IT'S A WHOLE NEW BALLGAME

Pumping Systems Inc. (PSI) and Flowtronex International proudly announce a new partnership, **Flowtronex PSI, Ltd.** Combining the strength and resources of the two industry leaders will forever change the landscape of the golf course pump station market.

BUT THE RULES HAVEN'T CHANGED

**RULE #1** Give the customer what he wants.

"Flowtronex PSI is committed to upholding and improving the standards of excellence defined by our founding companies. We will continue to design, engineer, and build the most advanced, efficient and reliable pump stations in the world. You, as our customer, will continually define our next product or enhancement."

**RULE #2** Take care of what the customer has.

With an installation base of over 4000 pump stations, Flowtronex PSI knows the importance of providing prompt, professional service. We have established the most extensive service network in the industry, with factory-authorized service centers located throughout the world. Our state of the art computer monitoring and dispatching system gives our factory technicians instant access to information on your pump station, allowing them to troubleshoot many problems over the phone.

**RULE #3** Never break rules #1 or #2.

"Any questions? Give us a call. 1-800-527-0539"

Flowtronex PSI Ltd 10717 Harry Hines Blvd. Dallas, Texas, U.S.A. 75220 214-357-1320 FAX 214-357-5861 © 1993 FLOWTRONEX PSI Ltd
INTRODUCING
THE FIRST FAIRWAY MOWING SYSTEM
DESIGNED SPECIFICALLY FOR YOU
Like everyone else, John Deere wanted to introduce a lightweight fairway mower years ago. We almost did. In fact, by February 1991 we were pretty far along on our “me-too” machine.

Then, we had a setback. We asked superintendents what was important. “Quality of cut,” they said.

“On what playing surface?,” we asked.

“Ours,” they replied.

“Wait!, you all work on different grasses, in different conditions.”

“Exactly.”

“But no machine delivers a quality cut on all playing surfaces!,” we pleaded.

“Now you understand the problem,” they said.

We went back to work.

Geography told us to keep it simple. After all, there are basically only three turf zones

<table>
<thead>
<tr>
<th>MOST IMPORTANT PRODUCT FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUT QUALITY</td>
</tr>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>

Number of responses 50 100 150

THE SURVEY SAYS
on the entire planet—warm season, cool season, and transitional.

The solution was obvious. Forget designing a "one-size-fits-all mower." Design a mowing system. One that's simple, but also offers variations to fit the turf world's basic conditions.


Today, we're ready to tell you more about our system. Three years of hard work and 8,000 hours of field tests tell us we have a pretty solid solution here. More importantly, the hundreds of superintendents who have seen, or worked with the system agree—it's been well worth the wait.

<table>
<thead>
<tr>
<th>STANDARD CUTTING UNIT</th>
<th>HEAVY-DUTY CUTTING UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.5 hp</td>
<td>N/A</td>
</tr>
<tr>
<td>32 hp</td>
<td>✓</td>
</tr>
</tbody>
</table>
Two solid designs—one solid story

Cutting unit advantages

John Deere's investment in reel manufacturing paid immediate dividends on this project. Our ability to design and manufacture our own cutting units gave us the freedom to take a new direction.

Moving the cutting-unit mounting point behind center puts balanced force over both rollers improving quality of cut by keeping the cutting units more level during operation. First, a patent-pending mounting design moves the attaching point to the rear of the cutting unit. This helps ensure that as the cutting unit rolls over the turf there’s balanced force over the front and rear rollers,

The 22-inch width of both the standard and heavy-duty cutting units ensure that you get a superior quality of cut over contoured terrain—regardless of the grass type you work on.

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The 22-inch width of both the standard and heavy-duty cutting units ensure that you get a superior quality of cut over contoured terrain—regardless of the grass type you work on.

Two cutting unit options allow you to match the right cutting unit to your turf. The standard 5-inch, 7-blade cutting unit is designed for delicate grasses—while the heavy-duty 7-inch, 8-blade ESP unit is perfect for tougher conditions.

ESP unit is perfect for tougher conditions.

The standard option features a lighter cutting unit for delicate grasses. The heavy-duty ESP option features a larger reel and more powerful hydraulic motor to handle tougher mowing conditions—including scalping warm season grasses for overseeding.

Finally, hydraulic down pressure is built into every traction unit to help the cutting units

Hydraulic down pressure helps keep the cutting units tight to the turf without weights or springs. A big advantage for mowing grasses in the warm and transitional zones.

which keeps the cutting unit level and in more solid contact with the ground.

Second, two ground-hugging 22-inch cutting unit options ensure a high-quality cut on any type of grass or terrain. The standard option features a lighter cutting unit for delicate grasses. The heavy-duty ESP option features a larger reel and more powerful hydraulic motor to handle tougher mowing conditions—including scalping warm season grasses for overseeding.

If needed, an optional patent-pending system allows you to put even more weight over the cutting units. All without the extra springs, weights, and other devices that get in the way of performance and service.

Two cutting unit options allow you to match the right cutting unit to your turf. The standard 5-inch, 7-blade cutting unit is designed for delicate grasses—while the heavy-duty 7-inch, 8-blade ESP unit is perfect for tougher conditions.
Servicing and operating advantages

Patent pending RFS (Rotate For Service) cutting units give unequalled service access. Cutting units rotate and present themselves for service—merely flip an unlocking spring and pull a pin.

Onboard backlapping is standard on both the 3215 and 3235. Simply pull out a knob to reverse oil flow and "dial-in" the desired reel speed. The same system allows you to set reel speeds for actual mowing conditions as well.

Simple service access is integrated into the design of every John Deere machine. The seat flips forward and the hood opens on the 3215 and 3235 so you can easily check or work on their engines and other drivetrain components.

Operator comfort and productivity features include two-pedal hydrostatic speed control, power steering, single-lever reel lift, deep-cushioned seat, and exceptional visibility.

Single-lever lift is integrated with PTO engagement to make operation easier. A single touch backward raises and shuts off the reels. A nudge forward lowers and re-engages them.
The days of “one-size-fits-all” lightweight fairway mowing just ended. Now, you can get the ground-hugging benefits of 22-inch cutting units regardless of what turf surface you work on.

The 3215 Turf System I and 3235 Turf System II Mowers let you choose from two horsepower and two 22-inch cutting unit sizes. Combined, they deliver three solid options to match your fairways.

The 3215 with standard cutting units is a 25.5-hp machine designed to perform well on any turf type, but especially on
the more delicate cool-season grasses. Cutting units are 5 inches in diameter and feature 7-bladed reels.

The 32-hp 3235 can be equipped with standard or heavy-duty ESP cutting units. The ESP units are 7 inches in diameter, have 3-inch rollers, and feature 8-bladed reels.

Their wider mouth, extra weight, and higher-capacity hydraulic motors allow them to work well where lightweights never have before—long grass, wet conditions, tough warm-season grasses, and scalping for overseeding operations.
No one can accuse John Deere of rushing products to the marketplace. Thorough functional and field testing has always been part of a product's development.

Three years and 8,000 hours of field testing have both proven and improved the system. It's mowed on over 30 different golf courses in different areas of the turf world. It's worked in the cool-season, warm-season, and transitional zones—on bent, rye, bermuda, zoysia, and more.

In addition, the traction unit and components have been put through their own battery of stress tests to ensure they'll survive the tough conditions you work in.

In fact, there's nothing left for us to do now except to give you our promise. If for any reason you are not completely satisfied, simply return the unit to your distributor within 30 days or the first 100 hours (whichever comes first) for a full refund.

We've done our homework. Now, it's time for you to see and benefit from its results.
Paul Ellwood  
Test Course Supt.  
Phoenix, Arizona  

"I'm very impressed to see a heavy-duty cutting unit that can follow ground contours as well as perform well on both bermuda and rye."

George Cook  
Test Course Supt.  
Bradenton, Florida

"We put over 580 hours on the unit and had very few problems. It's nice to know John Deere is interested in our input."

Lyman Hanley  
Test Course Supt.  
Tempe, Arizona

"We scalped for overseeding last fall. I was amazed at how this machine went in and cut everything in one pass."

Mike Lentz  
Project Manager  
Horicon, Wisconsin

"We made a number of modifications based on what we learned in the field. The testing and feedback were critical to this project's success."

Ken Bauer  
Test Supervisor  
Bradenton, Florida

“Our test program here was very successful because we put on a large number of hours in many kinds of conditions.”

Bob Finder  
Test Supervisor  
Phoenix, Arizona

“The quality of cut impressed people here, in addition to maneuverability, mowing speed, cutting unit power, and operator comfort.”

THE JOHN DEERE GOLF & TURF PROMISE

If for any reason you are not completely satisfied with your purchase, simply return it to your distributor within 30 days or the first 100 hours (whichever comes first) for a full refund.
### Specifications

<table>
<thead>
<tr>
<th></th>
<th>3215 TURF SYSTEM I</th>
<th>3235 TURF SYSTEM II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engine</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>Yanmar</td>
<td>Yanmar</td>
</tr>
<tr>
<td>Horsepower</td>
<td>25.5 hp (19 kW)</td>
<td>32 hp (24 kW)</td>
</tr>
<tr>
<td>Fuel</td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td>Cooling</td>
<td>Liquid</td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Vehicle</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traction type</td>
<td>Hydrostatic pump with wheel motors</td>
<td>Hydrostatic pump with wheel motors</td>
</tr>
<tr>
<td>Reel drive pump</td>
<td>Tandem-gear pump</td>
<td>Tandem-gear pump</td>
</tr>
<tr>
<td>Reel drive</td>
<td>Direct-coupled hydraulic gear motor</td>
<td>Direct-coupled hydraulic gear motor</td>
</tr>
<tr>
<td>Backlapping</td>
<td>Standard microlap valves</td>
<td>Standard microlap valves</td>
</tr>
<tr>
<td>Hydrostatic system capacity</td>
<td>12 gal. (45.5 L)</td>
<td>12 gal. (45.5 L)</td>
</tr>
<tr>
<td>Front drive tires</td>
<td>26.5 x 14-12 turf</td>
<td>26.5 x 14-12 turf</td>
</tr>
<tr>
<td>Steering</td>
<td>Power steering</td>
<td>Power steering</td>
</tr>
<tr>
<td>Steering tires</td>
<td>10 x 20-8 turf</td>
<td>10 x 20-8 turf</td>
</tr>
<tr>
<td>Ground pressure</td>
<td>11 psi</td>
<td>11 psi</td>
</tr>
<tr>
<td>Brakes</td>
<td>Dual disk/hydrostatic</td>
<td>Dual disk/hydrostatic</td>
</tr>
<tr>
<td>Actual operating weight (2WD)</td>
<td>2,500 lb. (1134 kg)</td>
<td>2,550 lb. (1,117 kg)</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throttle</td>
<td>Hand</td>
<td>Hand</td>
</tr>
<tr>
<td>Forward/reverse</td>
<td>2-pedal</td>
<td>2-pedal</td>
</tr>
<tr>
<td>Mower lift</td>
<td>Single hand lever</td>
<td>Single hand lever</td>
</tr>
<tr>
<td>Parking brake</td>
<td>Foot pedal with lock</td>
<td>Foot pedal with lock</td>
</tr>
<tr>
<td>Seat</td>
<td>Deluxe high back</td>
<td>Deluxe high back</td>
</tr>
<tr>
<td><strong>Dimensions (approximate)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>54.5 in. (1.38 m)</td>
<td>54.5 in. (1.38 m)</td>
</tr>
<tr>
<td>Length with catchers</td>
<td>110 in. (2.79 m)</td>
<td>110 in. (2.79 m)</td>
</tr>
<tr>
<td>Transport width</td>
<td>86.5 in. (2.2 m)</td>
<td>86.5 in. (2.2 m)</td>
</tr>
<tr>
<td>Mowing position width</td>
<td>110 in. (2.79 m)</td>
<td>110 in. (2.79 m)</td>
</tr>
<tr>
<td>Ground speed:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mowing</td>
<td>0-7 mph (0-11.2 km/h)</td>
<td>0-7 mph (0-11.2 km/h)</td>
</tr>
<tr>
<td>Forward</td>
<td>0-11 mph (0-17.7 km/h)</td>
<td>0-11 mph (0-17.7 km/h)</td>
</tr>
<tr>
<td>Reverse</td>
<td>0-5 mph (0-8.0 km/h)</td>
<td>0-5 mph (0-8.0 km/h)</td>
</tr>
<tr>
<td><strong>Cutting Units</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cutting unit width</td>
<td>22 in. (558 mm)</td>
<td>22 in. (558 mm)</td>
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<tr>
<td>Cutting unit diameter</td>
<td>5 in. (127 mm)</td>
<td>5 in. (127 mm)</td>
</tr>
<tr>
<td>Width of cut</td>
<td>100 in. (2.54 m)</td>
<td>100 in. (2.54 m)</td>
</tr>
<tr>
<td>Height-of-cut (HOC) range:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Blade (standard)</td>
<td>¼ in. (6.4 mm)</td>
<td>¼ in. (6.4 mm)</td>
</tr>
<tr>
<td>8 Blade (ESP)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Frequency of cut (FOC):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Blade (standard)</td>
<td>0.060 in./mph (1.2 mm/km/h)</td>
<td>0.060 in./mph (1.5 mm/km/h)</td>
</tr>
<tr>
<td>8 Blade (ESP)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Rollers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-inch cutting unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front (standard)</td>
<td>2.0 in. (51 mm)</td>
<td>2.0 in. (51 mm)</td>
</tr>
<tr>
<td>Rear</td>
<td>3.0 in. (76 mm)</td>
<td>3.0 in. (76 mm)</td>
</tr>
<tr>
<td>7-inch cutting unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front (ESP)</td>
<td>2.0 in. (51 mm)</td>
<td>2.0 in. (51 mm)</td>
</tr>
<tr>
<td>Rear</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Height-of-cut adjustment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-inch cutting unit</td>
<td>Wrench adjustable</td>
<td>Wrench adjustable</td>
</tr>
<tr>
<td>(standard)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-inch cutting unit</td>
<td>Wrench adjustable, quick adjust in 1¼ in. (38 mm)</td>
<td>Wrench adjustable, quick adjust in 1¼ in. (38 mm)</td>
</tr>
<tr>
<td>(ESP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>One year</td>
<td>One year</td>
</tr>
<tr>
<td><strong>Certificate</strong></td>
<td>ANSI B71.4-1990, without added ballast</td>
<td>ANSI B71.4-1990, without added ballast</td>
</tr>
</tbody>
</table>

*Specifications and design subject to change without notice.*
If you manage a public golf course, you shouldn't miss Public Golf '93—
The premier national conference for managers of daily fee, municipal, semi private and resort courses—sponsored by Golf Course News

We're dedicated to your success. Just take a look at this great agenda loaded with practical ways to help you profitably manage, maintain and market the public course:

**Sunday, November 14**
- Morning tee times
- Editor's Tourney and lunch (Optional event)
- 4-6 p.m.
- Registration and networking reception

**Monday, November 15**
**Improving the Profitability of Your Operations**
- 8:30 a.m.
- Welcome
- 8:45-9:30 a.m.
- Trends in Public Golf: Benchmarks for Profitability
- 9:30-10:45 a.m.
- Improving Profitability of Your Profit Centers: Food & Beverage and Pro Shop Operations
- 11-noon
- Improving Profitability of Your Profit Centers: Practice Facilities and Golf Instruction
- noon-1 p.m.
- Lunch
- 1-2 p.m.
- Raising Revenues on Rounds and Rides: Improving Profitability of Greens Fees and Cart Rentals
- 2-3 p.m.
- Alternative Management Strategies
- 3:15-4:30 p.m.
- Saving Money on Maintenance
- 5-7 p.m.
- Reception and table top displays

**Tuesday, November 16**
**Marketing and Promoting Your Course**
- 8:30-9:30 a.m.
- Positioning your Golf Course for Added Value
- 9:30-10:30 a.m.
- Marketing, Advertising and Promotions on a Shoestring
- 10:45-noon
- Low Budget Promo: Promo Ideas that REALLY Work
- noon-1 p.m.
- Lunch
- 1:00-2:15 p.m.
- Public Relations Ideas
  - Working with the Media
  - Programs for PR Impact:
    - Hook a Kid on Golf
    - Exec. Women Program
    - Audubon Conservation
- 2:15-3:30 p.m.
- Marketing and Tournaments Ideas That Make Dollars and Sense

**November 14-17**
**Wild Dunes Resort**
**Charleston**
**SC**
Finally, a quality lightweight with plenty of mowing muscle.

At less than 10 PSI ground pressure, the all-new Jacobsen LF-3810 treads lightly on the most delicate fairways. Yet its 5 heavy-duty 7" diameter, 10-blade reels deliver the high torque to handle all kinds of grasses and conditions beautifully. Plus, 26" balanced reels and our unique rear roller down pressure system produce tournament quality results at production mowing speeds, hugging undulations other machines would scalp.

Accessibility you'll flip over.
The entire operator platform and rear hood flip up, completely out of the way, for easy access to all key components. Also, the center cutting unit slides back, for quick, easy adjustments.

Comforting news for operators.
The LF-3810 is loaded with operator comfort features, including: full suspension seat with armrests; 5-position tilt, power steering; easier two-pedal hydrostatic drive; full instrumentation; even holders for their favorite soft drink and personal items.

Transverse engine mounting helps you handle slopes with confidence.
This up-front automotive design produces surprising traction and excellent climbing ability in a 2-wheel drive unit.

Exclusive SynchroLift control—Cross cutting at its easiest & most productive.
A simple push or pull of the synchronized lift levers is all it takes with this system. The machine automatically raises the reels to turning height, then lowers them for nimble, flawless cross cutting.

Maintain a spotless reputation on the fairway with GreenSentry™
Our advanced oil leak detection system is standard, to give you every advantage possible on the fairway.

The list goes on and on.
Variable-speed, power backlapping; 3, 4 or 5 gang operation; heavy-duty hydraulic system; a 38 hp, liquid-cooled Kubota diesel... the quality features just never seem to quit.

For a complete list of features and benefits, as well as a complete demonstration, contact your Jacobsen dealer today.

Showed with optional roll over protection structure

THE FIRST TRULY HEAVY-DUTY LIGHTWEIGHT.