capability to cut lower, to utilize attachments like brushes and the Turf Groomer, and they're quieter. Years ago, golf courses tended to be out in the middle of nowhere. Now they're part of housing communities. Mowers had better be quiet because they're running at 6 a.m. near someone's bedroom.

"This suggests the next logical step--the electric power triplex mower. It's one reason we developed and introduced the Greens King Electric this year. It answers the needs for a greens mower that's quiet, productive, and delivers a fine quality cut."

"Productivity will continue to be the driver, as well as the need for a better quality of cut.

**Q.** Joe, how has commercial landscaping equipment changed in the 12 years you've been with Bunton?

**Santangelo:** "Back then we were proud to sell a 52-inch walk-behind with an 11-hp engine. It did an excellent job and no one complained about it. Now, 11-hp isn't enough for a 36-inch mower. The industry is in a horsepower race now.

"There have also been changes in what we ask our mowers to do now. Ground speed, quality of cut, and mulching capability are much more important to the landscaper. All of these require a machine that has more horsepower.

"Productivity and quality depend on operator comfort. Bunton has gotten better at designing and building equipment.

Componentry is one factor. We went to overhead-valve engines, which are much more efficient in terms of ecology. They also put out more power per pound of engine. The torque curves are better, different types of hydraulic drive units are now available, and bearings are getting better."

**Q.** How have commercial riding mowers developed?

**Santangelo:** "Riding mowers have definitely gone through transitions. Fourteen years ago there were maybe three zero-turn riders in the industry and a number of out-front, rear-steered mowers. And there were still some tractor types.

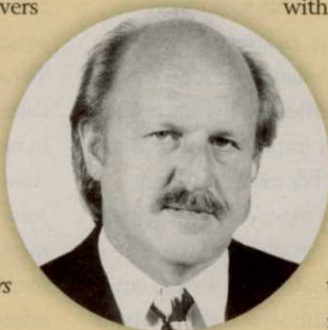
"The zero-turn riders have taken a pretty dominant position in the rider market today, along with large-area walk-behinds. And now we're stepping forward with 31-hp and 72-inch decks."

**Q.** What changes have you seen in the commercial landscape customer?

**Santangelo:** "Today, I see much larger landscape companies instead of two guys with a pickup truck and a trailer. I also see more consolidation of companies into larger and larger ones. These are professional organizations. They have corporate office buildings, fleets

of trucks, computers and cell phones. They're sophisticated and they're looking at profit margins and equipment costs.

"These companies demand more of manufacturers, which is why we keep working to develop better, more efficient products."



Santangelo: industry in a race for horsepower.

# 68:

Benzimidazole fungicides developed. Includes benomyl and thiofanate-methyl, first curative, systemic fungicides, can be used at lower rates. First Ohio Turfgrass Foundation Conference.

# 1969:

Widespread winterkill of Bermudagrass in Midwest. ChemLawn sales hit \$218,000. Musser International Turfgrass



Foundation is formed, by a group that includes Drs. Al Wilson; Joe Duich; Warren Bidwell; Fred Grau and Eb Steinegger. Joe Vargas named head of Turfgrass Disease Research at Michigan State. Joe Duich writes his doctorate on Merion Kentucky Bluegrass.

Jacobsen "Greens King" triplex greens mower is brought to the golf industry.

