

Compact Equipment™

NOVEMBER/DECEMBER 2020 www.compactequip.com

INNOVATIVE IRON AWARDS

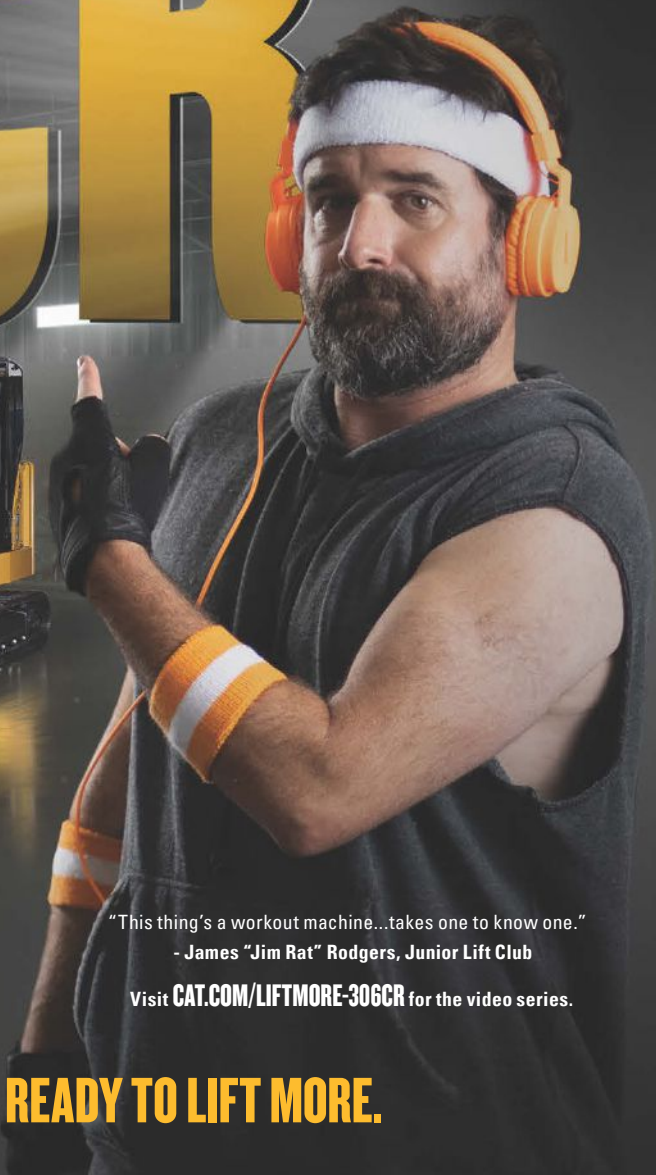
- 2020 -

WE HONOR THE TOP
EQUIPMENT OF 2020



BOBCAT'S NEW ELECTRIC EX + RENTING SPIDER LIFTS + BUILDING A LUXURY LOADER FOR THE HOLIDAYS

CAT[®] 306 CR



"This thing's a workout machine...takes one to know one."
- James "Jim Rat" Rodgers, Junior Lift Club

Visit [CAT.COM/LIFTMORE-306CR](https://www.cat.com/LIFTMORE-306CR) for the video series.

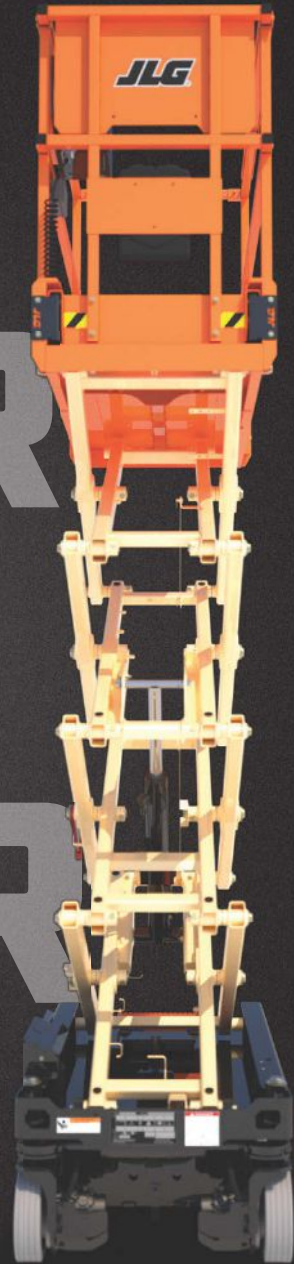
THE CAT[®] 306 CR. RAISING THE BAR — AND READY TO LIFT MORE.

Word in the weight room? There's nothing mini about the 6-ton mini excavator, the Cat[®] 306 CR. People are buzzing about its lift capacity. Huge gains across the board and maxing over 8,000 pounds without a grunt. It's not just lifting weight either. With industry firsts like Stick Steer and Cruise Control, it lifts your control and comfort during operation. Combine all that in one machine — and you don't need a protein shake to see a boost in performance by up to 20%. Ready to see it pump iron in a real gym?

Visit [CAT.COM/LIFTMORE-306CR](https://www.cat.com/LIFTMORE-306CR) for the video series, machine specs and how you can lift your work with the 306 CR.

NEW: LIGHTWEIGHT ELECTRIC DRIVE SCISSORS

LIGHTER MADE BETTER



They weigh under 2,000 lbs., but the new ES1330L and ES1530L electric drive scissors will put in a ton of work – and then some. Lightweight and compact at just 30-in wide, go wherever duty calls – sensitive floors, load-restricted elevators, even outside. Coupled with an industry-exclusive zero-turn radius, these two scissors deliver maneuverability in a class all their own. Get in, get out, get more done – that's ELEVATED ACCESS.

See innovation in action | ElevatingAccess.com

JLG[®]

Contents

November/December 2020
Volume 19 • Number 9

Features



14 Innovative Iron Awards

By Keith Gribbins
We honor the top equipment of 2020.



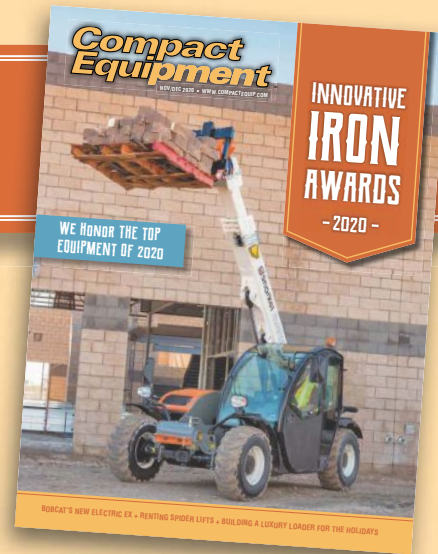
32 Visionary Implements

By Keith Gribbins
Let's take a look at the top attachments of 2020.



36 Luxury Loaders

By Pam Kleineke
It's time to dream big and pick out the ultimate skid steer or CTL.



On the Cover

Snorkel's SR5719E electric compact telehandler is just one of the innovative machines we're celebrating this year. Head over to page 14 to see the rest.

Departments

6 Editor's Message

8 News

38 Rental Center:
Compact Crawler Booms

42 By the Numbers

Compact Equipment™

COMPACT EQUIPMENT (ISSN 1552-1281) publishes 10 issues per year by Benjamin Media, Inc. 10050 Brecksville Road, Brecksville, OH 44141. Copyright 2020, Benjamin Media, Inc. All rights reserved. No part of this publication may be reproduced or transmitted by any means without written permission from the publisher.

ONE-YEAR SUBSCRIPTION RATES: complimentary for qualified readers in the United States and Canada. Single copy rate: \$10.00. Subscriptions and classified advertising should be addressed to the Brecksville office. Periodicals postage paid at Cleveland, OH and additional mailing office. POSTMASTER: send address changes to COMPACT EQUIPMENT 10050 BRECKSVILLE ROAD, BRECKSVILLE, OH 44141





WE MOVE FUEL®

- 12 Volt and 24 Volt • Electronic Solid State Design • ISO 9001:2015 • 14001:2015 Certified • ISO16750 Load Dump • REACH
- RoHS • Coast Guard 33CFR183.410 and 33CFF183.590 • Design for Stage 5 and Tier 4 Diesel Engines
- Compatible with Gasoline, Diesel, Bio Diesel Fuel • MTBF Up to 10,000 Hours • Assembled in USA •  LISTED AU1501



ECM Solid State



GOLD-FLO® Solid State



POSI-FLO® Solid State



CUBE Solid State



DURA-LIFT® Solid State



FACET®/PUROLATOR® BRANDED FUEL PUMPS ARE MANUFACTURED BY MOTOR COMPONENTS LLC AND ISO9001-2015/ISO14001:2015 FACILITY

FOR DESIGN AND ENGINEERING INFORMATION CONTACT:

PAUL PALEO, NATIONAL SALES MANAGER Phone: 607-737-8371

FAX: 607-737-8335 p.puleo@facet-purolator.com

MOTOR COMPONENTS LLC ELMIRA, NEW YORK 14903 www.facet-purolator.com

© Registered Trademark of MOTOR COMPONENTS LLC

ISO 9001:2015
ISO 14001:2015
BUREAU VERITAS
Certification



2020 Was Weird, But the Equipment Industry Was Resilient

While there are many words to describe 2020, I'll be as nice as I can and say it was, well, weird. There was a pandemic, shutdowns, people hoarding toilet paper, murder hornets, Zoom happy hours and washing your hands was something people needed to be told to do (for the record, I have always been a huge fan of handwashing). But for as weird as 2020 was, it was a year of resiliency. We saw it in essential workers who showed up and kicked butt for their communities every day. We saw it in mask-clad teachers and students returning to classrooms full of new rules and plenty of fears, and we saw it in each other as we all learned to navigate the new normal together.

We here at *CE* had a front-row seat to watch how the construction and compact equipment industries battled the weird and remained resilient. They tackled project delays, new COVID-19 protocols, factory shutdowns, budget cuts, staff working from home, etc.

We watched manufacturers persevere and continue to deliver the products and equipment crews needed to build our country. Even better, we got to see the same companies introduce new machines into the market despite this unique and trying year. Whether it was in-person before travel came to a halt or via press releases and virtual media events, there was an impressive amount of product launches, and that's what this November/December issue celebrates — the innovative products and equipment released in 2020. Be sure to flip to page 14 to see all the manufacturers we're honoring and what great innovations came out. I promise, you won't be disappointed.

Looking ahead to 2021, we're hopeful for a quiet but exciting year (is that a thing?). First off, *Compact Equipment* turns 20! Plus, we're launching a new website and continuing our work on not one, but two video series. And maybe, just maybe, we'll get out and visit a tradeshow or a product launch or two. We know there's a lot of uncertainty out there, but we promise to be here covering the market and machines both in print and online.

Here's to a safe and healthy New Year!

Pam Kleineke
pkleineke@benjaminmedia.com

Publisher

Keith Gribbins
kgribbins@benjaminmedia.com

Managing Editor

Pam Kleineke
pkleineke@benjaminmedia.com

Contributing Staff Editor

Chris Crowell
ccrowell@benjaminmedia.com

Advertising Sales Manager

Ryan Sneltzer
rsneltzer@benjaminmedia.com

Advertising Account Representative

Hannah Schiffman
hschiffman@benjaminmedia.com

Graphic Designer

Sarah Haughawout
shaughawout@benjaminmedia.com

**Director of Web/
Audience Development**

Mark Gorman
mgorman@benjaminmedia.com

**Audience Development/
Sustainability Coordinator**

Cayla Poteete
cpoteete@benjaminmedia.com



Chief Executive Officer

Bernard P. Krzys
bkrzys@benjaminmedia.com

President

Robert Krzys
robk@benjaminmedia.com

Controller

Marianne Saykes
msaykes@benjaminmedia.com

Director of Sales

Kelly Dadich
kdadich@benjaminmedia.com

Benjamin Media Inc.

10050 Brecksville Rd.
Brecksville, OH 44141 USA
330.467.7588 • Fax: 330.468.2289
E-mail: info@benjaminmedia.com

DOOSAN[®]

Powered by
Innovation



MANAGED BY YOU.

Sometimes, looking at the big picture means thinking small.
Demo a Mini Today!

Learn more at
discoverdoosan.com/CompactEquipment

Doosan[®] and the Doosan logo are registered trademarks of Doosan Corp. in the United States and various other countries around the world.
© 2020 Doosan Infracore North America, LLC. All rights reserved.



The proposed four Bobcat compact excavator models include the E10, E20, E35 and E50 (pictured).

ELECTRIC E4

Bobcat and Green Machine Team Up to Sell Alt-Propulsion Excavators

By Keith Gribbins



Bobcat Co. had a busy 2020. The famous compact equipment brand has been aggressively revamping product lines (from Next-Generation R-Series loaders to R2-Series excavators), entering new categories (like zero-turn mowers), refining its dealer network (dig all dealer changes at compactequip.com) and pushing technology in a variety of different directions (let's run through a few examples before we get to that headline).

Let's start with the just launched Bobcat MaxControl app, which allows remote operation of Bobcat equipment via a mobile phone or tablet, which of course everyone wants to try. Future enhancements to the app will include known object avoidance protocols (create geofences around obstacles and push the machine to avoid objects on the jobsite) and programmed navigation (plot GPS points and push the machine into simple, semi-autonomous operation).

In September, Bobcat announced its Features On Demand option, a patent-pending technology that gives customers the flexibility to enable additional features on its R-Series compact loaders like software as a service. Customers can install and uninstall options like: 2-Speed travel; high-flow hydraulics; automatic ride control; dual-direction bucket positioning; and even a reversing fan. Bobcat also just upgraded its Machine IQ wireless communication service with two new subscription packages — Machine IQ Basics and Machine IQ Health and Security — for customers to check on the health of equipment and remotely track info that enhances maintenance, security and performance.

A lot of these technologies were teased at CONEXPO-CON/AGG, which I was lucky enough to attend before the world shutdown from the pandemic in March. At that giant tradeshow, only happening every three years, Bobcat also pushed alternative propulsion technologies. Bobcat showed off three electric concept machines at the show: the E17e, an electric excavator; the S70e, an electric loader; and the T76e, an all-electric loader.

Bobcat is looking to go electric with velocity, so Doosan Bobcat North America found a partner to help build and sell these units. Green Machine Equipment Inc., a popular manufacturer of renewable power drive systems that also supplies and sells Takeuchi electric excavators, will provide electric/hydraulic Bobcat compact excavators.

"With this agreement, we have a partner that is able to provide the expertise needed for us to bring the latest technologies to our customers and accelerate electrification in our industry," explained Joel Honeyman, vice president of global innovation at Doosan Bobcat North America. "Green Machine will custom retrofit four of our Bobcat excavator models with their proprietary battery and battery management technology to replace the diesel power source. Green Machine will then sell the converted machines in select markets."

Launched in 2010, New York-based Green Machine is a wholly owned subsidiary of alternative energy company Viridi Parente, which uses advanced lithium-ion cell technology paired with its System Intelligence platform to deliver big, emissions-free power in mobile and in-place applications. Green Machine and Bobcat state these electric/hydraulic machines will provide the same power and performance equivalence of diesel-powered models, along with considerably lower daily operating costs, zero emissions, reduced noise and minimal maintenance.

"Maintenance will definitely be minimal on the new electric machines since battery management technology will replace the diesel power source," said Honeyman. "Like any machine, routine maintenance will be important in keeping electric excavators running properly. Customers of these machine will appreciate how they compare to their diesel counterparts."

The converted machines will be available for sale in select North American markets beginning in 2021. The proposed four Bobcat compact excavator models include the E10, E20, E35 and E50. These models provide a good platform and model mix of Bobcat's current compact ex-

WATCH ONLINE: CAT'S AWESOME PAC-MAN TRIAL VID



Leave it to Caterpillar to do something this cool. Continuing the company's successful Cat Trials series, a total of eight videos which have logged more than 18 million views, Caterpillar released its first new Cat Trial video in four years. Cat Trial #9: PAC-MAN takes on the video-gaming world to celebrate Caterpillar's 95th anniversary, while PAC-MAN celebrates its 40th anniversary. It's basically a real-life dirt version of PAC-MAN played out on a 162.4-ft x 180.4-ft version of the iconic game board — 19,040 percent larger than the original arcade screen. Remote control skid steers operate PAC-MAN and the ghosts. Caterpillar also stayed true to the original game by including fruit bonuses in the course, represented by Cat parts boxes, to earn extra points. It's all very awesome. Watch it at compactequip.com.

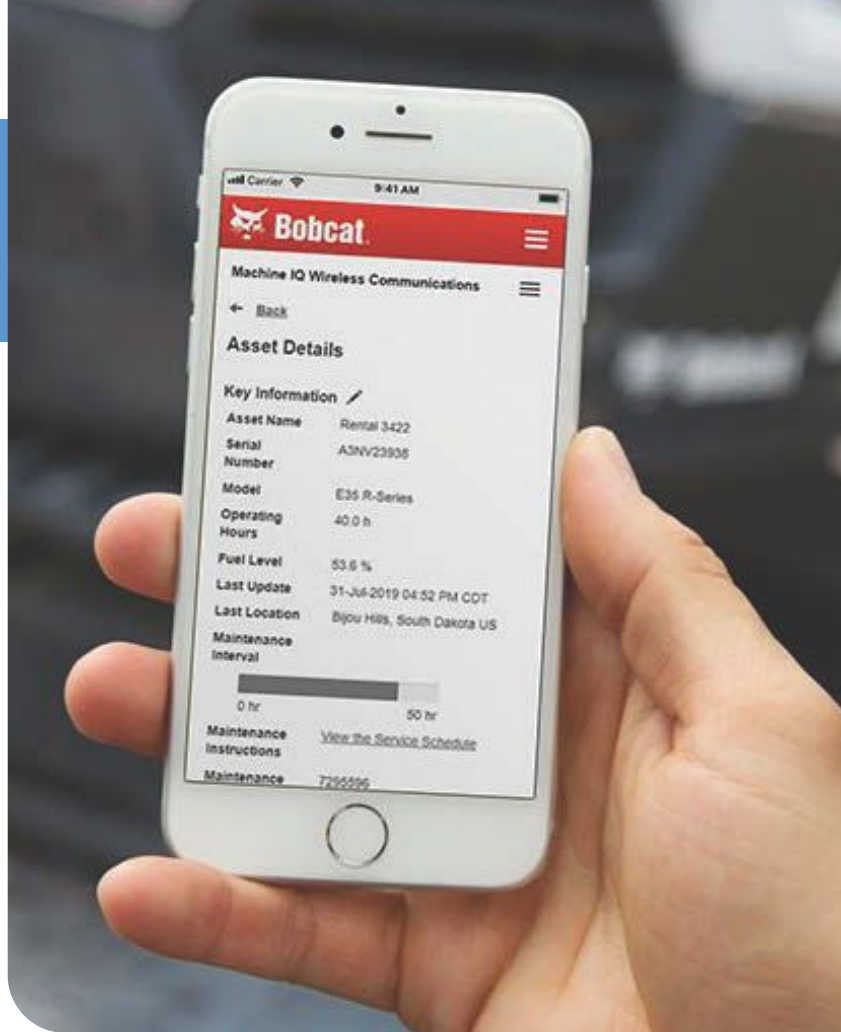
Bobcat also upgraded its Machine IQ wireless communication service with two new subscription packages in 2020 — Machine IQ Basics and Machine IQ Health and Security.

cavator line for customers interested in battery-powered machines.

“Electric machines will be able to help contractors in select markets, especially those in specific construction and utilities applications,” said Honeyman. “The machines will be especially beneficial for those who are working in urban environments — such as working indoors, close to other buildings or in public spaces. In addition, electric machines can help fill the need for contractors who need reduced noise on a busy jobsite and for those who are environmentally conscious. Our customers in these markets have been very interested in this kind of technology so it made sense to introduce electric excavators in select markets first.”

What’s the timeline for other electrified Bobcat units, including the industry’s first all-electric loader? We’ll keep you updated.

Keith Gribbins is publisher of *Compact Equipment*.



Jaibot is a big step toward seeing the efficiency that digital transformation can and will bring to construction sites.

HILTI UNVEILS BIM-ENABLED CONSTRUCTION JOBSITE ROBOT

Tool and tech pioneer Hilti continued to wow with awesome technology in 2020. It announced the EXO-O1 wearable exoskeleton this past summer. To finish out the year, Hilti introduced its first robot, Jaibot, for semi-autonomous mobile ceiling-drilling. The Hilti Jaibot construction robot will help mechanical, electrical and plumbing (MEP) installation contractors tackle productivity, safety and labor shortage challenges. With this new construction automation solution, Hilti takes a further step toward the digitization of construction sites. The Jaibot executes its tasks based on building information modeling (BIM) data. It locates itself accurately indoors, drills the holes dust-controlled and finally marks them according to the trade. This is what makes the solution ideally suited for the MEP industry.



JOHN DEERE

NO PAYMENTS NO INTEREST 90 DAYS

ON COMPACT CONSTRUCTION EQUIPMENT



Hard days don't stop you from getting the job done. And as you go steel-toe-to-toe with every challenge to run your world, we're here to help with no payments and no interest financing for 90 days on new John Deere Compact Construction Equipment.¹

Because we've always got your back, for the long run.

CONTACT YOUR DEALER TO LEARN MORE.

[JohnDeere.com/NPNI](https://www.johndeere.com/NPNI)

¹Offer valid on qualifying purchases made between 01 October 2020 to 31 January 2021. Subject to approved installment credit with John Deere Financial, for commercial use only. Down payment may be required. Average down payment is 10%. No payments, no interest for 90 days, followed by fixed interest rate financing. See your dealer for complete details. Taxes, freight, setup and delivery charges could increase monthly payment. Available at participating U.S. dealers. Prices and models may vary by dealer.

Aerial Coverage

Genie Launches Enhanced Electric Drive System Across GS Slab Scissor Line

MEWP master Genie announced a cool sounding new E-Drive, an optimized AC electric drive system, available across its entire line of GS slab scissor lifts. Based on industry-standard HIRD cycle testing, E-Drive scissor lifts have shown a 30 percent increase in runtime per charge, with up to a 20 percent reduction in lifetime battery costs, according to Genie. The new E-Drive motors are brushless and fully sealed against moisture and water for maintenance-free longevity. Further reducing service downtime, the new GS E-Drive scissor lifts have 70 percent fewer hydraulic hoses and fittings, drastically reducing the potential for hydraulic leaks. For more info, visit genielift.com.



Hy-Brid Lifts Launches Intelligent Controls

Low-level access experts Hy-Brid Lifts just introduced Intelligent Controls, offering what it calls intuitive and safe operation of its lifts. The new Controller Area Network (CAN) bus controls come standard on all Pro Series Hy-Brid Lift models and replace the previous hard-wired controls. With features including a diagnostics display, indoor/outdoor selection and movement controls, the panel makes operation easier than ever for users. The Intelligent Controls includes selection buttons for driving and lifting control. The driving control engages steering and forward and backward motion. The lifting control engages the up and down movement of the platform. For more info, visit hybridlifts.com.

Avant Tecno Now Sells Long-Armed Leguan Spider Lifts

Avant Tecno. We know the brand for its cool Euro-style, attachment-focused loaders, which we are generally calling "small articulated wheel loaders." Now, it's getting into the spider lift game, an equally cool, European-style equipment category, with a partnership to distribute Finnish Leguan Lifts. Since October, Avant Tecno USA and select dealers in its extensive network began promoting, selling and servicing the Leguan 190 spider lifts designed generally for tree care and rental use but also any application that needs a nimble, high reach machine in a compact, easily towable size. For more info, flip to our rental story on spider lifts on page 38. If you still need more info, visit avanttecno.com.





ENCLOSED LIGHT
EQUIPMENT TRAILERS



TRAILERS THAT WORK...



LIKE



NO



OTHER.

Brute Trailers by Bravo are not your typical "throw away" enclosed trailers. They have been engineered and tested for the rigors of construction equipment hauling. Find out more by visiting our website or call Bravo today!

bravobrute.com 877-99-BRUTE



©2020 BRAVO TRAILERS, LLC

INNOVATIVE IRON AWARDS

- 2020 -

WE HONOR THE TOP EQUIPMENT OF 2020

By Keith Gribbins

Even when the world shut down this year, construction equipment continued to roll. Since the beginning of the pandemic, crews and projects have been considered essential. Key machinery markets like housing are actually bucking the trend and growing in our new Covid economy. Somehow, I was able to attend two important machine tradeshow in February and March (The Rental Show and CONEXPO-CON/AGG) before all the chaos, and equipment manufacturers continued to release awesome, industry-changing products throughout 2020 despite the incredible challenges. The persistence, dedication and innovation of both equipment makers and the equipment trades (construction, rental, ag, landscape and beyond) blew me away this year. They helped build a clearer path in our radically changed world, and I'd like to honor all of them by highlighting what I consider the best compact, off-highway machines, technologies and OEM systems released for sale or concept in 2020. Congrats to all the companies included, and thanks to all the men and women behind these brands. They are essential in today's rapidly changing world.

Keith Gribbins is publisher of *Compact Equipment*.



THE MANY DIMENSIONS OF

DIRT

John Deere's SmartGrade 333G Compact Track Loader

Track loaders are evolving. CTLs are officially the most popular loader tool carrier in America, leaving skid steers (apologies here) in their tracks. Now, smart companies are niching these units with market-focused hybrids. John Deere's SmartGrade 333G compact track loader combines the versatility and convenience of a compact track loader with the power and reliability of a crawler dozer, and it looks utterly awesome. Released in concept in 2020 and for sale in early 2021, the SmartGrade 333G integrates John Deere's "mast-less" SmartGrade grade control software and accessories (Topcon's 3D-MC2 tech) directly into the structure at the factory. Also, with the push of a button, DozerMode enables the EH joystick control system to function like a crawler dozer, benefitting an operator wielding a six-way dozer blade attachment. Precision grade work is a hot market for CTLs right now, and the SmartGrade 333G brings new category-changing dimensions as an exacting dozer hybrid that both reduces the amount of operator input needed for a complex task while ultimately lowering that operator's fatigue. For more info, visit deere.com.



ZERO EMISSIONS, ZERO FUEL COSTS

INNOVATIVE
IRON
AWARDS

- 2020 -

Toro's e-Dingo 500 Compact Utility Loader

Battery-powered propulsion is thankfully becoming an important option for compact earthmoving equipment and tool carriers. While electric mini loaders have been the bread and butter of brands like Sherpa, Toro made a major step into the electric-powered equipment marketplace with the introduction of the new Toro e-Dingo 500 compact utility loader. The e-Dingo allows end-users to realize all the benefits and power of a small, standard compact utility loader with no fuel costs and zero exhaust emissions. It's ideal for indoor construction — especially with those white, non-marking tires. It's powered by lithium-ion battery technology, boasts both an Auto Idle feature and max operating capacity of 515 lbs and utilizes Toro's 4-Paw independent four-wheel drive system. Plus, it's compatible with 10 Dingo attachments from buckets to breakers to blades. For more info, visit toro.com.





WHEEL LOADER PIVOT

Bobcat's L23 and L28 Small Articulated Loaders

Bobcat sells just about every category of compact tool carrier under the sun. Skid steers, track loaders, mini track loaders, excavators, telehandlers, utility tractors and, new to 2020, the new Bobcat L23 and L28 small articulated loaders. These ultra-small, tool carrying wheel loaders are popular in Europe, sized to fit busy streets, sidewalks and walking paths for snow removal, tree care and landscape and facility maintenance. Powered by 24.8-hp, 2,600-rpm engines, the L23 and L28 articulate to minimize tire wear and save on fuel compared to a skid steer or track loader. Operators will use a steering wheel and joystick to operate, a heated cab enclosure and heated seat will be options and there will no doubt be a zillion attachments to choose from due to utilizing a Bob-Tach interface. The bigger Bobcat L28 model even has a telescoping lift arm that extends up to 24 more inches. For more info, visit bobcat.com.

CRAWLER SKID-EXCAVATORS

INNOVATIVE
**IRON
AWARDS**

- 2020 -



Mecalac's 6MCR, 8MCR and 10MCR

Combine the swiftness and attachment dexterity of a skid steer with the 360-degree rotation and dig skills of a mini ex and you have Mecalac's MCR Series. Excitingly, the French-based Mecalac brand has recently been releasing its unique species of Euro machines into the American market (dumpers to rail excavators). That includes the newly updated MCR Series "crawler skid-excavators" (the 6MCR, 8MCR and 10MCR). These units feature a hydrostatic transmission, drive motors and dedicated pump drives that allow MCRs to travel twice the speed of a traditional mini ex (6.2 mph). The company's patented quick coupler Connect allows operators to quickly transition between implements (pallet forks to buckets) without leaving the cab. MCR units also utilize a unique three-part arm, boasting 360-degree reach during operation and zero-turn compactness when confined or stowed. For more info, visit mecalac.com.



COMPLETE CONTROL

Cat's 420 XE Backhoe Loader

Caterpillar announced five new backhoe loader models operating in the 14- and 15-ft size classes in 2020. These units offer updated operator stations, new C3.6 Tier 4 Final engines, selectable power management modes, VisionLink and beyond. The 420 XE model specifically combines a unique range of integrated hydraulic tech. Seat-mounted controls stay with the operator as they spin from loader to backhoe. Operator control modes allow the unit to be tuned to skill set or preference. Adjustable joystick response and hydraulic modulation is available through the all new LCD touchscreen display. Electronic loader controls allow true parallel lift and programmable kick-outs, and return-to-dig automates operations. This unit has it all. For more info, visit cat.com.



DURABLE. DOWN & DIRTY.

Sullair compressors are built to spend days on end doing the dirty work — from the smallest projects to the biggest jobs and everything in between.

Learn more at Sullair.com



A Hitachi Group Company

INNOVATIVE
IRON
AWARDS

- 2020 -





CHARGE UP

Case's 580 EV Electric Backhoe Loader

Case Construction Equipment released so much great product in 2020. Six new excavators. The awesome DL450 compact dozer loader. Eight all-new B Series skid steers and track loaders — and what else? — oh, the construction industry's first fully electric backhoe loader the 580 EV (electric vehicle). The 580 EV is powered by a 480-volt, 90-kilowatt-hour lithium-ion battery pack that can be charged by any 220-volt/three-phase connection. While applications will vary, each charge will support most common eight-hour workdays. The battery separately powers the drivetrain and hydraulic motors, resulting in hydraulic breakout forces equal to diesel-powered machines and improved performance during simultaneous loader and drivetrain operation. Just like its 580N counterpart, the backhoe dig depth is over 14 ft with the loader side sporting a bucket breakout force of 9,506 lbs. Case even partnered with Michelin to use specialized CrossGrip tires for even greater efficiency and handling. For more info, visit casece.com.

INNOVATIVE
IRON
AWARDS

- 2020 -





NOW, I CAN SEE

ASV's MAX-Series Compact Track Loaders

Ye old skid steers and track loaders are notorious for their mediocre visibility and comfort. All the latest SSL and CTL brand revamps try to address this, but none have created a cab experience quite like ASV's new MAX-Series units. That floor-to-ceiling glass cab design with clear sides and frameless door provide unmatched visibility (unless maybe you compare a one-armed loader from JCB). The operator station can be upfitted luxuriously: a new fully suspended seat, four-way armrest settings, 7-in. touchscreen display, one-sided lap bar, 2 more inches of width at the shoulders, 8 in. more width at the knees and up to 4.5 in. more foot room than previous models. Bluetooth radio and improved speakers are available. There's even an escape hatch on the roof (an industry first). This is all built on the hydraulic performance, Posi-Track undercarriage technology, reliability and serviceability expected from an ASV loader. For more info, visit asvi.com.

BALANCE OF POWER

Kubota's SCL1000 Stand-On Track Loader

Kubota is always methodical when it decides to enter a new category of equipment, and the new SCL1000 stand-on track loader looks like precision engineering on a compact scale. The SCL1000 is on the smaller side of the stand-on tool carrier market, yet it has wide 9.8-in. tracks which balances the 36-in.-wide narrow body, sporting a rated operating capacity of 1,000 lbs. As you might expect, Kubota's SCL1000 boasts a 24.8-hp, turbocharged Kubota diesel engine. The loader arms reach high and far with a hinge pin height of 84.7 in. and a reach of 25.9 in. at a 45-degree dump angle. The loader comes standard with a keyless start with passcode protection, 12-volt charging port and a 4.3-in. LCD color dash monitor that provides easy-to-read machine monitoring. The SCL1000 also has a best-in-class travel speed of 4.9 mph. For more info, visit kubotausa.com.



INNOVATIVE
**IRON
AWARDS**

- 2020 -



ROLLING ALL DAY, ALL WEEK

Hitachi's ZW80 T4F Compact Wheel Loader

Nimble. Safe. Low maintenance. Powerful. Built for both comfort and long hours. Hitachi's ZW80 T4F compact loader checks all the boxes for a work-all-day wheel loader. The modern exterior sloping and pillarless cab design with floor-to-ceiling glass provide clear visibility all around the machine. A 66-hp engine powers a breakout force of 8,270 lbs with a 1.2 yd³ capacity bucket. A small counterweight adds agility and balance. Both doors swing back and lock, allowing operators to quickly talk to the crew. The ZW80's top speed is 21.1 mph, easily the quickest in this size class. Eco Mode reduces rpms and cuts fuel consumption by about 10 percent and an oscillating axle easily handles irregular terrain, maintaining a smooth ride and stable load-carrying. This unit's ready for your 12-hour day. For more info, visit hitachi.us.



HIGH REACH, ZERO EMISSIONS

Snorkel's SR5719E Electric Compact Telehandler

The Snorkel SR5719E is the world's first and only electric compact telehandler. Powered by 80V 300Ah lithium-ion batteries, the SR5719E can perform continuously between charges for up to six hours. The SR5719E delivers a maximum lifting capacity of 5,732 lbs and a maximum lift height of up to 19 ft, maneuvering with four-wheel steer and three steering modes (front, crab and coordinated). Built compact at just 6 ft, 2 in. wide, the SR5719E offers low noise and zero emissions, suitable for indoor use or for using outdoors in low emission zones such as city centers. The on-board single-phase charger provides a full charge overnight, while off-board charger options are available for fast-charging capabilities, up to 2.5 hours for a complete charge. The SR5719E delivers a reduction of up to 60 percent in operating costs over the diesel equivalent. Bonus: A universal skid steer attachment plate is available. For more info, visit snorkellifts.com.

INNOVATIVE
IRON
AWARDS

- 2020 -



FIORI
CONCRETE MIXERS



10 MODELS NOW AVAILABLE TO RENT

DOMINION
Equipment Parts

FIORI

(800) 365-7260
depparts.com/fiori

POWER MEETS COMFORT

Takeuchi's TB370 Compact Excavator

The TB370 is the first in Takeuchi's new 300 Series compact excavator line, and it's a doozy. A bigger machine in the 6- to 7-ton class, customers in general contracting, landscaping, utility construction and rental can enjoy a productive blend of power and comfort. The TB370 has an operating weight of 14,850 lbs, dig depth of 13 ft, 4.7 in. and max reach of 21 ft, 11.4 in. It has an impressive bucket breakout force of 14,613 lbs and a high-flow auxiliary circuit up to 31.7 gpm. That's all powered by a Kubota turbocharged diesel engine, delivering 56.9 hp and 168.1 ft-lbs of torque. The TB370 cab includes an 8-in. touchscreen color monitor, integrated air conditioning and Bluetooth radio. For more info, visit takeuchi-us.com.



4-TON DYNAMO

Yanmar's SV40 Compact Excavator

The 4-metric-ton mini excavator category is super popular these days, and Yanmar's new SV40 compact excavator is looking to redefine the definition of compact power with best-in-class power, digging force and lifting capacity. Available in cab and canopy, the SV40 boasts a 39-hp electronically controlled Yanmar Tier 4 Final diesel and an 11-ft, 10-in. dig depth. Options include a second PTO function, four- and six-way blades and an additional counterweight. The SV40 comes standard with Eco Mode, Auto-Decel Mode, a lever-controlled backfill blade with float position and two-speed travel. There's an LCD monitor, speakers and Yanmar's patented hydraulic quick-coupler. For more info, visit yanmar.com.



INNOVATIVE IRON AWARDS

- 2020 -

SMART SCISSOR

JLG's Davinci AE1932 All-Electric Lift



All mobile elevating work platforms are changing dramatically in 2020 with new ANSI A92 standards, so it's overly impressive to see a unit like JLG's Davinci AE1932 all-electric lift double down on innovation. This e-scissor uses a single lithium-ion battery, expected to last 120-plus months (the machine's lifespan). This is the first unit in the industry to recover energy while the platform is being lowered, which contributes to a 70 percent decrease in power consumption. The 19-ft platform height, 32-in. wide AE1932 scissor also provides a class-leading platform capacity of 600 lbs both indoors and outdoors. It travels two times faster than a standard scissor lift, and operators can drive the AE1932 via JLG's new Mobile Control app. For more info, visit jlg.com.

ACCURACY IN AIR

Sullair's Mid-Range Series Compressors



The compressor experts at Sullair are providing operations with almost infinite precision. Its new Mid-Range Series is the first to incorporate Electronic Spiral Valve technology (the 800HH/900H model delivering 800 to 900 cfm at 150 to 200 psi and the 920H/1100 model delivering 920 to 1,100 cfm at 100 to 150 psi). Spiral Valve Tech helps maximize fuel efficiency and extend runtimes by precisely matching air supply to demand. Operators can quickly input the exact pressure they want, anywhere between 100 or 200 psi, and the machine calibrates to give the maximum flow at that pressure. Offering both high- and low-pressure offerings and nearly infinite combos means this one compressor covers the job of nine. For more info, visit sullair.com.

ABSOLUTE CHORE TRACTORS



John Deere 4M Heavy-Duty Tractor

Tractor great John Deere added some impressive power to the commercial utility segment in 2020. The 4M Heavy-Duty Tractor is easily one of the most versatile on the market, equipped with a category I/II hitch with telescoping draft links so customers can use one tractor across a broad range of implements and hitch specifications. The new 4M Heavy Duty is available in two output ratings, the 52-hp 4052M HD and the 66-hp 4066M HD. Both units feature John Deere's innovative three range eHydro transmission with Twin Touch pedals. The eHydro transmission also includes eThrottle, Load-Match, MotionMatch and SpeedMatch systems along with automotive-style cruise control. It's also super compact with a 73-in. wheelbase. For more info, visit john-deere.com.

Kioti CX Series Tractors

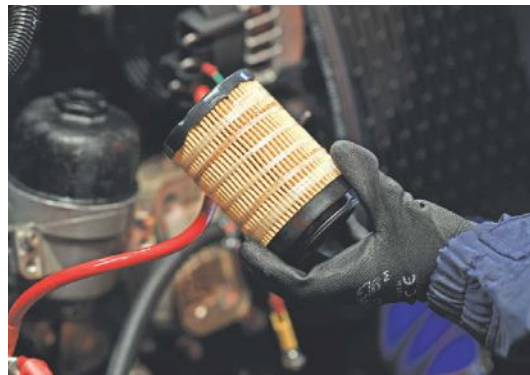
Kioti Tractor continued to fill out its impressive portfolio in 2020. The first two units in its new CX Series offer a great combo of size and performance in an economized commercial package, making these models great for construction and landscape pros. The series boasts two ROPS models with either a manual (CX2510) or HST (CX2510 HST) transmission, both with 24.5 engine hp and PTO hp ratings of 19.3 and 18.8, respectively. The HST model offers dual HST pedals, providing easy forward and reverse movement with smooth engagement. Dual arm rests, tilt steering wheel, hydraulic cushioning seat, tons of floor space and a cool illuminated dashboard make the operation area commercial grade. The category I three-point hitch and mid-mount PTO option make it a great utility player. For more info, visit kioti.com.



INNOVATIVE OEMS

Perkins Ecoplus Filters

The always innovative experts at Perkins introduced their excellent Ecoplus oil filter line in 2020, which uses a replaceable element inside a reusable filter housing. This eliminates the disposable metal canister, keeping them out of landfills. The Ecoplus filter can also be incinerated where local regulations allow. Compared to traditional spin-on oil filters, Ecoplus filters have no metal content, are smaller, have higher quality media and use a glass-filled nylon body housing that is very tough and can withstand extreme changes in temperature. For more info, visit perkins.com/ecoplus.



Chevron's Delo 600 ADF Oil

Released December 2019, we're making an exception for Chevron's new Delo 600 ADF super low sulfated ash oil in our 2020 innovations. Chevron's Delo 600 ADF with Omnimax boasts way less maintenance for Tier 4 Final emissions-compliant off-highway diesel engines — specifically engines using diesel particulate filters (DPFs). Heavy-duty engine oil produces about 1 percent sulfated ash. Chevron's Delo 600 ADF is formulated to 0.4 percent sulfated ash. This equates to a 60 percent reduction of ash in the DPF and translates to DPF service life 2.5 times longer than standard. For more info, visit chevronlubricants.com.

Deutz's Advanced Configurator/Electric Hybrid Drive System

Deutz rocked CONEXPO-CON/AGG in March with a whole host of awesome new technology. Two favorites include the Deutz Advanced Configurator app, which is a modular product design toolbox to help OEMs engineer diesel, gas, hybrid, electric and hydrogen technologies to create the best possible solution. Deutz also presented an electric hybrid drive system in 2020 designed specifically for use in aerial working platforms for low-load applications. The new Deutz D 1.2 hybrid engine combines a highly compact three-cylinder diesel engine with a capacity of 1.2 liters and a 48-volt electric motor. For more info, visit deutzusa.com.



VISIONARY IMPLEMENTS



VISIONARY IMPLEMENTS

TWELVE ATTACHMENTS AND TECH THAT REDEFINED
TOOL CARRIERS IN 2020

By Keith Gribbins



Cat Smart Attachments

Phones, TVs and now Caterpillar attachments are earning their digitized “smart” badge. Cat released its first three Smart attachments — a dozer blade, grader blade and backhoe — which when matched to certain Cat D3 Series skid steers and compact track loaders will unlock attachment-control mode changes in the standard joysticks, gifting the operator better precision control. Assist features enhance the dozer and grader blade into entry-level grade control apps. The backhoe sports side-shift, takes attachments off the boom and can be operated in excavator pattern. The grader blade even has foldable wings. For more info, visit cat.com.

Trimble Earthworks 2.0

The technologists at Trimble revamped its already (ahem) ground-breaking grade control platform in 2020 with Version 2.0. So many amazing features for so many different machines, just not enough space: mastless motor grader configs; Earthworks Assistant App for in-cab learning material; horizontal steering control for dozers; augmented reality for excavators; integrated Trimble Loadrite Payload Management; and beyond. The coolest part: Trimble Earthworks 2.0 is now also available for compact grading attachments with dual GNSS, single GNSS and total station guidance options. For more info, visit civilconstruction.trimble.com.



Danuser EP Auger System

Power hungry hole diggers need look no further than the new EP Auger System. Its planetary gear drive is up to 42 percent stronger than the competition, according to attachment-maker Danuser. That robust planetary gear drive and motor delivers greater torque for drilling through hard, compacted surfaces, while featuring easily accessible check-and-fill plugs for easy maintenance. An array of models are offered from 6 to 35 gpm and 1,500 to 3,500 psi, perfect for utility tractors, backhoes, excavators and skid steer and track loaders. Other improvements include a new, beefy skid steer quick-attach mount. For more info, visit danuser.com.

Vacuworx PHD Portable Vacuum Lifting System

A battery-powered vacuum lifting attachment that weighs just 25 lbs yet generates enough power to lift up to 2,500 lbs is an easy innovative implement pick. The PHD Portable Vacuum Lifting System can be mounted on everything from mini skid steers to forklifts to demolition robots. Vacuworx designs all its vacuum attachments as ultrasafe, so of course the PHD incorporates a remote control so the operator doesn't sit next to heavy loads. It's designed with a 12V 30 amp/hour rechargeable lithium-ion phosphate battery and twin pump design to work faster, safer and (here's a theme) smarter. For more info, visit vacuworx.com.



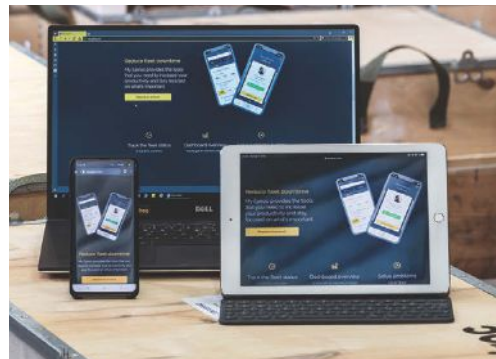


Level Best Grader Blade

Level Best has been making top tier grade control attachments for decades, but its new unit is a radical departure from its standard grading box design. It is accurate up to 0.1 in. of spec, easy to use even by inexperienced operators and is compatible with virtually all makes of today's popular compact track loaders and skid steers. Both box and blade automatically adjust more than 50 times per second in guidance mode, something no other equipment in the category does. Hydraulics use counterbalance valves for zero drift and greater safety. This new Precision Grader Blade adjusts in four different directions to cut and move soil to form windrows, and it works with 2D guidance, 3D guidance and in manual mode. For more info, visit levelbestgrading.com.

Epiroc HATCON

Atlas Copco's spinoff attachment brand Epiroc is now offering telematics tech on tough working attachment categories like breakers and drum cutters. HATCON or Hydraulic Attachment Tools Connectivity is a remote monitoring device for breakers and drum cutters that keeps track of location and operating hours to improve efficiency and safety. The cloud-based platform My Epiroc gives customers notifications about service, creates task lists and provides an overview of the entire fleet. HATCON is available factory mounted or as a retrofit kit for Epiroc premium range breakers and drum cutters. For more info, visit epiroc.com.



Fecon Standard-Flow Mulcher

Track loaders with brush cutting attachments have become so popular, Fecon introduced a standard-flow mulcher head for loaders with less auxiliary gpm. This standard-flow mulcher has reversible tooling and optimal rotor diameter that were designed specifically for the hydraulic power of standard-flow loaders. It also features a variable displacement hydraulic motor, allowing users to adjust the head with the turn of a screw should the application change from say soft wood to hardwood or smaller to larger material. A variable displacement motor also spins the rotor faster, stalls less and recovers more quickly. For more info, visit fecon.com.

Lowe Core 8 and 8U Augers

This Nov./Dec. issue is always a herald for the winter work season, and cold work is definitely cool with Lowe's Core 8 and 8U augers, designed for road crews who are removing or replacing rail posts, even more so during winter. Core augers are engineered for post removal from frozen or highly compacted ground. With conical carbide teeth, high-strength steel construction, a 12-in. inside diameter and a 17-in. outside cutting diameter, the Lowe Core augers can dig around square posts that are up to 8 in. across. They easily attach to a wide range of skid steer and compact track loader models. For more info, visit loweman.com.





Loftness L Series Low-Flow Battle Ax

Seeing similar demand for lower flow brush work, Loftness expanded its line of Battle Ax horizontal drum mulchers with the new L Series, designed for low-flow skid steers with 16- to 30-gpm hydraulic flow ratings, available with 51- and 61-in. cutting widths. Like other Battle Ax models, the L Series features a new rotor design with built-in depth gauges, which function similarly to raker teeth on chainsaws to prevent the attachment from engaging too much material at one time. This unique design is ideal for managing the amount of material being fed into the attachment than ring-style rotors, which many operators find to be overly limiting. For more info, visit loftness.com.

Kubota CC30 Concrete Claw

Call in the claw. The Kubota CC30 Concrete Claw is used for digging and removing large sections of concrete floors, driveways, sidewalks and other large slabs. Simply slide the teeth under a concrete slab, lift and load the slab under the pin-under top for clean and efficient concrete removal. The CC30 Concrete Claw features a universal quick-attach hitch that fits a wide variety of loaders and makes the attachment easy to attach. Its high strength T1 steel side panels resist bending and its specific design will save customers from damaging their standard buckets when removing concrete. For more info, visit kubotausa.com.



Montabert Water Mist System

Montabert, a world leader in design and manufacturing of hydraulic rock breakers, introduced its new water mist system at CONEXPO-CON/AGG 2020. The feature was created to mitigate silica on jobsites following OSHA regulation changes. The spray feature will include an integrated hose protection design with a water inlet port. Breakers with this feature will have two lifting points for improved safety and a water nozzle that provides a wide-angle spray. The optional water spray will be available on Montabert's smaller breakers including the SC-22 and SC-28. For more info, visit montabertusa.com.

Werk-Brau Extreme Duty Excavator Buckets

Werk-Brau's new extreme duty excavator buckets are aggressive. They feature a serious dig angle, rugged construction with abrasion-resistant AR400 through AR500 steel and horizontal wear strips to effectively excavate in the toughest conditions. Designed for durability and effectiveness, even in brutal conditions, they are made in the USA with industry-leading lead times. Standard sizes available from 3/8 to 10 cu yds in various widths, with special designs and capacities available on request. The buckets are ideal for demolition work, shot rock, abrasive applications, moderate prying and material handling when paired with a tough thumb. For more info, visit werk-brau.com.





Luxury Loaders

Dream Big and Pick Out the Ultimate Skid Steer or CTL

By Pam Kleineke

Tis the season to dream big. Imagine your wish list for a skid steer or track loader. What does it have? An enclosed heated cab? Grade control? Telematics? Well, as much as we'd love to gift you your dream loader, it's just not in our budget. However, we can tell you all about features and options out there to build the ultimate skid steer or CTL. When chatting with manufacturers, comfort and productivity are the two biggest areas customers focus on, so let's start with the cab.

"There's now a push for machines that are not only productive, but also comfortable and provide a great operator experience," says Buck Storlie, ASV product line manager. "Instead of pushing only for more power, operators are

looking for features to make their days easier while on the job. Things like more spacious cabs, better legroom and visibility are growing in popularity. You can go all out in comfort with fully adjustable seats, an enclosed all-weather cab with heating and cooling, cell phone holders, Bluetooth radio and more. Improve ease of operation with joystick controls and dual throttle capabilities, plus ride control and bucket positioning. Finally, get as much visible area as you can to allow a better view of the attachment and your surroundings, improving productivity and safety."

To provide the ultimate operator experience, ASV recently introduced its new MAX-Series loaders which include an optional pressurized cab featuring a seal tested to be five times better than the competition, says the com-



pany. This is ideal for dusty environments and for keeping warm or cool air in the cab, depending on the temperature outside. Storlie says the models also feature industry-leading 360-degree visibility with 52 percent more visible area than ASV's previous designs.

Taking a further look at the cab, Kevin Coleman, Caterpillar's SSL/CTL product expert, stresses the importance of operator retention and how ergonomics and customization play a role in providing a comfortable experience.

"An operator's office should have an intuitive layout so that everything is effortlessly located and is accessible," he says. "This includes easy-to-locate items such as switches, cell phone storage and charging locations, A/C controls and heads-up display panels. All Cat skid steer and compact track loader models offer a heads up display panel located such that an operator can view the rear-view camera image, in conjunction with using the standard rear-view mirror, for excellent rear visibility without having to crane his neck to see when reversing the machine. And it should be roomy. The Cat D3 Series SSL and CTL models feature an extra 3 in. of knee room for even more operating comfort."

Coleman also discusses the ability to tailor a machine to a specific operator and how that not only makes operators happy, but also helps retain them. For example, Cat machines offer display monitors that provide the operator with control features that allow him or her to customize and save machine performance, language and display parameters with codes for up to 50 operators.

"These advanced operator control features provide the ability to adjust a number of machine settings such as the implement response as well as the drive system response," says Coleman. "This means an operator can adjust a machine to match his operation style, experience level or even a specific job task. The ability to tailor the machine performance to an operator's specific experience level allows operators of varying skill levels to be comfortable and productive, no matter the task or attachment."

Gregg Zupancic, John Deere's product marketing manager for skid steer loaders and compact track loaders, adds that eliminating operator fatigue is a constant priority for crews so the company focuses on that when designing its compact equipment. He says there are a variety of popular comfort features that operators may want to consider when purchasing machines.

"Enhanced lighting is a key element that can improve operator visibility during use," says Zupancic. "We offer an LED light package that amplifies lighting output to increase light projected both in front and behind the machine. An HVAC system is also ideal for most operators and can suit temperature needs in a variety of climates."

Beyond a comfy cab, Coleman says customers are looking for equipment that offers features that help make operation easier and more productive while helping turn a novice operator into a skilled one. He says features like a dual self-leveling system, return-to-dig and work tool positioner are all great for productivity and have been available on Cat loaders since 2013.

"These features can aid customers in saving time and/or making more money by automating repetitive tasks like grading, digging and loading and allow the machine to perform these tasks with less user interaction," says Coleman.

Sarah Peckskamp, Bobcat's marketing manager for loaders, highlights the company's new R-Series machines and features that make them the most productive for operators.

"Two-speed travel allows operators to spend less time traveling across a jobsite or between jobs," she says. "You can move faster and get the job done sooner. Bobcat's automatic ride control option reduces material spillage, allowing operators to travel at faster speeds across rough terrain. Thanks to its dampening effect, this option also increases operator comfort by offering a smoother ride."

Another option available for Bobcat's R-Series loaders includes a dual-direction bucket positioning, which keeps the load at a consistent angle throughout the lift cycle to reduce spilling.

Telematics and More Tech

So, we have the comfy cab and productivity boosting options covered. What's next? Fortunately, there's no shortage of cool technologies designed to keep operators efficient and fleets running smoothly.

Zupancic says industry trends are leaning more toward customers wanting remote access to critical machine information. Luckily, John Deere offers JDLink, a telematics solution that provides operators with vital information.

"This type of solution helps our operators stay on top of machine monitoring which ultimately helps the machine run better and extend the lifespan," he says. "JD-Link also helps operators quickly connect with their local dealer for machine checkups and flag potential maintenance cycles in advance to increase overall uptime and productivity."

ASV's Storlie adds he has seen a drive for new technology to make job and fleet management easier.

"High-tech digital touchscreen displays like those seen on some of our MAX-Series models include operator key codes for login and lockout," he says. "They also feature job clocks that can track machine fuel consumption, idle time, run time and service schedules as well as other important items that can improve a contractor's bottom line."

Peckskamp says Bobcat's next generation of compact loaders is packed full of exciting, new technologies to not only improve operator comfort and usability, but also reduce downtime.

"Bobcat MaxControl Remote Operation, Bobcat Features On Demand and more technology in the new R-Series loaders were designed to help equipment owners do more and do it even better than before," she says. "Bobcat MaxControl Remote Operation makes operating machines easier and more convenient. It acts like an extra set of hands when help is limited. Two-person jobs can now be handled by one worker, and operators can say goodbye to unnecessary trips in and out of the cab."

Pam Kleineke is managing editor of *Compact Equipment*.



UP AND OVER

Compact Crawler Boom Rentals Help Crews Reach New Heights

By Pam Kleineke

Compact crawler booms, also called spider lifts (depending on the manufacturer), give operators the ability to reach up and over to access even the hardest-to-reach spots. They're both awesome all-terrain lifts that are great on uneven ground, thanks to legs that lock into place and provide stability at varying elevations, and ideal for indoor work on fragile floors. Compact crawlers

are also ultra compact. They can fit through doors and be easily transported and stored. All of this makes these machines attractive to a variety of customers — especially in rental — often eliminating the need for scaffolding jobs.

“Compact crawler booms are ideal for tough, hard-to-reach indoor and outdoor applications that require the operator to bring tools and materials to the work area,” says Randy Marzicola, director of business development

at JLG Industries Inc. “Atriums, gymnasiums, arenas, auditoriums, airports, schools and universities, as well as city, state, federal and military facilities. The machines’ versatility and ease of mobility is also ideal for jobs performed in hotels and convention centers by window washers, painters, maintenance professionals, electricians and tree trimmers.”

With such a large and diverse customer base, compact crawler booms are a sought-after machine on rental lots. Unit sales are also on the rise.

“The majority of units JLG sells start out in a rental fleet, however, we do see a steady cadence of purchases from end-users who have jobs requiring more consistent usage,” says Marzicola. “Colleges and universities, where there is a consistent variety of indoor and outdoor maintenance work, are good examples.”

Jukka Kytömäki, president of Avant Tecno USA, agrees.

“In general, we see the rental market as the biggest opportunity for us,” he says. “However, we are also quickly discovering that a lot of our customers are investing in these machines, particularly in the tree care segment.”

In October, Avant Tecno USA announced select dealers in its extensive network would begin promoting, selling and servicing Leguan 190 spider lifts designed for tree care and heavy-duty professional and rental use. Regardless of the brand, how do you rent?

“There are several features that are key to meeting a users’ needs,” says Marzicola. “Up-and-over reach is considered very important, as are, platform height, working height and platform capacity. Environmental considerations also come into play for customers looking for a machine that can deliver clean, quiet operation, and lastly, space and weight criteria such as ground bearing pressure, particularly when working on sensitive flooring, are important.”

Renters will have choices in power and propulsion: AC power, gas or maybe an optional lithium-ion electrical system that doesn’t produce emissions. The biggest units might have a diesel option. Most of the drive systems we’ve seen in the United States are mounted on tracks, but wheels are available in the global market. Non-marking tracks or tires for indoor operation are available. Automatic levelling makes setting up the platform quick

and effortless. There may be a wired or wireless remote control for the driving and outrigger operation.

“Compact crawler booms are fairly intuitive machines,” says Marzicola. “They can be operated with ground controls or from the basket. Thanks to a handheld unit with a wire, you can step outside the basket to operate it while walking next to the machine. This is extremely helpful when maneuvering it through tight areas.”

Max working heights can range from 50 to over a 100 ft and max outreach ranges from 20 to over 50 ft. Platform or basket capacities hover around 500 lbs. Something else to consider is training. In order to operate a compact crawler boom, operators are required to complete ANSI A92 compliance training.

“Manufacturers like JLG and even select rental houses and associations can help you get certified,” says Marzicola. “Some of the things you’ll learn as part of the certification are regulations, safety hazards, proper operation and proper use of safety harnesses.”

Three Popular Lifts

Let’s look at three popular machines from JLG, Leguan Lifts and Falcon Lifts. JLG says the versatility of its X600AJ in the 60-ft height class makes it a popular option. Its ability to pass through a single-person doorway is also an attractive feature for a wide variety of users.

Leguan Lifts only offers one model in the United States and Canada — the Leguan 190. “In the design of this particular spider lift, special attention has been paid to durability, excellent up-and-over clearance and user-friendly interface,” says Kytömäki. “The Leguan 190 is the right choice for tree care, painters, construction work and facility maintenance.”

For Falcon Lifts, the FS95 hits a sweet spot for many users.

“Its compactness and low weight allow the unit to pass single doors and operate on sensitive floors,” says Brian Falck-Schmidt, sales director at Falcon Lifts. “The Falcon FS95 is the only model offering a double jib for maximum reach and flexibility during work.”

Pam Kleineke is managing editor of *Compact Equipment*.

CHECK, PLEASE!

JLG’s Randy Marzicola Discusses Two Important Inspections to Conduct Prior to Operation

1. Check the workplace. Before operating the lift, a workplace inspection should be completed that includes checking the work area for overhead hazards such as electric lines and bridge cranes. Floor surfaces should be checked for holes, bumps, drop-offs, obstructions, debris, concealed holes and other potential hazards. Ground conditions should be evaluated to determine if they are able to support the maximum load shown on the decals located on the machine.

2. Check the machine. A machine inspection and functional checks should be completed prior to operation in accordance with the machine operation and safety manual. All machines should be serviced and maintained to the standards outlined in its operation and safety manual before use. This includes checking that all safety devices are operating properly and have not been modified and that all safety decals and instructional placards are in place.

DON'T BITE OFF MORE THAN YOU CAN CHEW ...OR LESS



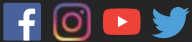
EXCLUSIVE DEPTH GAUGE DESIGN

The key to maximizing productivity from a mulching attachment is not to bite off too much – or too little – material at one time. That’s why we gave the new Battle Ax rotor unique depth gauges that optimize the material feed rate to always keep the machine operating at top efficiency.



TWO-STAGE CUTTING CHAMBER

Get consistently shaped particle sizes with the exclusive two-stage cutting chamber featuring an adjustable primary shear bar.



LOFTNESS.COM

AD INDEX

Advance Metalworking Inc	41
Bravo Trailers	13
Caterpillar Inc.....	2
Dominion Equipment Parts - Tracks.....	41
Doosan Infracore North America	7
Fiori	27
JLG	3
John Deere.....	11
Loftness Mfg.....	40
Motor Components, LLC.....	5
Perkins Engines	44
Sullair	19

IN NEED OF REPLACEMENT RUBBER TRACKS?

GO WITH AMERICA'S MOST TRUSTED BRAND,
DOMINION RUBBER TRACKS

YOUR SOURCE FOR:

- Morooka OEM Parts
- Yanmar OEM Parts
- Replacement Undercarriage

DOMINION
Equipment Parts

800-365-7260
WWW.DEPPARTS.COM

LOW PROFILE HIGH R.O.I.

The **Lo Riser Inclining Platform Trailer** is a versatile tool that will help increase your efficiencies and lower costs to deliver a higher return on your investment.

With a Lo Riser you'll see:

- ✓ Lower labor costs
 - one man loading/unloading offers more deliveries per day
- ✓ Lower specialized equipment costs
 - no rollback truck required, just a pickup truck
 - no crown point, equipment can be driven up the built-in ramp
- ✓ Lower worker's comp claims
 - enhanced safety features eliminate most opportunities for injuries
 - no more dangerous, slanted ramp boards

Stop, Drop and Load your way to maximum profits.



4 Degree Load Angle



*shown with optional paint color

LO RISER
Inclining Platform Trailers

Manufactured by: The Advance Metalworking Company, Inc.

1-800-369-5365

www.advancemetalworking.com

BY THE NUMBERS



3

That's the number of snow blower attachments John Deere recently introduced for its compact track loaders, compact wheel loaders and skid steers. The SB72D, SB78D and SB84D snow blowers incorporate features such as hydraulically operated poly-lined chutes and deflectors, reinforced wrappers, adjustable skid shoes and two auger options for improved performance and durability. The new two-stage hydraulic snow blowers are ideal for clearing snow from roadways, parking lots, driveways and sidewalks, and they move snow up to 45 ft from the machine. In addition to the standard smooth auger, the D-Series snow blowers are now also available with a serrated auger option that is designed to cut through the toughest of snow conditions. For more info, visit john-deere.com.



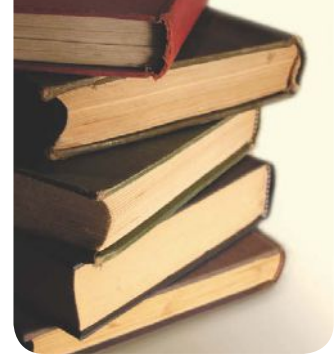
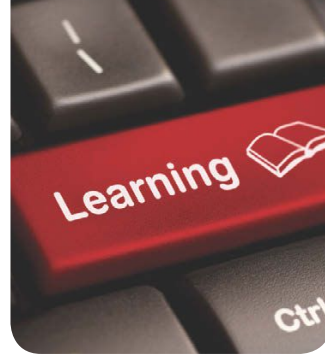
532,000

That's the number of estimated excavation-related damages to underground facilities that occurred in the United States in 2019 — a 4.5 percent increase compared to the 2018 estimate of 509,000 damages. This data comes from the Common Ground Alliance's 2019 Damage Information Reporting Tool (DIRT) Report. The Report analyzed all 2019 data submitted voluntarily by facility operators, utility locating companies, one call centers, contractors, regulators and others from the United States and Canada using an in-depth statistical modeling process. The report also examined the direct and indirect costs of damaging underground infrastructure and estimated that the societal costs totaled approximately \$30 billion in the United States in 2019 alone. For more info, visit commongroundalliance.com.

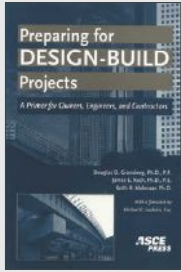
26,000

That's the number of jobs construction employment increased by in September — bringing the workforce total to 7,245,000. The recent gains were concentrated in housing, while employment in the infrastructure and nonresidential building construction sector remained mostly the same, according to an analysis by the Associated General Contractors of America of government data. Association officials said the pandemic was prompting strong demand for new housing as more Americans work from home, while undermining private-sector development of office, retail and other types of projects and forcing many local and state governments to cut construction budgets. For more info, visit agc.org.





Conferences and Events • Online Learning • Books



Preparing for Design-Build Projects: A Primer for Owners, Engineers, and Contractors

For nearly two decades, design-build (DB) contracting has become increasingly the method of choice in public and private construction projects. This book acts as a timely guide on developing DB requests for qualification and proposals. It also assists the reader in interpreting these documents in order to prepare a responsive DB proposal or to evaluate proposals and make a source decision.

Topics Covered Include:

- Writing DB performance criteria and project characteristics
- Preparing DB requests for qualifications or proposals
- Risk management and success factors
- Selection process request for qualification or proposal evaluation
- Design-build proposal evaluation case studies

\$63.99* | Softbound | 296 pp



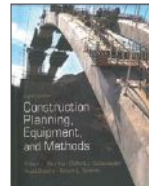
Project Administration for Design-Build Contracts: A Primer for Owners, Engineers, and Contractors

This practical guide provides case studies for owners, engineers, construction contractors, and architects who find themselves in need of guidance in administering a design-build project. It highlights advantages and disadvantages, providing the necessary information to make sound business decisions.

Topics Covered Include:

- Quality management
- Change orders
- Progress payments
- Close-out

\$63.99* | Softbound | 284 pp



Construction Planning, Equipment and Methods

This text is aimed at supporting a basic undergraduate construction equipment course that is part of an engineering curriculum. It is also applicable to graduate equipment courses. This enormous resource provides

the reader with hundreds of photos and illustrations. In addition, since technology is constantly evolving, this text provides an understanding of machine capabilities and how to properly apply those capabilities to construction challenges.

Topics Covered Include:

- Fundamentals of machine utilization
- Production estimating in a logical and simple format
- Building in today's global environment

\$199.99* | Hardbound | 816 pp

**Shipping and handling not included. Selling Price subject to change without notice.*

You work hard, so should your engine. Keep it running longer with Perkins genuine parts.

Designed specifically for your Perkins engine, you can be sure of quality with a minimum 12-month warranty on all parts.



www.perkins.com/partsandservice

 **Perkins**[®]

THE HEART OF EVERY GREAT MACHINE