



TECHUPDATE

Harvester/Processor Heads

By Tony Kryzanowski

Waratah

Waratah has introduced a number of new options, features, and improvements to the popular HTH616C and HTH622B models.

On the list are the new optional Multi-Tree Processing (MTP) field kits. These kits facilitate increased productivity and sawlog accuracy in small wood when processing multiple logs simultaneously, the company says. Next up is Waratah's 360 degree continuous rotator option. This option allows complete 360 degree rotation for all 600 series head models, improving operator productivity while at the same time eliminating wear parts and increasing hose life. This feature can be retrofitted to all field 600 series heads.

Customer requested standard features now include a new find-end sensor, a new tilt lock feature which prevents fibre damage while cutting, a new pin retention design, both saws using bar oil sourced from the same bar oil tank, larger pins and cylinders on the HTH616C, wider centre drive rollers on both models, improved pin and hardware retention, and added durability improvements to both models. Watch for the new 625C head coming in January 2014.

www.waratah.net

FORTEC

NWFORTEC Technical, a Canadian company, says its FORTEC processor provides proven performance, and is among the toughest timber processors available today, historically operating with over 20,000 hours in the field across Canada.

The FORTEC processor lineup includes the F930, the F920-2, and the F920-4wd fixed head models, all capable of handling Canada's harshest logging conditions in heavy limbed hardwood and softwood up to a 30" diameter, in either short or long log processing.

FORTEC processor models are said to meet the extreme demands of large hardwood processing with unparalleled long service life, and can handle coastal softwood with ease. Combined with up to 12,000 lbs. of feed force, the FORTEC head control system optimizes log measurement accuracy and productivity. The F920-4wd multi-stem model assesses the load to be processed on top, bottom, and both sides for maximum positive grip. FORTEC timber processors are capable of meeting operational demands in either a manual butt plate short log cut or a full computer controlled long log measuring application, providing a large range of stem processing options.

www.nwfortectechnical.com



Caterpillar

Caterpillar Forest Products is the exclusive North American distributor of processing heads designed and manufactured by SATCO, a New Zealand company.

Caterpillar offers the line and provides parts and support through select Cat dealers. The heads are designed to be matched with Cat forestry machines, the Cat 500 series track harvesters and the Cat 501HD harvester. The processing heads range from a weight of 2,618 lbs. with a maximum cutting diameter of 25" to 8,500 lbs. with a cutting diameter of 32".

SATCO heads have rugged structures with over 3" pins. The hose-through-centre design protects the hoses from damage and prevents over-bending. Main valves are rated at 6100 PSI (420 bar) and easily handle carrier pressures. The two-roller SAT223 and three-roller 3-series heads are said to be especially well-suited for processing wood in western Canada. The SAT214 handles multiple stems and is well-suited for harvesting and processing the smaller, mixed stands in eastern Canada.

www.cat.com

SP Maskiner

The SP 761 LF harvester head was presented for the first time at the Elmia Wood Exhibition in June and was very well received by loggers and dealers, the company reports.

The SP 761 LF is a new compact and heavy duty harvester head designed to handle a variety of different demanding applications. It reaches top productivity in tree sizes ranging from 10" to 20". With a weight of 1600 kgs, it is said to be a perfect choice for larger wheel based carriers, 20 to 25 ton excavator carriers as well as mid-size to large purpose-built tracked harvesters. It is designed according to LF principles of having minimum friction during feeding, resulting in maximum productivity as well as lowest possible energy consumption on the carrier.

A topping saw and specially designed processor knives are available as an option for increased performance and productivity when processing decked wood out of a pile. Other important features are the special expander pins for longest possible life and low maintenance, as well as the computer controlled proportional pressures on knives and feed rollers with different settings available per species.

The SP 761 LF is currently being tested in various markets and on different carrier types with very good results, says the company. It will be showcased at a number of exhibitions during 2013 and 2014. Sales launch is planned for the first quarter of 2014.

www.spmaskiner.com

Komatsu

The rugged new Komatsu 398 harvesting/processing head weighs in at 2,785 kgs. It uses proven components on a rigid main frame and routinely handles diameters in excess of 585 mm. Suitable excavator carriers would be 24.5-tonne or above.

All contents of this article are copyright© 2009 by Logging and Sawmilling Journal and may not be reproduced in any form without express written consent



The 398 head's rated feed force is 40 kN. It features a high-flow capacity main valve bank fitted with O-ring face seals. It has a "carry style" feed system, which is very fast thanks to three driven rollers and four motors, says the company. Two cylinders and an equalizer bar control the feed rollers, which cradle and pull stems into the head for a firm grip. A powered centre roller reduces friction for consistent high feed power. Constant contact between the stem and measuring wheel provides spot-on measuring.

The Komatsu 398 has four delimiting knives with an optional bottom mounted delimiting knife. Cutting is handled by ¾" pitch, 91 cm bottom saw and a .404 pitch, 64 cm integral topping saw.

www.KomatsuForest.com

Log Max

Log Max's new generation control system, the Log Mate 500, is a Windows-based, state-of-the-art, user friendly control system available to all Log Max head users.

Being Windows-based, it allows for programs to be installed, such as GPS and Internet connection. This system is built with high quality components to withstand rugged conditions and is IP65 standard compliant. One module is mounted on the head, and two in the cab to receive and transfer both power and data to the harvesting head, and a 12.1" color touch screen is included.

The 500 system has proven to be simple to learn and has been reported to increase each individual operator's production by at least 15 per cent, regardless of what type of processor they are experienced to run, says the company.

www.logmax.com

Ponsse

Ponsse's powerful H8 harvester head was developed for superior harvesting performance in larger timber. Its design includes several innovative solutions, which speed up harvesting, improve product quality and prolong the useful life of the harvester head.

The Ponsse H8 harvester head has tremendous feed force, says the company, and with its considerable capacity it is specifically designed to handle large sized trees. The feed roller opening is 1½" to 29", and with its unique grip geometry, the handling of large stems is made easy. The firm grip on trunks and the highly powerful feeding work hand-in-hand with the feed rollers, and blades grip pressure, which can be adjusted freely during operation. It is possible to use an above normal grip pressure at the start to prevent slipping. The firm grip is ensured by actuating the feed motor locking switch.

www.ponsse.com

Southstar Equipment

Southstar Equipment is a Canadian-owned and operated company based in Kamloops, B.C. Southstar offers a full line of 4-roller processors including the QS500 - 22", QS600 - 23.5" and the QS630 - 24.5". The QS series, with its industry



leading multi-stemming capabilities, is changing the game in the processing world, says Southstar. This processor gives the contractor the best of both worlds. When processing in small diameter tree stands, contractors can see up to a 70 per cent increase in production without impacting lengths and quality. When put into large diameter tree stands, the robust design of the head, with its high feed speeds, means it can handle the toughest processing environments, says the company.

Southstar, with its partnership with Dasa Control Systems, provides owners with one of the most advanced control and measuring systems in the market, while being very operator friendly, with detailed production reports to GPS tagging of wood that can be emailed direct to a home computer from the machine.

www.southstarequipment.com

Tigercat

The Tigercat TH575 harvesting head is specifically designed to match the high performance capabilities of the Tigercat track carriers in harvesting, processing and debarking applications. The TH575 is best suited to dedicated forestry carriers from 200 to 300 hp for harvesting softwood and hardwood in the 5 to 580 cm diameter range. Several TH575 heads are also working on 200 to 290 sized forestry-type excavators and showing superior performance.

The TH575 has a stronger boxed-design, high-tensile steel structure for high duty cycles. Taper-lock pins, isolation-mounted high-flow valve assemblies, clean hose routings, larger feed roll motors and auto-tension for all main and top saw options provide high uptime and long service life, says Tigercat. The patented three-wheel drive system automatically switches between three-wheel and two-wheel drive to optimize traction, feeding power and speed. This maintains processing efficiency in small trees without sacrificing big tree feeding performance.

A larger diameter measuring wheel with dedicated hydraulic circuit for fast response contributes to superior length accuracy. The TH575 uses a Motomit IT-E control system with eight species and up to 100 pre-set selections per species. Full optimization is optional with Motomit IT-J. An optional Dasa 5 control system is in development.

The TH575 has a cutting capacity of 700 mm, with an 800 mm cut option. Several options are available to tailor performance allowing the TH575 to perform well in a variety of in-the-woods and roadside applications. For fast cutting performance, the TH575 comes standard equipped with a 0.404 in pitch Hultdins Supercut 100 main saw with optional 0.75 in pitch Supercut 300. An optional Hultdins Supercut 100 topping saw is also available. Depending on options, the TH575 weighs between 2300 and 2700 kgs.

www.tigercat.com