

HEAVY METAL

THE LATEST NEWS FROM PETTIBONE HEAVY EQUIPMENT GROUP



05

OFF THE BEATEN PATH
TALKING TELEHANDLERS
COVERED: BARKO HARVESTERS

COVERED: BARKO HARVESTERS FEATURED IN

DIESEL PROGRESS

The farm and forestry issue of Diesel Progress featured a familiar product on its cover – the Barko 240B. Inside the magazine, readers got the full details on the Barko B-Series harvesters and feller bunchers. Here's an excerpt from the May issue:



With numerous enhancements to the original design, the new purpose-built B Series harvester and feller buncher from Barko Hydraulics incorporate extensive input from engineers, end users and other forestry professionals.

The 240B and 260B machines are each driven by a Cummins QSB6.7 Tier 4

final diesel engine rated 225 hp. Both use selective catalytic reduction (SCR) for aftertreatment. The new models offer a peak torque increase of 10% from the previous models. The machines are also equipped with an extreme cooling engine package and a 36 in. diameter Flexxaire auto-reversing fan that includes automatic temperature control.

The undercarriage on the 240B has a ground clearance of 26.2 in., track width of 9 ft. 4 in. and maximum travel speed of 2.47 mph. The 50,000 lb.-class unit delivers maximum tractive effort of 65,833 lb.ft. and a drawbar pull ratio of better than 1.3:1 to handle steep hills and rough terrain.

The 260B features a wider undercarriage with 8 in. chain pitch for added stability with larger attachments in the 60,000 lb. class machine size. It has a drawbar pull ratio of 1.13:1 and provides 65,481 lb.ft. of tractive effort. Ground clearance is 29 in. Options for both models include various track shoe sizes and five counterweights ranging from 1000 to 5500 lb.

Dual swing motors provide continuous rotation and high swing torque of 50,787 lb.ft. for each model. The machines have a heavy-duty, oversized swing bearing.

The strengths of the 240B and 260B are complemented by Parker IQAN hydraulic controls, which have been enhanced for even smoother operation. The hydraulics include a new electric fill pump for the reservoir and an improved internal hydraulic bypass for more consistent temperature in all weather conditions. A hydraulic tank vacuum pump is also standard.

The system was specifically designed for Barko, with hydraulics tailored for both fixed and dangle head harvesters as well as feller buncher applications. IQAN provides infinite variable control for the hydraulic system, including programmable settings for different operators.

System information and machine diagnostics are conveyed on a Parker IQAN-MD4 cab display. The operator station provides optimum comfort and visibility around the entire working area. Users can enhance visibility by adding an optional rearview camera with a 7 in. LED color display. Standard features of the climate-controlled cab include a large access door, exterior LED lighting, oversized skylight, sliding rear window and heated, air-ride seat.

The 240B and 260B each have a 1.25 in. polycarbonate window, which is intended

to provide added safety on both harvesting and feller bunching jobs. An air knife system keeps the front and skylight windows clear of debris. Additionally, a redesigned intake system is now located completely beneath the shrouding to eliminate any chance of damage from falling limbs.

A forward-sliding design allows the cab to move out 36 in. for easier serviceability. Additionally, a hydraulically opened gull-wing door is designed to provide direct access to the engine and components. The door, which spans nearly the full length of the machine, can also serve as a work platform and has a slip-resistant walking surface. An on-board air compressor provides immediate work tool capability.

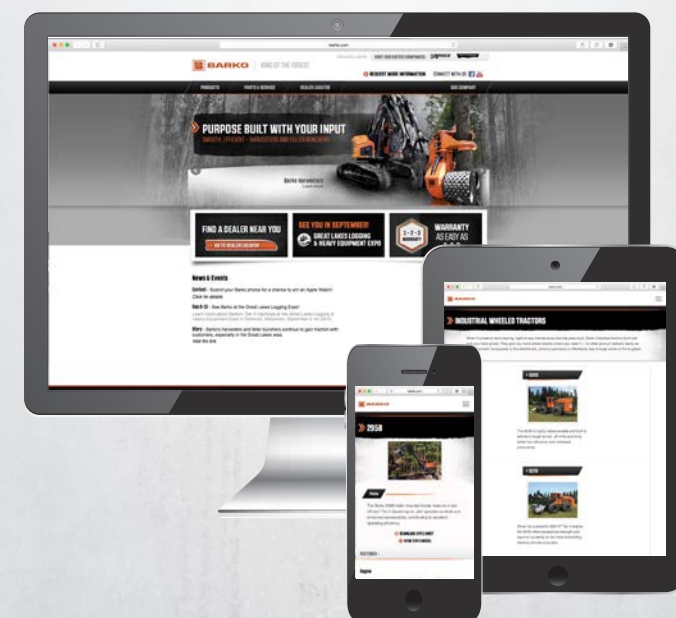
Both machines are designed to work with factory-approved harvesting and feller bunching heads from a variety of manufacturers, including Barko's own CF18 and CF22 fixed harvesting heads. Dual planetary gear rotate motors facilitate efficient 360° continuous attachment rotation. For users who are more accustomed to pedal operation for rotating the head, a foot control option is available as an alternative to the standard handle button.

An optional high-pressure hydraulic filter between the carrier and the attachment is intended to provide added protection for the attachment. Additional attachment options include a bar-and-chain grease system and herbicide stump spray system. Other attachments compatible with the Barko 240B and 260B include feller buncher heads from Quadco and Propac as well as dangle heads manufactured by South Star and Log Max.

BARKO LAUNCHES NEW WEBSITE

The new website for Barko Hydraulics – barko.com – officially launched in May. The website offers simplified navigation and extensive information on Barko product lines, including loaders, harvesters and feller bunchers, forwarders, industrial wheeled tractors, and whole tree chippers. The site offers customer testimonials, product selection content, and feature and specification information for each machine.

Barko has produced some of the most powerful and dependable products in the forestry industry over the past 50-plus years. The new website highlights the advantages that current Barko users have experienced, while also making it easier for new customers to explore the available product ranges and find the right machine to tackle specific forestry tasks.



TALKING TELEHANDLERS:

PETTIBONE EXTENDO IN THE NEWS

The new Pettibone telehandlers garnered some nice press attention in the first half of 2016. Construction Equipment talked to product manager Bob Mayo for its April buying file feature. Diesel Progress also interviewed Mayo about the Extendo 944B in the January issue; here's an excerpt from the magazine:

Pettibone has introduced the Extendo 944B, the company's first model in its new generation of telescopic handlers that meet the latest U.S. Environmental Protection Agency (EPA) regulations. Designed for efficient operation and simplified serviceability, the 944B offers the lift capacity and reach for a wide array of material handling applications.

"The largest impact in the design of the Extendo was implementing the Tier 4 final engine package from Cummins,"

said Bob Mayo, product manager, Telehandlers, for Pettibone. "Along with the Tier 4 final engine comes the exhaust aftertreatment system, which is comprised of an SCR (selective catalytic reduction) system with DEF (diesel exhaust fluid). We also added an additional display in the operator's compartment that provides the required exhaust system and engine monitoring along with diagnostics."

The Extendo 944B is powered by a Cummins QSF3.8 turbocharged diesel engine rated 117 hp. A Parker IQAN-MD3 display provides monitoring and diagnostics. The unit's Dana T12000 Powershift transmission offers three speeds and is supported by a heavy-duty transmission cooler. The axles are also from Dana, with 212 Series front and back, giving the machine four-wheel drive. It has a 32.6 gal. fuel tank and a 5 gal. DEF tank.

The Extendo telehandler is a multi-use tool that has been popular on residential and commercial construction sites for years. According to Mayo, Pettibone's customers were initially apprehensive of "how Tier 4 will affect their day-to-day operation and cost of ownership. However, in a short time of operating and becoming more familiar with the product and Tier 4 emissions, customers are well accepting of our newly designed 944B Extendo," he said. "They are also appreciative of our minimal design impact to our product versus Tier 3. The machine environment feels the same, functions the same, and overall performance has been enhanced."

With a maximum load capacity of 9000 lb., the 944B provides forward reach up to 30.25 ft. and a maximum lift height of 44.33 ft. Single-joystick, pilot-operated controls are designed to allow for smooth operation of all the Extendo's boom and



auxiliary hydraulics. For operation in tight areas, the 944B offers four-wheel, two-wheel and crab steering modes and has a turning radius of just 12.33 ft. The machine is compact enough to fit under an 8 ft. doorway. Its operating weight is 24,600 lb.

The Extendo includes two wide-stance, heavy-duty lift cylinders with an automatic fork and load leveling design that eliminates the need for slave cylinders.

"Our fork leveling system provides an accurate and robust means to maintain fork leveling throughout the entire boom lift and lower cycle," Mayo said. "Engineering calculations, high-quality

components and a simple hydraulic circuit provide the ground work to attain self-leveling without the need for separate slave cylinders. The basic function is the exchange of hydraulic oil between the lift cylinders and the fork carriage tilt cylinder. Our design provides fewer components, less sight line obstructions and the added benefit of extremely robust lift and tilt cylinders."

To further improve load stability, the 944B offers 24° of frame sway — 12° left and right of center — and is equipped with a rear axle stabilization system.

New service access doors allow users to remove only the front half of the



enclosure to perform daily engine and transmission fluid checks, rather than the entire cover. A battery disconnect switch is now standard and accessible from the cab.

assembly, drawworks, mud pump, hole loader, pipe rack, headache rack and a direct-drive three-stage hydraulic system.

"A pilot-operated hydraulic system provides excellent control of critical drilling functions. Automatic pipe clamping and break-out tools offer great efficiency and keep the operators safe. Complete engine speed control, gauges and diagnostic information and safety switches are all included at the drill control station, allowing the driller to focus on the task at hand. The units also require little maintenance and are extremely durable," claims Leahy.

"The biggest advantages of using the K 4x4 in geothermal drilling are speed of operation, low cost of operation and, of course, the ability to negotiate different types of terrain to get around anywhere."

OFF THE BEATEN PATH:

ARDCO K 4x4

GeoDrilling International ran a feature on the ARDCO K 4x4 in its December issue. Here's the text from the publication:

The original K 4x4 off-road transportation platform was developed in 1969 to meet the need for a heavy-duty, durable machine to power through the tough, swampy areas in the southern US. However, upgrades over time have incorporated modern features and made it productive for a range of off-road situations. "People need multi-purpose machines where they can customize the rear frame for specific jobs. Especially for tasks in areas where it's difficult or impossible for on-road trucks to reach, having one machine to



handle everything is critical. The K 4x4 is particularly advantageous in getting through wooded areas, wet/muddy terrain, hilly/rocky terrain and sand dunes," explains Tom Leahy, general manager of ARDCO.

One of the configurations, the C-1000 drill, was developed to deliver enhanced drilling speed with hydraulic operation. "It has been an extremely productive seismic drill in the industry for many years. ARDCO is launching several new models, each with its own set of features and benefits," explains Leahy.

Platform Features
A standard feature across the K 4x4 line-up is the Cummins QSB 6.7L diesel engine, a high-torque unit with 190hp at 2,200rpm and enough power to reach backwater locales. The heavy-duty, five-speed (five forward,

one reverse), fully automatic Allison transmission includes a push-button shifter and adaptive shifting technology. A two-speed transfer case delivers torque to the wheels and has a front-axle disconnect to shift between two-wheel and four-wheel drive.

The vehicle's axles are rigid-mounted to the frame, and the front axle includes a no-spin feature that keeps full power running to both tires. Other attributes include fully enclosed inboard wet-disc brakes, a tubular steel frame and various tire options.

Drill Specs
The C-1000 drill can be used for seismic, geotechnical, water-well and geothermal drilling. Its 16ft (5m) mast is welded tubular steel designed to use 10ft (3m) drill pipe. Other features include a hydraulic rotary

DEALER PROFILE

Barko Hydraulics has added Chadwick-BaRoss, Inc. to its distribution network for all forestry equipment product lines. With five locations across Maine, Massachusetts and New Hampshire, Chadwick-BaRoss will carry Barko equipment for the New England region.

"We're very excited to welcome Chadwick-BaRoss to the Barko team," said John Janiro, Barko's Director of Sales, Eastern Region. "Their established history of providing high quality industrial equipment and excellent customer support makes them an ideal partner to carry our

brand of innovative forestry machines. We are confident that they will help expand Barko's presence in the Northeast, especially in growing our market share for loaders and tracked harvesters and feller bunchers."

Chadwick-BaRoss was originally founded as the Portland Tractor Company in 1929 before its acquisition by Robert BaRoss and Richard Chadwick in 1959, and today is part of the Strongco Corporation. The company represents several leading heavy equipment manufacturers in their respective industries. Chadwick-BaRoss

will carry the full range of Barko forestry products, including loaders, harvesters, feller bunchers, industrial wheeled tractors, forwarders and whole tree chippers.

"Barko products certainly fill a need for a lot of our forestry customers," said Randy Mace, president of Chadwick-BaRoss. "In particular, we haven't had a feller buncher in our product offering for quite some time, and we're already finding that Barko's machine is a good fit for our area. It's been a great start to what we hope is a long and prosperous relationship for both Chadwick-BaRoss and Barko."



SEE US AT THESE UPCOMING EVENTS



Visitors to EXPO Richmond in May were able to see the newest Barko loaders and industrial tractors up close, while the ARDCO K 4x4 and Pettibone Cary-Lift once again drew a lot of interest at the Global Petroleum Show in Calgary in June. Next up, a swing down to Orlando for the Speed Swing at AREMA, and lots of forestry equipment on display in Oshkosh in September.



August
28-31
Orlando, Florida

PETTIBONE

AREMA

September
8-10
Oshkosh, Wisconsin

BARKO

Great Lakes
Timber Professionals Association

November
7-10
Abu Dhabi, United Arab Emirates

PETTIBONE & ARDCO

ADIPEC
The Abu Dhabi International Petroleum Exhibition & Conference
7-10 November 2016
Abu Dhabi National Exhibition Centre (ADNEC)

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NEW PRODUCT UPDATES

*A Quarterly Look At
New Machine Introductions >*



Fuel Tank

Personnel Carrier

■ ARDCO K 4x4 Personnel Carrier & Fuel Tank

ARDCO debuted its new personnel carrier and fuel tank configurations for the K 4x4 at last month's Global Petroleum Show in Calgary. The ROPS certified personnel carrier is a mounted enclosure that can transport up to 10 people to and from jobsites. Various seating and cab options are available. Meanwhile, the new K 4x4 fuel tank offers a streamlined design for delivering fuel to machines working in remote locations.



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