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TECHNOLOGY YOUR GUIDE TO PRODUCT RESEARCH

Mini & compact equipment

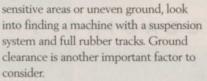
he compact equipment industry has changed remarkably over the years. In the beginning, the industry could be summed up with two words: skid-steer. Such machines helped take the "break" out of "back-breaking" and became synonymous with what was known as compact equipment

But, as industry representatives and end-users know all too well, technology changes. For compact equipment, the main driver for change was the many users who found that their needs weren't being met by the limited functionality of skid-steers.

For example, compact track loaders, once a niche player, have taken chunks of market share from competitors over the last decade. According to the 2006 Yengst Associates *"Equipment Analysis of Compact Track Loaders,"* more than 30,000 are expected to be sold in 2007.

"It was inevitable that inventive minds would develop alternatives to skid-steers that would challenge the basic assumptions of what compact machinery is, and what it should do for a landscaper," claims Brad Lemke, director of new product development at ASV. "For example, a rubber track loader can beat a skid-steer in virtually all applications. This has given a buyer a lot to think about when considering a purchase." Consider this:

► What sort of terrain will you be working on? If it includes turf, environmentally



▶ Will you need to transport the machine or work in tight quarters? Machine width and trailering capabilities come into play here.

- If you're looking at a rubber track loader, how is the undercarriage designed? Some manufacturers have a suspension system, while others maintain rigid undercarriages. Factors to consider are the terrain and rider comfort.
 Is the track system incorporated into the design of the machine, or is it
- added to an existing skid-steer frame? A good point of consideration is whether or not a machine has been built to be a rubber track loader. Look for a machine where the tracks and the frame have been built from the ground up to work in unison.

Compact Power Inc.

Compact Power's Boxer 320 mini-skid offers the power in the smallest package yet. The 320 is a dedicated track machine that comes standard with a 7-in.-wide rubber track that produces only 3.2 psi of ground pressure to reduce damage to lawns and landscapes. The Boxer 320 is only 34.5 in. wide, but features a tip capacity of 1,250 lbs. and a 50% operating capacity of 625 pounds.

For more information contact Compact Power at 800/476-9673 or <u>www.box-</u> erequipment.com / circle no. 264

Gehl

Gehl provides three models of its compact track loaders: the CTL60, CTL70 and CTL80. The CTL60 features high-powered, 4-cylinder, liquid-cooled and emission-certified diesel engines, which deliver up to 97 hp for exceptional performance. Models CTL70 and CTL80 are turbo-charged. The 2-speed-drive system uses high-torque, radial-piston mo-



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LM Reports

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tors with planetary final drives. SAHR (spring-applied, hydraulic release) multidisc wet brakes respond quickly to hold the loader on any grade. The units have exceptional hydraulic power, for dependable digging and self-leveling lift action, and for keeping loads balanced when the lift arm is raised.

For more information contact Gehl at 262/334-9461 or www.gehl.com / circle no. 265

Ramrod

The 905, 915, 950 and 1150 Ramrod Taskmasters handle the most demanding jobs. The 905 Taskmaster can be as narrow as 32 in. to work in constrained areas and the 915 can wide track to 44 inches. There are more than 40 versatile, "quick on, quick off"



attachments. From the low-step stand-on platforms, operators get a clear, 360 degree unobstructed view of their work area. For more information contact Ramrod at 800/667-1581 or www.ramrodequip.com / circle no. 266

Ditch Witch

At less than 36 in. wide, the Ditch Witch SK350 Mini Skid Steer can go anywhere you need it. The Ditch Witch SK300 is a 13-hp,



track-mounted, platform mini skid steer. The SK500 is a track-mounted, walk along mini skid steer. The SK650's powerful 31.5-hp Kubota diesel engine and hydraulic system give it the muscle to do the jobs of much larger machines.

For more information contact Ditch Witch at 800/654-6481 or <u>www.ditchwitch.com</u> / circle no. 267

Toro

Compared to other Dingo models, Toro's TX 525 Wide Track diesel compact utility loader offers extra torque, longer engine life and increased hydraulic flow for enhanced perform-

> ance of ground-engaging attachments. The model is compatible with Toro's 35-plus compact util-

ity loader attach-

ments — making it suited for applications such as installing irrigation systems, preparing seedbeds, material hauling and handling, constructing decks and fences, tree planting, demolishing structures and pond building. Weighing 2,127 lbs. with a standard bucket, the TX 525 Wide Track has a rated operating capacity of 553 pounds.

For more information contact Toro at 800/Dig-Toro or visit <u>www.toro.com</u> / circle no. 268

Tiger Equipment

The Cheetah Mini Skid Loader is the only Stand-in-the-Middle mini skid steer loader. Less mistakes are made because the operator can see the work area. The Cheetah also offers excellent operator stability, exceptional overall balance, simple user-friendly controls, 24-hp Honda with electric start engine and a light footprint of 1,250 pounds. More than 40 attachments are available.

For more information contact Tiger Equipment at 540/489-7777 or <u>www.tigerequip.com</u> / circle no. 269

Circle 150



ASV

ASV's SR-80 rubber track loader is built on a new ISR-4 undercarriage with 20-in. rubber tracks, a multi-level suspension and four wheel carriages on each side that flex independently. The SR-80 has an overall width of 72 in., an all-new chassis and a 125-in. lift height for the bucket. The cab has an adjustable suspension seat, split lap bar with gauge package and an optional slide up door. The company also launched a smaller model, the SR-70 (not shown), with 15-in. tracks on a 66-in. machine. This model is built on the same chassis and cab as the SR-80. They can travel at max 7 and 12.5 mph.

For more information contact ASV at 218/327-3434 or visit <u>www.asvi.com</u> / circle no. 270

Caterpillar ►

Caterpillar's C-Series line of mini excavators has 22% more digging force and 10% more stick digging force than other models. The 301.6C and the 301.8C have 18.1 hp, increased hydraulic flow and pressure. New, variable displacement hydraulic pump eliminates stalling. Operating weight is 3,792 lbs. when equipped with a cab and 3,548 lbs. with a canopy. Independent swing boom lets the machine work next to a wall or obstruction. 200-degree bucket rotation ensures good material retention at height as well as flat trenching capability. For more information contact Caterpillar at 888/OWN-A-CAT or www.cat.com / circle no. 271

Hitachi

Two improvements to Hitachi's new Zaxis 17U-2 compact excavator are its adjustablewidth tracks and its backfill blade with fold-



able end sections. These features reduce the width to 40 in., allowing maneuverability in previously inaccessible areas. When fully extended to more than 50 in., the undercarriage provides excellent stability for operations. The standard quick coupler/hydraulic attachment package increases jobsite possibilities. The reduced tail-swing ZX17U-2 improves performance specs, more operator comfort, and better fuel economy.

For more information contact Hitachi at 800-675-8459 or <u>www.hitachiconstruc-</u> tion.com / circle no. 272



LM Reports

IHI

IHI's NX series units have a hydraulic pilot joystick for higher responsiveness and zero tail swing. Mini excavator is powered by a 10-hp water-cooled diesel. Auxiliary hydraulics to front are standard, as is backfill blade. Has 5ft., 2-in dig depth. Undercarriage expands from 27.5 - 37.5 inches.

For more information contact IHI at 800/538-1447 or <u>www.ihicompactexcavator.com</u> / circle no. 273

Kanga

With compact power to handle the toughest of jobs, whether moving soil or mulch across the work site, trenching for an irrigation system or installing a fence. The 16-hp Honda, electric-start Kanga Kid has more than 10 attachments, all with a quick attach mount plate. Unit weighs less than 1,000 lbs. and is 32 in. wide. Complete system trailer can be pulled behind a standard vehi-



cle. Ride-on operator platform and fingertip controls minimize training.

For more information call Kanga at 800/476-9673 or <u>www.kangaequipment.com</u> / circle no. 274

Finn Corp. ►

Finn Corp.'s Eagle compact skid steer comes in three models: 204, with 20-hp Kohler Command Pro; 244D, with 23.5-hp Cat diesel; and 252 with 25-hp Kohler Command Pro. Its 3,000 psi parallel hydraulic system provides full power simultaneously to all functions.

For more information contact Finn Corp. at 800/543-7166 or <u>www.finncorp.com</u> / circle no. 275

Vermeer >>

Vermeer Manufacturing Co.'s S600tx rubber track mini-skid steer features a spring-cushioned platform and two single-joystick controls with operator-handle grip that allows operators to keep their balance while operating any of the machine functions. A machine width of 35.75 in. allows the S600tx to maneuver through gates and other con-







Crew #1 at Johnson Mall? Yes, and they arrived at 7:45.



fined areas. The 7- or 9-in. tracks provide enhanced stability and lower operating ground pressure. For more information contact Vermeer at 888/VERMEER or www.vermeer.com / circle no. 276

MultiOne

Functional capacity, power and high performance allow MultiOne series GT to be used in the maintenance of green areas for lifting, cleaning, cutting and earth moving. Its strength stands at 50 hp combined with a robust 4WD hydrostatic transmission, lifting capacity of over 1,000 kg and standard telescopic arm for heights of more than four meters. More than 50 accessories can be connected in less than 10 seconds each. For more information contact MultiOne at 208/356-8028 or www.multi one.com / circle no. 277

Bobcat

The Bobcat 425 zero-tail-swing compact excavator builds upon the existing 430, 435 and 442 ZTS excavators. In the 2-3-metricton class, the 425 standard-arm excavator delivers a maximum digging depth of 8 ft. 4 in. and a maximum reach of 14 ft. 10 in. at ground level. The 425 is powered by a 26-hp liquid-cooled

diesel engine and features 2speed (1.2 mph low and 2.3 mph high) travel motors. The 425 offers 3,282-lb. arm breakout force and 5,058-lb. bucket breakout force. With an overall width of 61



inches, the 425 is able to access areas that larger excavators and tractor loader backhoes cannot.

For more information contact Bobcat at 866/823-7898 or www.bobcat.com / circle no. 278

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Circle 156

Get a Grip TECHNOLOGY TRIMMER LINE, THE SCOOP

> All of them will do the job. It boils down to which is easiest to use and does the best job.



Test them first, then buy

BY ALLEN SPENCE

ou need to purchase trimmer line for your trimmers. You're faced with a bewildering number of choices. How do you know which one is for you? Is it even important?

Consider these points about trimmer line before you plunk down your hard earned cash:

1. Will this product help me make more money?

- 2. Will it do the job I need it to do?
- 3. How will it affect my equipment?
- 4. How easy is it to use?

.130)

SLUE

OUAR

Obviously, you won't know how a particular line will function until you've used it. It takes a bit of trial and error. Start by buying small quan-

tities from a trusted source. You can find out for yourself what each type of trimmer line does.

The line comes in at least five sizes. Diameters of .065, .080, .095,

.105 and .130 are available. Within each size are several different shapes and colors – round, square, twisted, dimpled, and even hexagon shaped; it is a long list.

Trimmer line should be chosen by matching its diameter to the horsepower of the unit. The larger the line, the greater the power needed to rotate it. Failure to match the cutting-line diameter with horsepower may cause mechanical problems such as excessive carbon build-up, spark arrestor clogging, premature clutch failure or overheating.

▶ Shapes — Round line is more aerodynamic says one manufacture, square line has more cutting edges and lasts longer says another. Another advertises that their hexagon-shaped line has more mass resulting in a cleaner cut. It is also supposed to last longer. Then we have line with serrated edges. These edges act like saw blades and are designed to work better in grasses and weeds that tend to have stronger stalks. The dimpled line is claimed to accelerate faster, run quieter and cut better.

► Colors — Distributors' claims don't make the decisions easier. Green line blends in to the grass resulting in less time spent cleaning up, advertises one distributor. Red, yellow and blue are highly visible, which results in faster clean up times, argues another.

Of all these choices which one is right for you? All of them will do the job, but which one will do the job best for you? It boils down to which is easiest to use and does the best job for you.

— The author is turf equipment management instructor at Hinds Community College in Raymond, MS. Contact him at <u>haspence@hindscc.edu</u>.

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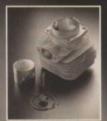
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Project Portfolio DESIGN/BUILD RENOVATION / OUTDOOR KITCHEN / POOL TERRACE

The design

Connecting stairways, an outdoor kitchen and a new, larger pool deck terrace were on the wish list for the occupants of this 5year-old home.

The site before construction

A small deck, two separate staircases, a swimming pool, pavilion and landscape planting.

Project Requirements

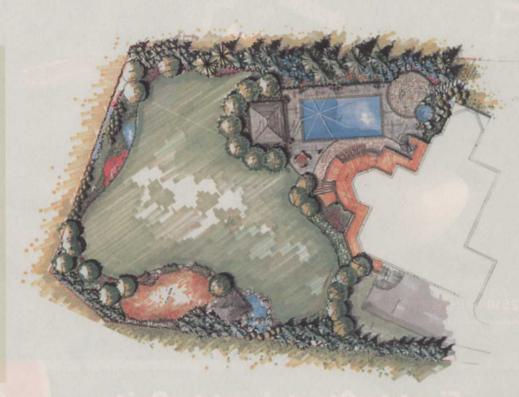
Relocate the existing pavilion.

Add a curved upper deck with new connecting stairways, an outdoor kitchen and new pool terrace – one that repeated the curve of the pergola.

Access off the heavily used garage driveway area made materials storage and backyard access a challenge during the project.

Project Specifics

The existing hardscape and woodwork did not meet the standards of craftsmanship and design the new owners wanted.





ABOVE The pavilion was moved and centered on the new, larger pool deck, which has a detailed paving pattern and bull nose bluestone coping.

RIGHT The geometric IPE decking was fastened by a biscuit system, preventing any surface penetration to the decking.

