Background

- 18,000 participants including exhibitors, dealers, retailers, manufacturers’ representatives, rental shops and distributors of lawn, garden and outdoor products and equipment for consumer and commercial use; also lawn & landscape professionals, hardscape contractors and distributors, general contractors, forest & land managers, maintenance & grounds managers and parks & municipal buyers. Registrations from more than 25 countries.
- 750 exhibits by manufacturers and suppliers of lawn and garden products, landscape maintenance, outdoor leisure products, hardscape products, rental lines, outdoor power equipment and related products throughout 500,000 sq. ft. inside and in the 19-acre Outdoor Demonstration Area.

Discussions with Vendors

Several analysts from Power Systems Research (PSR) attended the show and shared information with vendors and to learn about new products presented at the show. Participating in the show were Joe Zirnhelt, vice president analytics and technology, Erik Martin, director-Asia region, and Michael Aistrup, senior analyst. Here are some of the highlights of their visit.

Mean Green Mowers – All products are cordless/battery. Contractors will have a charger on the truck to charge batteries. Products are all made in the US, except the battery. Market for cordless/battery is stronger in Canada then US. Headquarters in Cincinnati. Lithium batteries used for all products.

GreenWorks – Panasonic Lithium is by far the best battery. Battery has to be matched up with the motor. 80V maybe the limit for volts. 80V batteries are just as powerful as gasoline engines. In 2015 they will be introducing 80V mower and trimmer. Will be contacting Paul Manley, Director of Sales, to get more info on cordless/battery.

Yamaha – No cordless/battery products available at this time.

EGO – I’m not certain about the way they measure volts. Chervon is parent company. EGO markets cordless/battery products. Home Depot is a channel partner and they are looking for additional dealers. The “volt” measurement has become a game for cordless/battery manufactures. Better to measure
cordless/battery on “how far” a charge will go or “how long” a recharge will take. 56V Lithium – ion battery.

**Brilliant Group Industry** – Distributor of Mitsubishi OHV motors. Brilliant is a member of the China Internal Combustion Engine Industry Association (CICEIA), and was contacted by CICEIA to alert them of our visit. They expressed good interest in our data offerings.

**Honda** – Claims to be the largest overall engine manufacturer. The biggest issue for the engine industry (claims Honda) is the fuel issue and E85. Engines are not set-up to work with ethanol. Emissions control is also an issue. Not concerned with cordless/battery products.

**Mahindra** – Introducing a UTV in the next couple of weeks. The UTV will be manufactured by a US company, and sold through dealers. Mahindra will announce the UTV during the Farm show in Jan/Feb.

**Daye** – They claim to sell 500k lawnmowers in Europe. Partner with Husqvarna and Makita. Use Honda or Briggs & Stratton engines – make their own engine based on old Honda design. Sale 250K engines in China. Has a cordless/battery mower. Erik will contact them and arrange for Qin Fen to follow up with them in November.

**Encore** - In the commercial market: Kawasaki and Kohler rule the engine segment; Briggs & Stratton and Honda are not good, reliable products (Briggs and Stratton had some commercial engine problems 10 years ago and the commercial segment has not forgotten or forgiven them); Commercial engines get 2000 – 2500 running hours before they have to be replaced at ~$2,000 per engine: Commercial mower sales driven by the end-users perception of the engine manufacturer. For the most part, Residential is not brand driven but cost driven.

**Exmark** - Commercial is coming back slowly, but not like it was before the recession. A dealer used to be able to customize an engine with a mower manufacturer, today the manufacturer will not customize and the dealer is given no/or very few choices to customize. Commercial is brand conscience. The rep explained that the Toro and ExMark products go down the same line, and then diverge into separate brands. He expects the Toro brand to eventually be discontinued for commercial riding mowers, and all will be ExMark.

**Stihl** – Another way to measure EV is “total operating cost” which can be measured against gasoline/diesel products. Stihl claims that a 36 – 40 volt battery has enough to compete with gasoline engines. 80V was not needed.

**Zongshen** – In partnership with MTD, Champion, Westpro (Westinghouse Licensee). Export 300k completed products and 1M gasoline engines. Total annual output capacity 3M engines and 1M completed products. Export mainly to USA, Europe and South America.

**Loncin** – “Paying special concentration to the development of low-carbon-emission and packaged dynamic products, Loncin has formed an industrial group including engine, generator, motorcycle and new-energy vehicle…and provides superior products and high quality service to more than 100 countries and regions. Loncin has also established stable collaborative relations with several famous international corporations.”
**Greenman Machinery Co.** – 100 sales and service outlets throughout China. Partnership with John Deere. Two manufacturing facilities in China for Lawn and Garden products – Beijing and Jiangsu. Jiangsu manufacturers’ mowers, cutters, golf course mowers and aerators. Uses Kohler XT800 engine for lawn mowers. Golf carts use the KDS motor. We have been invited to visit their Beijing factory to view production and discuss our data products.

**Husqvarna** – Battery powered equipment uses 36V li-ion battery system.

**Dolman** – Markets a 36V Lithium powered motor.

**Hisun Motors Co.** – Manufacturers ATV’s, UTV’s, motorcycles and golf carts. Production capacity of 500K ATU and UTV’s, 2 million motorcycles and 1.5 million units of engines and parts.
Erik exchanging information with Owen Gong from Chongqing Jili Yunfeng Industry Group Co.
**News Releases**

**Honda Power Equipment** introduced its new HRX series of premium residential lawnmowers. The updated HRXVKA and HRXVYA models offer cutting performance, ease of use, durability, control and reliability.

![Lawnmower](image1)

**Honda Power Equipment** introduced its new HS720 series of residential snow blowers. Honda integrated several updates into the HS720A and HS720AS models to provide snow throwing performance and convenient operation in a compact package for both homeowners and commercial users. The new systems are powered by a lightweight OHC Honda GC190 engine.

**GreenWorks** introduced GreenWorks Pro, the commercial industry’s only line of cordless outdoor tools that combines brushless motor technology with 80 Volt Lithium Ion batteries. GreenWorks Pro delivers gas-comparable power and performance without the high cost of gas and oil, which means no more tune-ups, maintenance or emissions. The GreenWorks Pro line includes the following products, all powered by the same industry-leading 80 Volt Lithium-Ion Battery and charger: Walk-Behind Mower; String Trimmer; Blower; Chain Saw; Hedge Trimmer and Snow Thrower. In addition, there will be different 80 Volt fuel pack options that provide extended run-times to accommodate commercial needs, including a back-back battery.

![Lawnmower](image2)

**Kubota Tractor Corporation** announced the expansion of its residential mower line with the addition of a new model to its Kommander Z100-Series, the all-new Z122R zero-turn mower. The Z122R makes its debut into the consumer market, enhancing the Kommander series of 48- and 54-inch deck models with a 42-inch deck model at a price of $3,899. The Z122R is equipped with a Kawasaki FR engine, and a new Hydro-Gear ZT-2200 transmission.

**Kubota Tractor Corporation** introduces a new member to its Z300 Series zero-turn mower fleet with the ZD326H. Designed for turf care professionals and large property owners alike, the new diesel model is built to handle long days of dedicated landscaping with ease.
**John Deere** updated its commercial zero-turn offerings with the new Z997R Diesel ZTrak. The Z997R features a 37.4 hp. Final Tier 4 diesel engine, providing a workhorse solution for customers needing a large zero-turn mower in all conditions, including tall and wet grass.

**John Deere** and **Michelin Tweel Technologies** announced the new MICHELIN X TWEEL TURF for commercial ZTrak mowers. The new MICHELIN X TWEEL TURF is an airless radial tire sold exclusively for John Deere ZTrak 900 Series models with 54-, 60- and 72-inch deck sizes. Unlike traditional pneumatic tires, the MICHELIN X TWEEL TURF virtually eliminates tire downtime and is nearly maintenance free.

**Toro** introduced the Toro Power Max HD 928 which is powered by a 265cc Toro Premium OHV 4-cycle engine, the 928 OHXE can take on up to 1900 pounds of snow per minute, throwing it up to 45 feet out of the way. A 28-inch clearing width creates a wide path, while a serrated auger chews through compacted snow at the end of the driveway. A commercial-grade gearbox powers the 14-inch diameter, oversized auger.

**Toro** introduced a new tractor alternative TimeCutter SW Series zero-turn tractors. The new models combine the maneuverability and time-savings of a zero-turn mower with the ease of a steering wheel and speed control pedal, much like a car or tractor. Toro V-Twin engines utilize a double-barrel carburetor that allows a stream of air and fuel mixture to be dedicated to each cylinder separately rather than both cylinders competing for one stream of air and fuel mixture. Additional features on the Toro V-Twin engine include the patent-pending Max-Flo self-cleaning airbox filtration system that helps keep dirt and debris out of the engine, as well as a convenient quick-drain oil hose.

**Toro** introduced a new top of the line single-stage model, the Power Clear 721 QZE. This machine features a Toro premium overhead valve (OHV) 4-cycle engine, so there’s no need to mix oil and gas.
DeWalt launched its first battery-powered Outdoor Power Tools. The company says its tools provide the convenience of cordless without sacrificing the performance of gas. The line includes two 40V MAX Brushless String Trimmers, two 40V MAX Brushless Blowers, and a 40V MAX Hedgetrimmer.

Kohler Engines unveiled its most fuel-efficient commercial engine yet. The Command PRO EFI 824cc features a highly tuned air intake system that enhances airflow to maximize power and torque. The 824 engine—offered in four models—will be available on numerous commercial mowers for the 2015 model year, including Scag and Gravely. Exmark and Toro are reportedly looking to make a mid-season launch in 2015.

For more information on the show, contact Mike Aistrup at maISTRUP@POWERSYS.com.