TECH UPDATE - Rubber-Wheeled Log Harvesters

John Deere

John Deere’s E-Series harvesters combine agility and enduring power to deliver unparalleled productivity and operator comfort, says the company. John Deere PowerTech Plus diesel engines are said to deliver high torque at low rpm for excellent fuel efficiency and power without compromise. The engine responds to workload changes, enabling more fluent and productive harvesting.

Innovative technologies, including TimberMatic and TimberLink, combine to offer increased user comfort and uptime. The TimberMatic automation system optimizes production, timber measurement, and base control functions, while TimberLink constantly monitors the machine’s performance and condition so operators can increase productivity, which minimizes fuel expenses and other daily operating costs.

Reliability and durability boosting enhancements include rugged reinforced boom cylinders and valves, automatic chain lubrication and tensioning, and a hydraulically driven fan. E-Series operators will enjoy comfort in the rotating and auto-leveling cab. With large windows and low-mounted console, it provides a clear sightline to the business at the end of the boom and the harvester head.

www.johndeere.com

Ponsse

The Ponsse Bear 8w harvester offers extreme performance for heavyweight timber harvesting. Its key strengths include motor and hydraulics efficiency, Ponsse’s most powerful crane ever and the durable Ponsse H8 harvester head.

Thanks to its usability and reliability, the Ponsse Bear 8w meets all the special demands expected of a first-class harvester, says the company. The product’s development is based on Ponsse’s extensive experience and close co-operation with customers and other experts. Ponsse says it has taken the basic strengths of its forest machines to a new level and built a new cut-to-length harvester that provides superior efficiency.

The new Ponsse Bear 8w harvester performs best in stands with bigger trees. The machine’s well thought-out features enable quick, precise and safe handling of heavy trees in demanding terrain and conditions. The exceptionally powerful crane uses two slewing motors, which guarantees enormous slewing power.

www.ponsse.com

Caterpillar

The rubber tired, 6-wheel drive Cat 550 harvester is equipped with a 197 hp Cat C7 engine with ACERT technology. Ongoing tests show fuel economy of Cat engines with ACERT Technology are three to five per cent better than current competing technologies, says the company. The engine also includes cold mode start strategy and automatic altitude compensation.
The 550 comes standard with a 27’ telescopic boom designed for a dangle head. Lift capacity at full reach is 5000 lbs. The boom’s V-shaped bottom extends the life of the wear pads and minimizes side-to-side movement. The harvester can also be equipped with a fixed head boom with a lift capacity of 8378 lbs at full reach. The 550 travels up to 12 mph, is easy to maneuver and provides a smooth ride. The forward-mounted cab and rear engine provide excellent visibility and stability. The auto leveling mechanism tilts in all directions.

www.cat.com/forestry

**Komatsu**

Komatsu America Corp. recently introduced what the company says are the first Tier 4 interim compliant harvesters to North America; the 911.5 and 931.1. While power ratings have not changed, at 228 hp and 259 hp respectively, these models have new engines with maintenance-free Selective Catalytic Reduction (SCR) emission technologies. SCR meets all Tier 4 interim regulations without need for a diesel particulate filter (DPF) and the heat associated with DPF regeneration.

The new 7.4 litre, 6 cylinder diesel engines combine four-valve per cylinder head design, high pressure common rail fuel systems and electronic injectors with proven SCR to meet Tier 4 interim regulations while reducing fuel consumption up to 15 per cent, depending on application.

Both machines have an upgraded rear axle with integrated hydraulic brake line routing and dual trunion mounting for increased ground clearance and line protection. They also now feature O-Ring face seals throughout to help minimize oil leaks, have improved air intake systems with high capacity easy to service air filters and are available with the 4 motor/3 roller Komatsu 365 harvesting head and 32’10” reach.

www.Komatsuforest.us

**Tigercat**

The 1135 machine marks Tigercat’s entry into the wheel harvester category. It falls into a specialized harvester class. According to Tigercat CTL product manager Jon Cooper, the 8-wheel-drive machine is specifically designed to maneuver between forwarding rows in tightly spaced first thinning stands, dramatically increasing forwarder row spacing and residual stand quality.

To achieve this, the machine is narrow and highly maneuverable with powerful steer cylinders, a tight turn radius, perfect wheel tracking, bogie lifts and ample ground clearance. The Tigercat-designed and built parallel linkage crane has a 9.3 metre reach achieved with a 2 metre telescoping stick. The crane base is equipped with fore/aft leveling to maintain powerful slewing capability in uneven terrain and also has a side tilt function that allows the operator to reach around standing trees.

The 1135 is powered by the high performance 228 hp Mercedes 906 engine with dedicated pumps for the drive, harvesting head and crane functions. The cooling system uses a hydraulically driven automatic variable speed fan for optimal fuel efficiency in cold operating environments. The articulation joint is equipped with tapered roller bearings.

www.tigercat.com

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**Rottnet**

The Rottnet H20 harvester is suited for large clear felling.

Rottnet describes it as a very competitive harvester, built for exacting final felling and heavy forests, with a first class driver environment. The robust steering joint with its high steering force is designed with the horizontal joint towards the rear of the machine where the articulated frame lock, consisting of two cylinders, is integrated.

The loader is developed for a large harvester and is extremely powerful in both lifting and swing functions. The large head with supporting wheel arms and five feed rollers grips stems securely and effectively transfers the high tractive force.

www.rotnecanada.com

**Timberpro**

The TimberPro TB630 is the only swing boom wheel harvester that has the capacity to handle heavier attachments, says the company. With the quick change combo feature, it can also be equipped with a grapple or grapple saw to work on a landing or load trucks.

There are two boom options—one with a squirt boom option to 32’ and another for handling the heavier control fall attachments.

TimberPro also has an eight wheel machine that can be set up as a harvester or forwarder or both. Changeover time can be less than 10 minutes for one man to change from a harvester to a forwarder or vice versa. There is no capacity lost as either a harvester or forwarder, primarily because of the continuous swing which allows working all around the machine with no obstruction over the front.

www.timberpro.com