



TRAINING TALK:

CARY-LIFT IS MORE STABLE.

A major safety factor for any material handler – and particularly for those required to move objects like pipe, poles and lumber – is stability. Operators of such machines need to be conscientious of the different circumstances that can impact the stability of a loaded vehicle while in use, including speed, grade and ground conditions.

There are numerous additional factors related to the design stability of the machine itself. Weight distribution, suspension,

wheelbase and tires can all influence a vehicle's resistance to tipping, even during completely normal operations. The level of stability also depends on the vehicle's intended function versus its actual use on the jobsite.

Looking at an articulated wheel loader as one example, this machine is very good at moving dirt and is mainly designed to do exactly that. Along with a front-mounted lift arm, wheel loaders feature articulated steering, which is not conducive to carrying heavy loads and turning at the same time.

A wheel loader can lose as much as 50 percent of its rated load capacity when going into a turn. Because of this,

drivers with sharp turns in front of them may have no choice but to resort to multiple-point turns, moving forward and back as much as needed until the turn is complete.

Unfortunately, sometimes operators aren't aware that the physical dynamics of a loader are changing when turning or otherwise maneuvering the machine. Simply relying on the vehicle's specification data under normal use — and failing to make proper adjustments to the speed, load or turning approach to account for these changes — will lead to a greater likelihood of an accident.

Personnel who work in stockyards where wheel loaders are routinely used are probably familiar with the sight of a loader lying on its side with pipe

scattered nearby on the ground. Of course, a danger exists not only to the operator in this type of scenario, but also to bystanders in the vicinity of the machine.

The Pettibone Cary-Lift is purpose built to deliver enhanced strength and stability for specific jobs like moving pipe. Instead of an articulating joint, this machine has a heavy-duty, solid steel frame that can take full loads into sharp turns without sacrificing any load capacity or stability.

The newest Cary-Lift machines have a shorter wheelbase that provides an even tighter turning radius while still maintaining capacity. Another recent enhancement of the Cary-Lift is a wider stance for the lift arms to further improve stability while moving a load.

Working on a paved or level stockyard drive aisle is one thing, but pipeline construction jobs out in the field clearly provide a whole new set of stability challenges for material handlers. Some stockyards might rely on traditional straight mast forklifts, but these machines are designed to operate on a smooth, graded work surface and aren't capable of going into rough terrain applications.

The Cary-Lift is an all-terrain, 4-wheel drive machine — a basic necessity when hauling pipe on construction jobs in the field. The machine also offers hydraulic frame sway control with leveling action to compensate for the irregularities of uneven terrain, helping to ensure operators are carrying a safe, stable load.

VERSATILE MACHINES

RIGHT AT HOME IN ROUGH TERRAIN

This past fall, Oil & Gas Product
News spoke to ARDCO general
manager Tom Leahy for a feature in
the Canada-based publication. Read
an edited excerpt of the article here,
and check out the full interview at:
www.oilandgasproductnews.com/
article/21729

Much of Canada's oil and gas exploration is taking place today in remote areas, like northern Alberta's rugged, frozen terrain. Oil and gas companies engaged in exploration, road building and other operations need reliable ways to get in and out of those locations on a regular basis.

A machine originally designed to operate in the bayous of southern Louisiana and rugged back country of Texas is finding traction – literally – in these parts of the Canadian market. Thanks to a versatile collection of designs and ability to be modified for the needs of each user, ARDCO machines are catching more attention.

"Two big things about ARDCO equipment are how adaptable the machines are and that they can power through very difficult terrain," explained Tom Leahy, general manager of ARDCO. "One customer is using our 6x6 model with a pipe trailer, hauling very heavy pipe through very sticky, wet, muddy terrain. They're using it because it just doesn't get stuck."

ARDCO was founded in the mid-1950s doing custom manufacturing jobs. Operators working in muddy stretches of the southern U.S. would come to the company with ideas and have them built for their individual needs. One area that proved popular was oil and gas.

"ARDCO made its name in oil and gas exploration, as well as the seismic world, for geotechnical work," Leahy related. "We have always manufactured our own drill unit, and would sell a 4x4 machine with a drill on the back and a water buggy." A diversifying oil and gas industry meant companies in the sector needed more machines. ARDCO started building a wider range of products as customers brought more challenges to them, resulting in a collection of configurations, all able to move around in rough terrain.

"The machine is designed to get into places where it's hard to haul equipment around," Leahy said. "You can also use it on a regular jobsite; if you have material or other items that need to be moved, this can handle it."

ARDCO manufactures 4x4, 6x6 and tracked machines. Each one can be purchased in specific configurations beyond the popular exploration drill setup. Leahy said water and fuel tanks are popular, as well as service and lube beds.

"You can place a crane and welder, all your oils and fluids that you'd need to service various equipment on the jobsites — or you can just use a straight diesel fuel truck," Leahy said. "Personnel carriers are also popular to get people to the jobsite. On a 4x4 machine we can place a 10-passenger carrier, and on the 6x6 there is a 12- to 15-person carrier."

Other items, such as backhoes, are used as well. The machine is very customizable, Leahy pointed out. "We design them to be interchangeable so you can buy one machine and add different attachments."



BIGGER & BETTER:

THE NEXT GENERATION OF BARKO HARVESTERS AND HEADS

The demand for Barko harvesters and feller bunchers continues to grow as Barko launches its "B" Series generation of these purpose-built machines.

The new 240B harvester/feller buncher is powered by a 225-horsepower Cummins QSB6.7 Tier 4 Final engine with SCR aftertreatment. Added horsepower from the Tier 3 design has increased the peak torque by 10 percent. The machine offers maximum tractive effort of 65.833 foot-pounds and superior drawbar pull – better than 1.3 to 1 ratio – to handle steep hills and rough terrain with ease.

Users impressed with the responsiveness of the 240 have reported the 240B is possibly even smoother running than the original, thanks to new IQAN hydraulic controls. The control system is specifically designed for Barko, featuring hydraulics tailored for harvester or feller buncher applications. IQAN includes programmable settings for different operators.

Info on system hydraulics is available on a Parker IQAN-MD4 display.

Additional improvements include a new electric fill pump for the hydraulic tank and improved internal hydraulic bypass for more consistent temperature in all weather conditions.

The operator's station provides excellent visibility around the entire working area. A rearview camera with cab-mounted 7-inch LED display is optional. An air knife system keeps the front and skylight windows clear. Additionally, a redesigned intake system is now located completely beneath the shrouding to protect against falling limbs.

The 240B comes with a 1 1/4-inch polycarbonate window. Other standard cab features include a large access door, exterior LED lighting, sliding rear window, and a heated, air-ride seat,

platform spanning nearly the

Dual swing motors provide continuous rotation and high swing torque of 50,787 pounds at 3,770 psi. The unit features a heavy-duty, oversized swing bearing (53.5-inch outside diameter) and offers an outstanding reach of 21 feet, 2 inches.

The D5 undercarriage on the Barko 240B features high ground clearance of 26.2 inches and compact track width for enhanced maneuverability. Ground pressure is 7.63 psi when equipped with

600-millimeter width shoes and 6.54 psi with 700-millimeter shoes, and max travel speed is 2.47 miles per hour.

Barko 260B

The 260B offers similar overall performance but comes with a wider D7A undercarriage with 8-inch chain pitch for added stability with larger attachments. The 260B maintains exceptional drawbar pull (1.13 to 1 ratio) and provides 65,481 foot-pounds of tractive effort.

CF22 Fixed Harvesting Head

The most popular attachment for Barko machines has been Barko's CF18 single grip fixed harvesting head. Barko has now launched the CF22, offering an official capacity of 22 inches and larger saw bottom to improve controllability of larger diameter wood and longer tree lengths.

Scott Pinney, owner of Northwoods Logging and Tree Service in East Jordan, Michigan, routinely encounters big diameter hardwood. One year after purchasing a Barko 240 with CF18 harvesting head, Pinney added a Barko 260 and CF22.

"We run into bigger trees," said Pinney. "With the CF22 we can cut all the wood without having to bring out a hand cutter or run a hot saw in front. We're able to cut up to 25-inch-diameter trees."

According to Pinney, the fixed head can cut a tree clean off the stump without splintering. He's able to position a tree in exact spots and create less damage in the woods. "Both Barko heads have the power to feed a pretty good sized hard maple down it, and it will shear the limbs off after one or two hits – and you're talking a 6- to 8-inch diameter limb," said Pinney. "With our previous unit you beat on it a while and eventually had to cut the limb off."

Pinney originally chose the 240 after viewing a head-to-head demonstration with his old machine. "The Barko outdid our other one," said Pinney, "I can cut beech, hard maple, oak. You can even swing a tree and pull it up the hill. The power is just amazing."

Like the CF18, the CF22 features a patent-pending design with 360-degree continuous rotation with center hose routing. This configuration enhances maneuverability when cutting, and some users have reported reduced hose replacement costs due to the hoses being protected.

The patent pending, forward-sliding cab design enhances serviceability by sliding the cab forward 36 inches. Offering direct access to the engine and components, the hydraulically opening gull wing door is also a convenient working

A Quarterly Look At **New Machine Introductions**

930B & 937B Industrial Wheeled Tractors

machine's full length.

The walking surface has

been modified on the

240B to provide more

IQAN controls provide machine

diagnostics and straightforward

troubleshooting. A hydraulic tank

vacuum pump is standard. Exclusive to

the industry, an on-board air compressor

provides immediate work tool capability.

The machine also has built-in tool storage.

resistance against

possible slipping.

The Barko 930B and 937B industrial wheeled tractors are powered by 320- and 380-horsepower Tier 4 Cummins diesel engines, respectively. The new units deliver exceptional hydraulic horsepower to the mulching head for right-of-way land clearing and site prep jobs, and can also be equipped with a variety of other attachments in numerous applications. Equipped with a 127-gallon fuel tank for longer operating intervals, the tractors provide exceptional productivity, maneuverability, and durability.



Extendo 1157B

Delivering max load capacity of 11,000 pounds, the new Pettibone Extendo 1157B telehandler provides forward reach up to 42 feet, 1 inch, and maximum lift height of 57 feet. Single joystick, pilot operated controls allow for smooth hydraulic operation. The 1157B is powered by a 117-horsepower Cummins QSF 3.8 Tier 4 Final turbo diesel engine. A Parker IQAN-MD3 display provides instant engine and aftertreatment diagnostics. The fully modulated Carraro Powershift transmission offers four speeds, forward and reverse. Maximum travel speed is 20 miles per

DEALER PROFILE Barko Hydraulics, LLC has just added Kleis Equipment was founded in 1997 "We're very excited about the partnership Kleis Equipment LLC to its dealer network as a small, family-owned firewood and with Barko," said John Kleis, owner of Kleis for all forestry equipment product lines. logging operation, and has since grown Equipment. "We look forward to building Located in Constantia, New York, Kleis into a full-service outdoor power equipment around the Barko product lineup and will carry Barko equipment for most of supplier. In addition to its lines of new expect that it will become the backbone New York State. products, Kleis has done a significant level our dealership. In particular, there is great of business in the used equipment market. potential for sales of Barko loaders in this area, and we are hopeful to find a "It is great to have Kleis Equipment The company's service center provides

successful niche with their harvesters and

for everyone involved, especially our

customers."

feller bunchers. It's an excellent opportunity

EQUÍPMENA

parts and maintenance for a wide array

Kleis will carry the full range of Barko

tracked harvesters and feller bunchers,

industrial wheeled tractors, forwarders and

forestry products, including loaders,

of machine makes and models.

whole tree chippers.

come aboard as a new dealer for Barko."

experience in the outdoor power equipment

said John Janiro. Barko's Director of

and logging industries make them an

ideal fit for our brand of premium

forestry machines."

Sales, Eastern Region. "Their extensive

SEE US AT THESE UPCOMING EVENTS



The new generation of Pettibone telehandlers made their official debut at World of Concrete in February, with the Extendo 944B and 1157B models on display (left). Our trade show focus for the spring and summer now turns toward forestry and oil & gas. Come out and see what's new!

May Richmond, Virginia



May / June Vienna, Austria



June 7-9 Calgary, Alberta

PETTIBONE & ARDCO **GLOBAL** PETROLEUM **SHOW**

August Orlando, Florida



September Oshkosh, Wisconsin



BARKO



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135TH ANNIVERSARY

CHALLENGE COIN!

You can now get your hands on the 2016 Pettibone challenge coin, which commemorates the anniversary of the company's founding in 1881. These coins represent our "challenge" – to everyone – to take a closer look at why Pettibone machines are the strongest and safest in the industry. Contact us to request coins for you and your customers today!











