he outlook for the green industry equipment market in 1987 is still positive, but the figures may be down from impressive 1985 and 1986 numbers.

It finally appears the steamrolling American economy is slowing to a more realistic pace after four years of substantial growth, and that slower pace appears to be having an effect on the turf equipment market.

Members of the Outdoor Power Equipment Industry (OPEI) anticipate a decrease in product shipments in 1987, according to figures prepared for OPEI by the Bolens Corp.

However, the decrease is not expected to be substantial.

Total shipments for 1987 (walk-behind mowers and tillers, and riding units) are expected to fall just 1% from 1986 figures.

Figures from 1986 are down slightly from 1985. When final figures for model year 1986 are available, rear engine riding mower shipments are expected to decrease 3%; front engine lawn tractors, down 1%; garden tractors, down 10%; walk-behind rotary mowers, down 3%; walk-behind tillers, down 6%; walk-behind snowthrowers, down 16%.

A solid long-term

Although 1986 and 1987 numbers are expected to lag behind those posted in 1985, projected numbers for 1988, 1989, and 1990 are up substantially, according to OPEI members.



The outlook for the equipment industry is down slightly but projected figures to the end of the decade are positive. The commercial turf equipment market should experience steady growth through decade's end.

by the WT&T staff

Shipments of walk-behind mowers and tillers are forecast at more than 5.5 million in 1988, up a projected 4.5% from 1987's estimated figures. Projected figures for 1989 are up 4% while 1990 figures are projected at a 3.4% increase.

OPEI commercial turf care members are optimistic about 1987, forecasting a 5% increase in shipments.

In the long view, commercial turf care members predict increases of 4% and 2% for 1988 and 1989, respectively.

Is there a single reason why OPEI members are so optimistic about the years 1987 through 1990? Probably not. However, more efficient design and manufacturing processes may lead to greater productivity, more profits, and a rosier outlook.

A new solution

It's called the CAD/CAM system. It's revolutionizing the equipment industry, perhaps more than any new product itself.

CAD/CAM stands for "Computer Aided Design/Computer Aided Manufacturing."

While smaller manufacturers still fumble with erasermarked drawings, larger companies are taking it easy. Push one button on the CAD/CAM system and you can re-design an entire product, or just one part of a product.

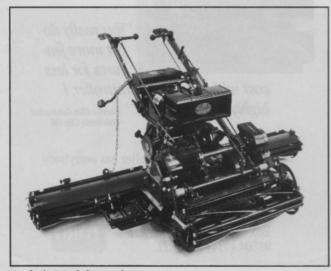
"We've enjoyed continued growth and a certain momentum because of CAD/CAM design for state-of-the-art engines," says Ruth Ann

Stuckey, marketing director for Grasshopper.

Denny Brown, manager of marketing services for Toro, says the CAD/CAM system has reduced costs in testing and evaluation of new products. "It's becoming more common, but not many companies use it yet," Brown says.

Simplicity's director of administration Chris Covert says CAD/CAM has made an impact on the industry's manufacturing aspect.

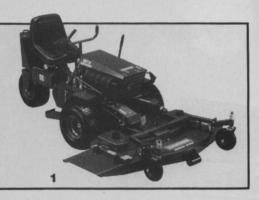
Howard Price of Howard Price Turf Equipment says, besides CAD/ CAM, automatic computer-con-



Locke's Model 6 reel mower.



J I Case's Model 480E loader/backhoe.





trolled punch presses are also becoming popular high tech "musts" in manufacturing. Nic Smokey, advertising manager for Tecumseh, says robots are also being used frequently in manufacturing.

And greater technology is engendering growth in certain markets. The commercial turf care industry market has been growing steadily since 1983, and OPEI commercial turf care members predict continued growth to the end of the decade.

Lawn care organizations made up about 48 percent of the commercial market in 1985, with a predicted rise to 55 percent by 1987.

Similarly, shipments of both walkbehind and riding mowers are expected to be up in 1987 and beyond.

Shipments of walk-behind mowers in 1987 are forecast at 5% over 1986 levels. An increase of 10% is predicted for 1987 in the riding mower category.

Heavy equipment sales down

The outlook for the construction equipment market is not so bright, according to figures prepared by JI Case.

North American sales of small and medium-sized construction equipment are projected to fall 18% in 1987 when predicted reduced housing starts and commercial construction takes place. Sales of construction equipment were rated at 81,500 units in 1986, a

decrease of 3.5% over 1985's 84,595 figure, according to Case. The figures from 1985 represent

about 75% of the industry's last peak

...projected numbers for 1988, 1989, and 1990 are up substantially...

in 1979 (113,823). Sales reached a low of 48,194 in 1982.

High-tech touches all

It's difficult to link the ups and downs of the markets with recent product changes. But there's no doubt that high tech has affected almost all turfcare products.

High tech has caused "better utilization of labor," says Gordon Bannerman, corporate secretary of G. Bannerman Ltd. Such advancements provide time to get other things done.

In the sprayer category, Bannerman says the greatest advancement is the development of the microchip. Computerized spraying minimizes



1) Ransomes' T16K, 54-inch rider with floating cutter deck.

2) Kubota's G6200, 16-hp lawn and garden tractor.

3) Honda's HR173 lawn mower.

4) The new Lesco 300 Greensmower.

5) Bunton's 26-inch walk-behind greensmower.

chemical waste and doesn't pollute the environment.

Even the smaller equipment manufacturers are utilizing high tech improvements. Larry Hoyord, manager of sales administration for High Ranger Inc., which makes bucket trucks used by arborists, says fiberoptic controls makes replacing a wire or hydraulic oil possible with a beam of light transmitted through a hollow cable.

Frank McNamara, manager of market planning for Kohler Co, says magnum fuel tanks, made out of a plastic material, are a new trend in equipment.

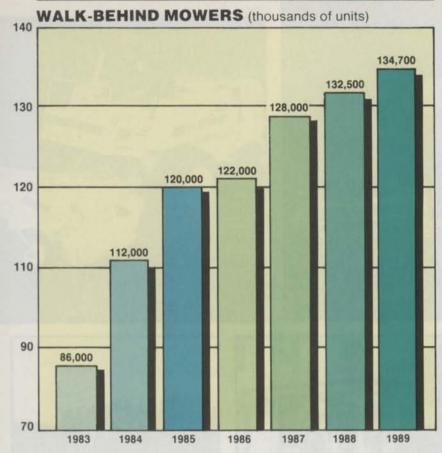
Pat Curtiss, manager of product planning and research for Honda, says his company has been an innovator in marketing lawn mowers with plastic decks which won't rust, and tractors with clutchless transmissions. This year Honda will introduce the first four-wheel drive, four-wheel steering garden utility tractor which uses gasoline instead of diesel.

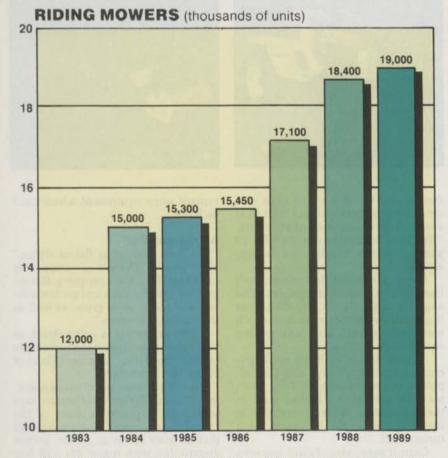
Hydraulic power

Hydraulic power is becoming more popular, according to Pat Scholl, communications manager for Alamo.

But Stan Kinkead, sales manager for National Mower, says hydraulics cost more and lose efficiency by using more horsepower.

Extended Commercial Products Forecast





Source: statistics presented by Bolens Corporation for Outdoor Power Equipment Institute

Where mowers and tractors are concerned, operator comfort and equipment versatility are the biggest reasons for improvements, says Jim Taylor, president of Heckendorn.

Lee Markgraf, operations manager for Kawasaki, agrees. "The trend in new products are features to help people operate the machines, such as low-oil shut off," he says.

Besides operator comfort, safety has been a reason for some equipment changes.

"I would say the biggest improvements came when federal legislation for consumer product safety went into effect three years ago," says Jim Jenkins, sales manager for Snap-

Flail mowers have seen better sales...because of safety features.

per. An example is mowers in which the blades stop turning the minute the handle is released.

Flail mowers have seen better sales recently because of safety features. Flails will throw rocks down to the ground instead of out, explains Ed Toolis, president of Vrisimo. "There's a great demand for our particular type of equipment. We're adapting flails where rotaries were once popular," he says.

Security factors

Along with safety factors, some companies are integrating security features into new products. Joe Nelson, director of marketing services for Sensation Power Equipment, says this is the second season the company has marketed the electronic code access monitor (ECAM), a touch-tone phone key pad used instead of an ignition key.

Electronic controls and electronic monitors which check engine, ground, and reel speed are becoming even more popular equipment features, according to Jim Byrnes of Jacobsen. But some companies can't compete.

"It isn't feasible for a lot of companies to keep up," says Byrnes. "They have limited research and development facilities. As a committed larger organization, we'll have a definite advantage."

Besides domestic competition, equipment companies face foreign competition. Bob Bergen, president of Bolens Corp., sees some advantage to the foreign competition.

"There's been a moderate upgrade







1) Jacobsen's HF-5, five-gang hydraulic fairway mower.

2) Deere's Model F935 with 76-inch swept spindle mower implement.

3) Ford Tractor's LGT 18H lawn and garden tractor.

4) Excel's Hustler 400, a 72-inch, 34-hp tractor.

5) Brouwer's Greensmower with 3.5-hp gas engine.

of engines in the past couple of years which has been sparked by more offshore products coming onto the market," Bergen says.

Pat Hammell, marketing coordinator for John Deere, agrees that foreign competition is not all bad. "American manufacturers have utilized ideas they've picked up from the Japanese method of manufacturing such as the modular design," says Hammell.

John Small of Yanmar Tractor says the Japanese technology and





Asian ability to manufacture and develop products quickly will hurt some American manufacturers. "But they've been on notice for 10 years," warns Small, who is Japanese.

Foreign competition alone isn't hurting equipment companies. The sagging agriculture industry has brought down some companies which manufacture both farm and garden equipment.

"It's all tied in with the total agriculture industry," says Bill Carroll, public affairs manager of Ford Tractor. "Things haven't looked good in the last several years. Everybody in the tractor business is hoping for a turnaround."

Carroll says sales should improve by 1988, since people will be forced to replace some equipment which can't be fixed.

Ag market 'flat'

"The farm market is flat or dying," says Small. "There's certainly very little hope for a great recovery. But we believe that the lawn and garden market will continue to grow, as well as the nursery industry."

"The ag market is going down, so we're concentrating on the turf side to take up the slack," says Kent Hahn of Hahn Agri Producers.

Jack Steinhour, advertising manager at Woods Division of Hesston, says sales will improve because of the "rural renaissance." Steinhour says that as more farms go under, people disgruntled with urban life will buy up an acre or two of land and use need more lawn equipment.

While the farm economy may be down, the general economy is stable which makes sales good overall. "The consumer is willing to spend money on big ticket items," says Simplicity's Covert.

Low interest rates particularly affect the housing market. "Every day there's more building permits given out, every day there's more lawns to be mowed," says Sam Smith, manager of lawn and garden equipment operations for Deutz-Allis Corp.

Steve Yolitz, manager of market planning for JI Case, says along with low interest rates, low oil prices benefit the industry. "Low oil prices, in general, are a plus because it impacts construction," says Yolitz. "A drop in oil prices also reduces operating costs."

The economy has an impact on the equipment industry from the outside, but changes within the landscape management industry also have a strong impact.

The best opportunity

Toro's Brown calls the commercial landscape contractor "the fastest growing opportunity today for equipment."

Gary Erholm, president of Kem Enterprises and developer of the Rockhound grooming machine, is enjoying solid sales to landscape contractors throughout the country.

"We see more and more landscape contractors entering the scene with more than a wheel barrow and shovel background. I'm hearing a lot of favorable reports from contractors who have so much work they can't keep up." says Erholm, who also sells to golf course contractors and municipalities.

"We're seeing growth in the outdoor power equipment industry," says David Welfelt, marketing manager for Excel. "A lot of it is due to the professional landscape maintenance contractor. There's still a lot of professionalizing going on within the landscape maintenance industry. That goes hand-in-hand with equipment."

Such growth has heated up competition between companies in all types of equipment.

"This is a very competitive market," says Teresa Lowry, advertising manager of Gravely. "When we entered it four years ago, there were maybe five manufacturers making commercial intermediate walk-behind mowers. This year at the Landscape Expo, there were something like 40. We do see the market growing."

Howard Price says the competition for manufacturing 72-inch mowers is especially intense since John Deere, Jacobsen, Toro, Excel, Ransomes, and Price all market similar models. **WT&T** Bob Bergen, Bolens president, sees good years in 1986 and

1987.

Lesco's Jeff Mack sees equipment growth for his company.



Jim Gourley of Lawn Masters "can't build plug aerators fast enough."

WT&T asks: 'How does the future look?'

Dale Evenson, president, HMC/The Green Machine: "In the two-cycle part of the industry, there will be some pretty good price increases coming up this summer and next year if the dollar remains the same. Most two-cycle equipment is imported."

Jim Gourley, president, Lawn Masters: "Tremendous. We can't build our plug aerators fast enough."

Myrtle Feldmann, Feldmann Engineering: "Very optimistic. We're always developing new products."

Earl Crane, Earl Crane, Inc.: "It's like I've said for 60 some years in this business...It's out there if you want to go get it."

Jim Taylor, president, Heckendorn: "It doesn't look like it's going to be gangbusters, but there'll be steady growth."

Bob Martin, president, Exmark: "Sales are ahead of last year and mechandise is moving through earlier. We see the market continuing to grow for several reasons: commercial mowers are growing like commercial chemical application people, and the cost of a good quality homeowner mower is increasing."

Bob Walker, president, Walker Mfg.: "We're a niche product in turf care. We'll offer a larger horsepower machine in '87 with more features for the commercial market."

Bob Bergen, president, Bolens: "The outlook we see from our company's standpoint is very very positive for this year. There's good indication it will carry through to next year."

John Kurtze, vice president sales, Al-Ko Kober: "I see nothing but low inventories and an interest from all levels to increase inventories. I'm very positive about it."

Mike Schaefer, vice president, F.D. Kees: "The lawn equipment market is a growing market. The intermediate riding mower market is pretty tight. But I think it'll be like the trimmer market and thin out in the future."

Jeff Mack, product manager, Lesco: "We believe that today's customer is becoming cost conscious. They will not sacrifice quality to obtain this objective. This fits Lesco in that we market directly to the end user, thereby allowing us to provide excellent quality at a very competitive price. This strategy has positioned us for tremendous growth within the equipment industry."

Kevin McGrath, Locke Mfg.: "It looks positive. The people we're selling to now are much more educated and knowledgeable.

Dal Neely, manager national commercial sales, Wheel Horse: "The power equipment industry looks pretty good for a number of reasons. The economy has stabilized, interest rates are down, and the pricing structure is better."

Steve Yolitz, manager market planning, J I Case: "85 was the best continued on page 28