

REVIEW: H-P HEADS

Manufacturers offer multiple models, options for specific applications.

According to Pekka Leppanen, Product Marketing Manager for John Deere Forestry, matching a harvesting-processing head to the timberstand is key to achieving good delimiting quality and minimal surface damage to logs. "Priorities for harvester heads are reliability, productivity and ease of servicing," he says. "There has to be a good grip on big and small trees alike, the feed must offer precise measuring and there has to be as much head control as possible. Good control helps in bypassing difficult branches. The speed at which knives open and close is important in terms of efficiency. And there must be adequate feeding speed."

To help loggers keep up to date on head manufacturers, models and options, *Timber Harvesting* asked manufacturers to briefly describe one or more models and to identify a couple of satisfied customers. That information is presented as follows. Check out respective web sites for more detailed information.

Blount, Inc.
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Email: sales@blount-fied.com
www.prenticeforestry.com
Number heads sold: 1,000-plus

With few moving parts, Prentice processing heads are simple to operate and maintain. All major functions are controlled from the cab, and one cover over hydraulic valves provides easy access. Heads can be mounted on excavators and purpose-built wheel or track harvesters and come in sizes for both hardwood and softwood.

Various high speed or high torque motor sizes are available. Feed roller styles include spiked, machined, debarking and rubber with chain. Bar pitch saw systems include .404 and $\frac{3}{4}$ in. 11H. Topping saws are optional on some models and all saws have automatic chain tensioning.

With heavy-duty rotators and strong C-frame structures, several models are ideal for large diameter hardwoods. Heads tilt forward to allow the extended picking arms to grab a stem from a deck. Feed rollers cradle the stem with



enough traction to get the job done fast without marring the wood.

► Greg Adams, Avon, Me., just took delivery on a Prentice fixed head. He works in rough terrain in both hardwood and softwood. "That's the good thing about those heads. They don't care what they are cutting." He has another Prentice/Fabtek head, an earlier version of the same model, with over 22,000 hours. He says the heads are simple and very economical to own and maintain. "They work day in and day out and make the job easy for me."

► Kevin Marshall, Antigo, Wis., 715-216-3127, also likes the durability of his Prentice/Fabtek dangle heads. He says

his five heads get a steady diet of hardwoods and they hold up well. "I've heard of guys rebuilding their heads at 5,000 hours but we've got over 11,000 hours on our first two and they are still running." He also likes the valving system and says the measuring system is very accurate.

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Hakmet USA, an American corporation, is specialized in forestry machinery, offering Finnish-built Arbro cut-to-length processing heads that are special-



ly designed for small-to-medium size timber harvesting and thinning.

Arbro 400 is a stroke harvester capable of felling, delimiting and cutting-to-length both hardwood and softwood and can fell trees with diameters up to 14 in. It weighs only 616 lbs. and has a low 12-21 GPM flow requirement.

The bigger Arbro 1000 handles trees up to 18 in., weighs 990 lbs., has a maximum opening for grip arms of 19.5 in. and for knives 18.5 in. Required flow is 21-31 GPM.

Both models have Arbromatic user-friendly micro processors. Several pre-selected lengths may be programmed. Any length can be chosen at any time.

Arbro heads use the stroke technique that permits mounting on lighter, less expensive carriers.

Customers like Dick Kelley of D & M Logging, Inc., Coos Bay, Ore. (541-751-8818) and Aaron Nash of Western Oregon Forest Management, Inc., Curtin, Ore. (541-942-8510) have respectively chosen Arbro 1000 and 400 models to make their harvesting operations time and cost effective.

Hytec Equipment Inc.

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Hytec is proud to have manufactured harvesting heads for over 22 years. Hytec was the first cut-to-length manufacturer of harvester heads in North America.

Hytec offers roller, stroke, and roller/stroke configurations on its entire head line. There are many different models available with a multitude of options. Hytec harvesters can cut and delimit both hardwood and softwood trees from 3 to 28 in. Hytec offers five different size high-torque/two-speed roller motors.

The Hytec Harvester is compatible with all track-type and purpose built carriers. Some advantages include easy maintenance access, auto-bar retract, auto-chain tension, high-speed cut for 11BC/H 3/4 in. pitch chain, .404 pitch chain, and stroke delimit force in excess of 35,000 lbs.

Hytec deals with new, used, and factory reconditioned heads and carriers.

John Deere Forestry

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John Deere offers more than a dozen H-P heads well suited to various applications.

Check out the new H480 with its longer upper delimiting knives that make it easier to pick up stems. Its relocated lower knives' pivot points and shorter bottom knives provide improved delimiting quality and stem control. Its 25.6 in. (650 mm) cutting capacity can handle anything from late thinnings to regeneration harvesting.

The smaller 745 is ideal for a variety of log sizes in both harvesting and thinning operations. Its four synchronized feed rollers are driven by high-efficiency motors which surround the stem for true four-wheel drive.

Located in L'Anse, Mich., Ray and Debbie Hansen and John Stenvig of Quality First Products, Inc. run a John Deere 1270C harvester with a 758HD dangle-head. "We're getting more productivity per man using the harvester and harvesting head. It takes less people to do the same amount of work when you're doing cut-to-length versus full-tree," says Ray Hansen.

Chris Muma of Muma Forest Products, Gladwin, Mich., says "using CTL gives us access to many more job opportunities and we find it to be more efficient. We're not in the repair business and our CTL equipment is truly dependable."

Keto

Western Canada distributor of Keto,
WoodStar and Quadco heads
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Keto's product line includes five models, the K51, K100, K150, K600TS and K825TS. Special LD4 and HD4 models have four knives. Topping saws are available on TS models.

All Keto heads feature unique track drive for high feed traction and industry leading length accuracy. All feature Motomit CANbus control systems.

Pierce Pacific Mfg. Inc.

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Titan 22:

Our commitment is to provide a strong product and strong support beyond customer expectations.

How do we create this with the introduction of the Titan 22? Utilizing decades of experience in mechanized forestry attachments, we are confident that we will exceed your expectations.

Extensive structural analysis has allowed us to design a framework that is free of concentrated "hot spots," minimizing cracking potential. An additional valve section increases drive power and butt saw speed, allowing higher production. IntelliTec Measuring System offers precise accurate, quality logs. And, easy operation through the windows-based color touch screen allows for simple



performance adjustment procedures, and easy access troubleshooting and diagnostics.

Perhaps more important than the product itself is how it is supported. How are we prepared to keep you processing? Replacement component availability in strategic locations, sufficient field representatives to support the Titan 22, proper training, etc.

Whether you are harvesting at the stump, or processing from a log deck, the Titan 22 is available now and ready to surpass your expectations, as well as your current production levels

DHT 650 Series II: This unit is specifically designed for North American forestry conditions. Its robust frame is proven in



the toughest hardwood applications and it optimizes performance on a versatile range of carrier sizes.

The DHT 650 Series II utilizes the DASA 4 Measuring System which offers precise accurate, quality logs. And, easy operation through the windows-based color touch screen allows for simple performance adjustment procedures, and easy access troubleshooting and diagnostics.

The 650 Series II combines ruggedness, power, speed, reliability and precision. In fact, the self cleaning measuring wheel assures accuracy advantages, even in demanding applications, and at high feed speeds of up to 20 ft/sec.

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Ponsse's H73e is an extremely versatile multi-purpose head. Able to handle logs up to 27 in. in diameter, the H73e can also manage thinnings easily. The H73e offers excellent capacity in proportion to its weight. Ample feed force with three feed rollers ensures a strong grip on the trunk. A lock system using four feeding motors enables spin-free, uninter-

rupted feeding. The series/parallel flow of hydraulic oil to the feed motors guarantees a positive grip and extends the service life of components.

The H60bw head is very powerful with feed rollers borrowed from the larger H73e. With its large rollers, it is at its best working on thick-barked, twisty trunks. New roller frames can also be supplied as a conversion kit for the H60 and H60e models.

There are two feed motor options—630 cc or 470 cc. Small motors offer greater feed speed and better operating efficiency while larger ones provide greater feed force at a slightly lower speed.

► Miller Timber Services, Philomath, Ore., uses two H73e heads 10 hours a day in 80% hardwood and 20% softwood.

► Located in Monticello, Ark., J.P. Price Lumber Co. uses three H60bw heads in combination with its Ponsse Beaver harvesters.

Quadco
Distributors in U.S. Southeast
for Keto, WoodStar and
Quadco heads
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Quadco offers two purpose-built controlled falling and processing heads available in 22 and 24 in. cut designed for mounting on 22 ton or larger excavators or purpose-built feller bunchers. Accumulator arms provide multi-stem tree handling. Both heads feature a Motomit CANbus control system, high performance intermittent saw discs and .404 pitch top saws. Controlled mounts with float allow superior tree handling for harvesting and processing applications.

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Risley manufactures two sizes of controlled head processors, the Cobra and the Sidewinder. Both process and optimize at the stump or at the deck. Suited for a carrier class ranging from 22 to 30 tons, the Cobra is ideal for 3-24 in. diameter stems. The Sidewinder is suited for use on a carrier class ranging from 30 to 33 tons and is geared for 3-30 in. diameter timber.

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Tigercat recently introduced the TH575 harvesting head, a unit specifically designed to match the high performance capabilities of Tigercat track carriers in harvesting, processing and debarking applications.

The TH575 has a heavy-duty steel structure for high-duty cycles and features isolation mounted valve assemblies and clean hose routings for maximum uptime. Its unique three-wheel drive system is designed for faster feed speed and superior feeding power (8,670 lbf) and its large diameter meas-



uring wheel improves accuracy. It features a Motomit IT computer system, which is programmable for up to eight species and has 100 preset selections per species.

The TH575 has a cutting capacity of 27.5 in and an optional bar with a 31.5 in. capacity. It's fast too, with a feed speed of 19.7 ft/sec. The TF575 comes with several options, including top saw, a variety of feed rollers and measuring wheels, floating top knife and more.

Valmet

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Valmet heads are a proven solution for wheeled or tracked carriers harvesting at the stump or processing at the landing. Valmet's state-of-the-art heads handle thinning to demanding final felling. Valmet invented the single grip harvester and has sold over 5,000 harvesting heads.

Today's Valmet heads are versatile, reliable, fast, and tough. Valmet design optimizes the ratio of strength-to-weight, giving the operator more speed and power than they've come to expect for more wood at the landing every day.

Recent refinements have further extended head service life.

Valmet heads calculate and track cut length and harvest data through the Maxi-Head control system, which is easy to use and easy to adjust on the fly. Operators can make individual adjustments to harvesting or processing preferences. Plus, Maxi allows the operator to perform diagnostic tests from the cab.

Models best suited for North America include 350.1 and 360.2. Light and very fast, they are designed for early thinning and light harvest. The 370.2 is also very fast yet covers a broad range of duties from medium thinning to larger harvesting and processing. The 370E and 380 models are fast and powerful. They are designed for the heavy demands, greater boom power, and continuous processing duties of excavator style machines. Valmet's 385 is a real workhorse designed for very demanding harvesting or processing of large diameter stems.

In processing applications, Valmet head durability makes them an excellent alternative to traditional delimiters in price, performance, and versatility.

Waratah Forestry Attachments

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Waratah products are tougher-than-nails and built to work. Choose from the rugged New Zealand 600 Series or the tested and proven European 200 or 400 series models. Waratah has a head that is just right for the wood you're working in. The big boy HTH626 can handle 34-inch (85 cm) decked wood, or harvest big timber 26 in. (66 cm) and larger. The HTH470 is purpose-built for high-volume harvesting. The 470 is perfect for use on 20-25 ton carriers and



has a cutting capacity of 25.6-in. (65 cm) to process difficult, heavy-limbed or crooked stems into clean log lengths.

Located in Olympia, Wash., Roger Smith of R.L. Smith Logging Inc. currently runs a John Deere 3554 harvester with a Waratah HTH624 head. "One of the major selling points was the speed of the Waratah 624 and the durability of the machine. I listen to my mechanic's input when I go to buy a machine and that had a lot to do with this purchase."

Rick Taylor of Taylor & Taylor Contracting in Prince George, BC runs four machines fitted with Waratah heads. "Waratah heads work in steep, rugged terrain and where we are, the ground and weather conditions are really tough. We're five hours away from the nearest dealership so we have to depend on the exceptional durability of our equipment."

WoodStar Forestry Attachments

Pacific Northwest distributor of Keto, WoodStar and Quadco heads

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WoodStar's high performance harvesting and processing product line covers six models: WH50, WH60, WH70, WH75, WH95 and the WH105. All offer high feed force and speed and are available with multiple feed roller options.

Compound curve knife profiles provide high log quality. The CANbus Maxi control system allows feed, knife and saw speed and force to be varied with tree diameter for high log quality and performance. Built in diagnostics and pressure/flow adjustments can be made from the cab.

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