Tech Update - Forwarders

Ponsse

Ponsse is said to be the first forest equipment company to introduce a forwarder with active damping. The highly popular active damping system used in the Ponsse Ergo and Bear harvesters has now been introduced in forwarders, increasing the stability of driving and significantly reducing sideways movements affecting the operator.

The unique active damping system developed by Ponsse effectively eliminates vibration caused by uneven terrain and keeps the cab in a vertical position. The system enables quick movements and provides the operator with first-rate working conditions, the company says. The cab remains in a vertical position within the active damping system’s movement range, particularly on slopes, increasing comfort in loading.

The six-wheel Ponsse Buffalo ADS forwarder is now equipped with the active damping system patented by the company. The new forwarder combines the agility of a six-wheeler and the comfort of an eight-wheeler achieved through its active damping system. www.ponsse.com

Tigercat

Tigercat builds three forwarder models ranging from 11 to 20 tonne capacity.

Smallest in the range is the 1045B, a heavy-duty 11-tonne forwarder with a 201 hp Mercedes 906 engine. Next is the 1055B, powered by a 228 hp Mercedes 906 Tier III engine. The 1055B has a 14-tonne load capacity. This is an all-around forwarder, well suited to thinning or final fell applications.

Tigercat’s highest capacity forwarder is the 20-tonne 1075B. Built for final fell applications, extreme terrain and forwarding heavy timber over long distances, the 1075B is powered by the 275 hp Mercedes 906 Tier III engine.

The wide super-duty 20-tonne bogie for the 1075B provides extra flotation and reduced ground pressure when equipped with tracks and eliminates bogie-lift on steep slopes. Additionally, with Tigercat’s unique centre section design, the 1075B does not require an oscillation lock, allowing the operator to reach out and pick up a load of logs while the machine is still in motion for improved productivity.

Various bunk and wagon options are available to customize the Tigercat forwarders to specific applications, together with optional sliding bunks for added versatility. The 1055B and 1075B are also available with optional expanding bunk systems.

www.tigercat.com
**John Deere**

John Deere E-Series forwarders offer comfort and control, with a cab that rotates to follow the boom and smoothly levels in tough terrain, so work gets done faster with less operator fatigue.

The rotating cab gives operators a full 360-degree view of the machine’s surroundings, ensuring more accuracy and efficiency, while smooth and accurate cab leveling allows operators to drive at higher speeds with less stopping and starting for increased productivity.

Each E-Series model is built with user-friendly software, die-hard durability, improved ground clearance, ergonomic controls, excellent visibility and a reversing, variable-speed hydraulic cooling fan for higher productivity, lower operating costs and maximum uptime.

Uses for each of the E-Series forwarders are: 1010E--thinning and regeneration felling operations; 1110 --thinning and final felling operations; 1210E--late thinning and final felling work sites; and the1510E--this workhorse takes on the toughest workloads. www.JohnDeere.com

**Komatsu**

Komatsu Forest offers three forwarder models for North America.

The eight-wheel Valmet 890.3, which weighs in at 18 metric tons, is said to be ideal for large wood forwarding, in-the-woods chipping, and biomass. It is powered by a Tier III, 7.4 litre, 204 hp diesel engine.

The Valmet 860-4, at 14 metric tons and Valmet 840-4 at 12 metric tons, come in six or eight-wheel arrangements and are powered by 6.6 litre Tier III compliant diesel engines rated at 190 hp and 168 hp respectively.

All Valmet forwarders feature the Valmet ‘comfort bogie’ for improved ride, traction and ground contact on adverse grades.

MaxiForwarder is Valmet’s easy-to-use Windows-based operator control system, providing machine control, operating status and production reports.

These forwarders all have the Valmet ProTec grapple hose protection, which is especially important in biomass applications. The Valmet LoadFlex system, a variable width bunk system for biomass, thinning and production forwarding applications, is available as an option. www.KomatsuForest.com

**Caterpillar**

The Cat 584 and Cat 584HD forwarders are designed to transport large payloads long distances over difficult terrain. The 18 metric ton 584 is available as either six or eight-wheel drive; the 20 metric ton 584HD is eight-wheel drive.
The forwarders feature the Cat C7 Tier III-compliant engine with ACERT technology providing fuel efficiency through high torque in the 1400 to 1600 rpm range and a speed modulated, hydraulically driven large cooling fan.

The rugged front and rear frame structures, heavy duty cast articulation and large oscillation bearings are built for long service life in demanding forest applications. A field-proven hydrostatic propel system provides maximum power on grade, resulting in infinitely variable speeds at peak power and dynamic braking.

The comfortable, spacious cab features automatic temperature controls, low-effort ergonomic joystick controls and storage compartments. Side windows extend below seat level for ground visibility close to the cab.

All major components and systems are accessible through the forward-tilting engine canopy and hydraulic tilt cab.

Logset

Logset forwarders are designed to withstand the harshest conditions and are built from components from leading suppliers. All Logset forest machines are equipped with Agco Sisu Power’s efficient, low fuel consumption common rail engines, Loglift-loaders and NAF drive train. The main suppliers of hydraulic components are Sauer and Rexroth.

Logset forwarders have spacious and modern cabs with excellent sound insulation, the company says, and visibility from the cab is unobstructed in both the drive and load modes. Titan forwarders are equipped with Logset’s Total Operation Control (TOC) system. The TOC controls the main functions, such as the engine, crane, transmission, lights and air conditioning, cruise control as well as some optional functions.

Agco Sisu Power has developed custom made engine software for Logset in accordance with the requirements of their forest machines. The software, together with the Logset TOC control software, optimizes fuel injection in accordance with the prevailing engine load, hydraulic pressure and oil flow requirements in all possible circumstances. The engine responds quickly to changing conditions to balance power, torque and engine revs. www.logset.com

Rottne

Rottne’s newly designed F18 forwarder is powered by a John Deere 6090 HF485 Power Tech Plus Tier III engine, has hydrostatic transmission, two hydraulic motors and the powerful new RK160 loader with 8.5 metre reach. The F18 has a load capacity of 18 tons. This unit, with its stable frame design and strong articulating joint--along with a low centre of gravity-- makes it especially suited for rough terrain, heavy forests and long hauling distances. The cab is ergonomically designed and offers excellent visibility and comfort for the operator. The F18 is equipped with the Rottne D5 control system, which uses Can-bus technology. With the D5, the operator can control and monitor the transmission, engine, loader, pressures, temperatures and fluid levels all from within the cab using a 7” display. Optional air ride cab is also available. www.rottne.com
Quebec-based Tremzac Inc. manufactures a combination prime mover called the OxTrac with a log trailer and loader that works well for forwarding logs in commercial or private logging applications, as well as selective logging.

The OxTrac has a compact design at 49” wide with removable track guards and is very environmentally friendly. It has a 35.5 hp, 4 cylinder Perkins diesel engine and it can also operate on bio-diesel. Fuel consumption is one gallon per hour and ground pressure is rated at between 2.3 to 3.4 psi.

The OxTrac works well in combination with the LT50 log trailer. The log trailer has a loading space of 2.9 cubic metres, and a maximum load capacity of 11,000 lbs.

Completing the package is the BF110-log loader. It has a horizontal reach of 11’, a lifting load capacity of 1700 lbs at 5’3”, and 810 lbs at 11’. The grapple offers continuous rotation and the boom has a rotating angle of 380 degrees.

Over 40 attachments are available for the front and rear of the OxTrac. www.tremzac.com

TimberPro

The TimberPro TF800B series is among the most versatile forwarders on the market today, says the company. What makes the TF800B so versatile is its ability to work 360 degrees all around the machine. The 360 degree work area allows the operator to easily fix or mat heavily used skid trails and retrieve wood from difficult-to-reach areas. This same 360 degree work area allows the TF800B – COMBO machine to be both an effective harvester and forwarder.

The TimberPro TF840B forwarder with its powerful drive train can be transformed into a clambunk skidder for tree length operations. It is also available with an optional 4’ longer rear frame and custom long length wood basket to forward long length logs.

The cab forward design and centered steering joint allows the TF800B series to have a very tight turning circle with no off-tracking. The operator swings with the boom, effectively making the machine an extra loader at the landing.

www.timberpro.com

Tanguay

Designed and manufactured in Canada, the TG88E is by far the world’s largest forwarder.

Powered by a 400 hp QSM11 Cummins engine, the eight-wheel drive TG88E forwarder is used mainly as a low ground pressure clambunk or grapple forwarder configuration with a payload capacity of 35 tons.

At present, the TG88 is the Canadian solution for forwarding large volumes of timber on long distances in the northern boreal forest around James Bay in Quebec. The Tanguay TG88E has also been very successful in Australia’s tropical plantation area in the soft and sensitive soil of Queensland and steep slopes of Gippsland Mountain in the State of Victoria.
The reliable and proven 100 per cent hydrostatic drive provides 146,000 lbs of drawbar pull. Developed 20 years ago, the TG88E’s innovative traction provides the manoeuvrability of a small four wheel forwarder and low ground pressure for minimum ground disturbance.

www.tanguay.cc