Volume 4 • Issue 1 • 2016

Feature The Hands-On Experience page 30-34

> Shows Cheers for Bauma 2016 pages 41-48

Report MB Dustcontrol Aim their Cannons at USA page 54-55

> News New Products from Blastrac page 12

News Superabrasive Adds New Grinder, Polisher and Vacuum page 38

News Brokk Brings Independance to Compact Demolition page 37

New Huqvarna PP 490 Power Pack page 19

Golf and Country Club Benefits by Using Blastrac Products. Page 51

N O

Gateway to North, Central and South America

The Whole World is World Review on pages 21-20



Husqvarna

AS SIMPLE AS LIFTING A FINGER

The Husqvarna PG 820 RC remote control planetary grinder offers very high productivity, powerful performance, and outstanding ergonomics. The remote control is key on this machine. It enables the operator to move around the jobsite, correcting hosing, moving the dust collector, inspecting the floor, and preparing the next set of tools. This leads to increased productivity and less fatigue on the operator. The remote control unit can optimize the grinding parameters to assure quality for a specific application, enabling consistent operation and results even when changing operators. To learn more or to request a demo, visit www.husqvarnacp.com.

HUSQVARNA PG 820 RC

Power, kW (hp)17.4 (Voltage, V380-Rated Current, A32Grinding width, in (mm)32 (8Grinding pressure, lbs (kg)664 (UL & CSA approved100 (

17.4 (13) 380-480 32 32 (820) 664 (301)

facebook.com/husqvarnaconstruction



Professional Demolition Americas Magazine

Postal address: Riverbends Publishing, LLC, PDa Magazine, P.O. Box 552, Nokesville, VA 20182, USA

Phone: +1 /03 392 (E-mail Editorial Office: editorial@pdamericas.com

Web Site: www.pdamericas.com

EDITORIAL STAFF

Senior Editor: Jim Parsons jim.parsons@pdamericas.com Editor-in-Chief: Jan Hermansson jan.hermansson@pdamericas.com

Assisting Editor-in-Chief Anita do Rocio Hermansson anita.hermansson@pdamericas.com

Editor North America: Jim Parsons jim.parsons@pdamericas.com

Editor South America: Luiz Carlos Beraldo Iuizcarlosberaldo@gmail.com

CORRESPONDENTS

andrei.bushmarin@pdworld.com

Mikael Karlsson mikael.karlsson@pdworld.com

David Ehrenstråle david@flaskborsten.se

Kevin Mayhew **kevinm@addixion.co.za**

SALES

Sales Director North & South America Darren Dunay Riverbends Publishing, LLC, PDa Magazine P.O. Box 119, Westwood, NJ 07675, USA Phone: +1 201 781 6133, Fax: +1 201 664 1829 darren.dunay@pdamericas.com

Sales South America Eduardo Kubrick Phone: +55 11 999494544 eduardo.kubrick@pdamericas.com

Sales Europe and rest of the world Phone: +46 8 585 700 46 sales@pdamericas.com

Publisher

The magazine PDa, Professional Demolition Americas is published four times per year in North and South America. The annual airmail subscription rate is US\$ 45. All subscription correspondance should be directed to: The subscription department, Riverbends Publishing, LLC, P.O. Box 552, Nokesville, VA 20182, USA. Or sent by e-mail to info@pdamericas.com. PDa is mailed by second class postage. @Copyright Riverbends Publishing, LLC, 2013. Printed in the US.

Cover photo: Andreas Kuelz at Graff Concret Cutting, Canada. Photo by Andreas Kuelz.







Your Gateway to North, Central and South America

Editorial Is There a Robot

In Your Future?

Business

6

Dynaset Celebrates 30th Anniversary Unevol S.A, First Sandvik Construction Dealer in Cuba AEM Produces New Brush Chipper Safety Manual Berger Promoted at Volvo Construction Equipment Astec Mobile Screens Honored for Safety Record Hicks Hired as Parts Sales Development Engineer

CDRA Brings World's Only Stand-up Economist to C&D World Genesis Attachments Names Mike Booth Northeast, Mid-Atlantic Regional Manager 8 Harms Joins KPI-JCI and Astec Mobile Screens as Senior Sales Engineer Blastrac NA Expands Headquarters Operations Avant Tecno Expanding Manufacturing Facilities

Brokk celebrates 40 years of innovation GSSI Unveils StructureScan Mini XT Ritchie Bros. Premier Global Auction is a Record-Setter

News New Products from Blastrac

- 12 New CPLVT V15 Light Towers Offers Durability, Safety and Performance
- 13 The New, Smart Way to Coredrill
- 14 New Products from CS Unitec14
- 15 New GDT Razer from Genesis Attachments Tackles High-Reach Applications New Husqvarna KV 760 and KV 970/1260 Add More Applications to Power Cutters
- 16 New Products from Stanley La Bounty
- 19 New Husqvarna PP 490 Power Pack General Equipment Company Offers Long Reach Air Tools
- 36 Husqvarna Launches New Redi Lock Series for Hard Concrete Rockster Recycler Showing New Strength in North America Rotar Expands Production Capacity New Hilti Detection Software
- 37 Brokk Brings Independence to Compact Demolition
- 38 Superabrasive Adds New Grinder/Polisher and Vacuum Superabrasive's Full Range at Bauma
- 49 HTC Launches the 800 RXP Remote Controlled Propane Floor Grinding Machine Avant Tecno Presents New Avant 200 and E series

Furukawa Rock Drill New Products

50

- 53 New Husqvarna PG 680 RC's Unique Oscillation Function Improves Productivity Husqvarna FS 3500 G Flat Saw — Designed With the User in Mind Trevi Benne Goes to Press
- 57 Tyrolit Presents New Concrete Cutting Products at Bauma 2016
- 58 U.S. Construction Equipment Exports Close Out 2015 Down 19 Percent

Jenny Products Electric Compressors Now Certified UL 1450 and C22.2 No. 68-0958 New Pitbull 2300 Propane Screener a Cost-Effective and Low- Emission Alternative to Diesel

Shows

- 21 The Whole World if Watching
- 41 Cheers for Bauma 2016
- 42 Bauma 2016 Selected list of exhibitors
- 48 What's the best way to get to bauma?

Feature The Hands-On EXPERIENCE

Site Report Golf and Country Club Benefits by Using Blastrac Products

Reports MB Dustcontrol Aim Cannons at USA

30

51

54

8

10

12

Is There a Robot In Your Future?

Last fall, several news outlets covered the emergence of new robots capable of handling routine construction tasks. The MIT Technical Review, for example, reported on a "semi-automatic mason" (SAM), developed by a company in New York, that can purportedly can lay up to 1,500 bricks per day, compared with the maximum 500-brick daily output of the more familiar human versions. Other robots, most still in the prototype phase, reportedly can be pre-programmed to build entire masonry structures within a few days.

Now anyone who's watched the masonry competitions held in conjunction with the annual World of Concrete in Las Vegas recognizes the difference that a deftly wielded trowel can make in a contractor's productivity. On the other hand, this new generation of robots never needs a break, and their sensors ensure precise angles and placement from start to finish. If the workload includes a large number of relatively simple tasks, then there may well be a case for putting the machine to work.

Robotics are being applied to other facets of construction, from flagging at highway sites to assembly line functions. As with the mechanical masons, however, these systems remain very much tools with human oversight to make sure they're doing what they're supposed to do safely.

So does that mean various concrete demolition tasks are also ripe for robotics? First, let's note that Brokk, Husqvarna, et al prefer to call their products "remote controlled demolition machines" (although the word "robot" does find its way into their marketing copy occasionally). And given the nature and setting for those kinds of tasks, it's probably good

to have a human minder on hand to manage the work of the machine...or robot or whatever you want to call it.

The integration of remote control capability on machines such as grinders and

polishers, however, might be a more immediate horizon for robotics. With the right combination of sophisticated sensors and programmable machine functions, a contractor could conceivably put a machine to work and check in on its progress periodically in person, or monitor it remotely via video. Some human intervention may be needed for trickier areas such as corners, or around immovable objects such as machinery or furnishings. But for the most part, it'd be a matter of setting the parameters, and letting the machines do the rest.

> Similarly, robotic devices could also take on the tasks of performing simple cutting or coring tasks, transporting loads of debris to a dumping or sorting area, and performing routine inventories and inspections once the work is done

With enough imagination, one could easily come up with any number of other tasks ripe for a robotic alternative. What's not certain, of course, is if and when we'll ever see them. For every "gee whiz" innovation that makes the news, there are dozens of others that never see the light of day because they proved impractical, too costly to develop/use, or simply not what the market wanted at that particular time.

But let's not assert that such things will never hap-

pen. History is rife with since disproved and almost laughable assertions that certain technologies have come as far as they can, or that they'll set humankind on the road to ruin. It'd be sad if in the dim, dark future, a reader came across this PDa editorial and got a chuckle out of its pronouncements.

No doubt, though, it'll be a successor to one of today's robotic Internet search engines that finds it.

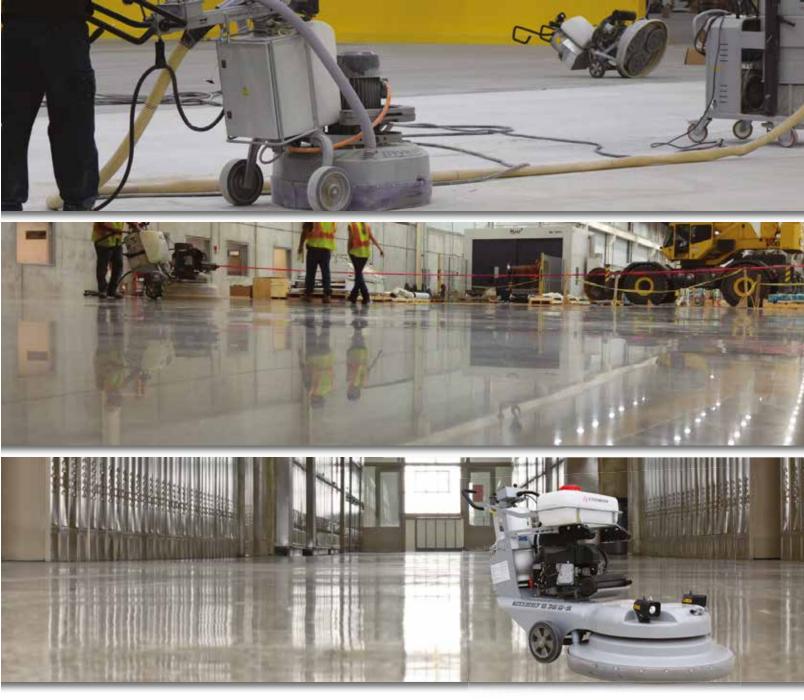
> Jim Parsons, Senior Editor jim.parsons@pdamericas.com







BOOTHS #A1.211 & #12A.4



GRIND | POLISH | MAINTAIN

BETTER.

superabrasive.com

Dynaset Celebrates 30th Anniversary

The Finnish manufacturer of hydraulic equipment, Dynaset will celebrate its 30th anniversary this year. The company was founded and established in 1986 by general manager Reijo Karppinen. Since then the company has developed a comprehensive range of hydraulically powered equipment including generators, compressors, grinders, pumps, winches, welders, valves, pressure washers, pipe cleaners, dust suppression units, and magnets.

www.dynaset.com

Unevol S.A, First Sandvik Construction Dealer in Cuba

Sandvik has announced that Unevol S.A. will be the company's first distributor for drill rigs, rock tools, and crushing and screening equipment throughout Cuba. Unevol S.A. will also be providing full aftermarket care, spare parts, and dedicated customer service.

The appointment of such a professional and experienced distributor reinforces Sandvik's commitment to provide even greater levels of customer care and enhance its locally focused customer support.

Unevol S.A. is an established name throughout Cuba with offices, workshops, and service engineers throughout the area. Founded in 1998 and headquartered in La Lisa, La Habana, Unevol has been selling and servicing Volvo Penta and Volvo Construction products since 1998 and 2000 respectively. The company serves an important mix of state and private-sector enterprises on the island. It employs 126 workers, with branches in Holguin and Moa.

Per Hundevad, General Manager of Unevol S.A., says that becoming a Sandvik Construction distributor is an important development of his company.

"With Sandvik's portfolio of products, Unevol S.A. will now be able to provide drilling, crushing and screening equipment and consumables to our existing customers," he says. "We will now be able to meet our customers' growing demand and provide complete solutions to guarantee a win-win situation."

Kauko Juuri, Global Distributor Manager Sandvik Construction adds, "We are sure that the combination of Sandvik equipment



and global aftermarket support, together with the local knowledge and industry expertise of Unevol, will enable Sandvik customers throughout the area to benefit from a winning combination."

"Unevol has a very professional technical and sales team and is a recognized distributor in Cuba due to its outstanding product support and their close interaction with their customer base," says Jorge Duarte, Sales Manager for Sandvik Construction in Mexico and Central America. "We are very happy to grant Sandvik distribution to Unevol and be able to actively participate in the great potential growth and development of the infrastructure in Cuba."

AEM Produces New Brush Chipper Safety Manual

The Association of Equipment Manufacturers (AEM) has produced a new brush chipper safety manual that outlines safe equipment operation, start-up and shutdown guidelines, and maintenance precautions for a variety of brush chipper machine types.

Manufacturer members working through AEM's Environmental and Reduction Equipment Council (EREC) provided content development and review, with input also provided by AEM's Forestry Equipment Council. The manual is heavily illustrated with industry pictorials, and safety messages are presented in clear, readable text to aid understanding. The information is intended to supplement, not replace, manufacturer operating manuals.

"Manufacturers design and build machines to enable the operators to work safely," says Tom Haley, product safety manager for Vermeer Corporation, who is also a past chair of EREC and current chair of North America's ISO Forestry Technical Advisory Group. "AEM consensus manuals are an additional industry resource to help reinforce safe operating practices."





Berger Promoted at Volvo Construction Equipment

Alan Berger has been appointed senior vice president, Technology at Volvo Construction Equipment. Berger has worked for the company since 2007. He has held a variety of senior engineering, technology and management roles both within the Volvo Group and outside the company. Alan is responsible for leading the development and delivery of Volvo CE's global Technology strategy. Reporting to company President Martin Weissburg and serving as part of the executive management team, Alan will be based at Volvo CE's global headquarters in Brussels, Belgium. Effective from the start of this year, Alan replaces Anders P. Larsson who took up the role of president of Volvo CE Investment China and head of the Lingong Integration Office on January 1, 2016.

Alan, an American citizen, joined Volvo CE as part of the Ingersoll Rand acquisition in 2007. Most recently Alan was vice president of Volvo CE's product platforms organization, a position he held since 2011. Prior to this, he was vice president of advanced engineering and before that he was vice president of engineering for the road machinery division of the business. Alan holds a Bachelor of science degree in electrical engineering, computer engineering, and applied mathematics as well as a Master's degree in electrical engineering, controls, and signal processing. Commenting on his appointment, Alan says, "I am very excited about this opportunity and look forward to driving the Technology function forward at this important time for the business." Alan will relocate to Belgium this summer with his wife. He is currently based in Shippensburg, Pa.

Astec Mobile Screens Honored for Safety Record

Astec Mobile Screens (KPI-JCI and Astec Mobile Screens) was recently recognized for achieving a superior safety rating for Astec Industries companies in 2015. Currently, the company has gone 745 days without a recordable accident for its 100 associates employed at the manufacturing facility, according to Tim Gonigam, president of Astec Mobile Screens. Astec Mobile Screens is one of three Astec Industries companies that make up KPI-JCI and Astec Mobile Screens, a worldwide leader in manufacturing equipment for the aggregate, construction and recycling industries. As a result of its dedication to safety, the company was honored with an award from parent corporation Astec Industries. Gonigam says the employees' commitment to safety reflects the company's core values, which advocate "safety, profit, and growth as means to ensure success of the company." "We are incredibly proud of our 100 associates who have prioritized safety as an integral part of our day-to-day operations," Gonigam says. "Our goal is always to have everyone be safe and injury-free. This can be difficult to achieve in the manufacturing industry, but every day we make it our goal to have zero recordable incidents."



Astec Mobile Screens' day shift poses with the award given by Astec Industries for a superior safety rating in 2015.

Hicks Hired as Parts Sales Development Engineer

KPI-JCI and Astec Mobile Screens has hired Nate Hicks as a new parts sales development engineer as part of its ongoing strategy to grow its PDQ and OEM parts lines. Hicks recently relocated from Colorado, where he mostly recent served as a project engineer for Springs Fabrication. He graduated with a degree in mechanical engineering from South Dakota School of Mines and Technology. Hicks, who is originally from Yankton, S.D., previously worked for KPI-JCI and Astec Mobile Screens' South Dakota manufacturing facility as a design drafter intern in 2008. As a parts sales development engineer, Hicks' primary responsibilities will include increasing customer uptime and reducing overhead costs through improved parts design. Director of Parts Ryan Newman said the addition of Hicks was an important step in growing the company's PDQ and OEM parts sales. PDQ parts are a collection of high-performance, after-market parts developed by in-house design teams and experienced engineers that are supported in the same way as the company's OEM parts.





SEE WHAT WE CAN DO

Remote demolition feature options can increase precision, performance, and protection. Our optional factory-installed packages include an enhanced cooling option, an extra hydraulic function and cylinder protection option, or a heat protection option.

Enhanced Cooling: allows DXR full power in higher ambient temperatures.
Hydraulic Option: an additional hydraulic function can be added to expand the range of attachments used.
Heat Protection: protects vital parts from damage caused by radiant and conduction heating.

These possibilities will enable the DXR demolition robot to be used for challenging applications such as kilns, steel factories, deslagging in hot melting plants and more. Visit www.husqvarnacp.com to find your nearest Husqvarna sales representative to learn more or schedule a demonstration.

facebook.com/husqvarnaconstruction

business

Event Calendar

Bauma 2016

April, 11-17, 2016 Munich Exhibition Center, Munich, Germany *www.bauma.de*

Construction Expo 2016

June, 8-10, 2016 Immigrantes Exhibition Center São Paulo, Brazil *www.sobratema.com.br*

ConcreteShow 2016 Brazil

August 24-26, 2016 São Paulo Expo, São Paulo, Brazil *www.concreteshow.com.br*

DEMCON 2016

September 29-30, 2016 Infracity, Stockholm, Sweden *www.demcon.se*

World of Concrete 2017

January 17-20, 2017 Las Vegas Convention Center, Las Vegas, USA www.worldofconcrete.com

CONEXPO-CON/AGG

March 7-11, 2017 Las Vegas Convention Center, Las Vegas, USA *www.conexpoconagg.com*

CDRA Brings World's Only Stand-up Economist to C&D World

Yoram Bauman, PhD., will make C&D World 2016 attendees laugh about politics and economics, and make them think about tackling climate change with a carbon tax swap that uses revenue from a carbon tax to reduce existing taxes. Other educational sessions at the May 1-3 exhibition and conference in San Jose, Calif., will cover the use of telematics to optimally utilize your equipment fleet, and how to prevent and respond to facility fires. Stan Orr, President of the Association of Equipment Management Professionals, will provide information on how to best employ equipment at any job site, relying on information on his association's latest book on telematics. David Devito, ReEnergy and CDRA Secretary/Treasurer, will team up with a local fire official to provide tips on handling incidents at recycling facilities.

www.cdrecycling.org

Genesis Attachments Names Mike Booth Northeast, Mid-Atlantic Regional Manager

Genesis Attachments announces Mike Booth as regional manager for the Northeast and Mid-Atlantic. Covering New York, New Jersey, Connecticut, New Hampshire, Vermont, Maine, Massachusetts, Rhode Island, Delaware, Maryland, Virginia, and eastern Pennsylvania, Mike will provide attachment, parts and service sales, and application support to the demolition, scrap, and material handling industries. "Having more than a decade of attachment sales experience will enable Mike to quickly become a valuable resource for Genesis dealers and customers," says Shane Kuhlmey, Genesis director of North American sales.



Harms Joins KPI-JCI and Astec Mobile Screens as Senior Sales Engineer

KPI-JCI and Astec Mobile Screens has hired Tim Harms as senior sales engineer for crushing and screening products at its Kolberg-Pioneer, Inc. manufacturing facility.In his new role, Harms will assume a sales engineering leadership role and act as a resource for the sales engineering staff. He will also help guide equipment selection for potential customers, and manage sales opportunities in conjunction with the product management group and the field sales force. Additionally, Harms will be responsible for assisting other sales personnel in the development of production and operation cost data, product pricing, sales tools and training materials.

Harms first began his relationship with



the company in 1989, when he was hired as an engineering design drafter. Over the next 20 years, he served in a variety of roles, including project designer, product application specialist, and sales engineer. In 2009, he left the company to pursue a full-time farming operation with his family's farm.

"We are thrilled to have Tim Harms return to the company to help grow our crushing and screening business," said Ron Griess, product manager for KPI-JCI and Astec Mobile Screens. "Tim has more than 20 years of product knowledge in the industry, and with that experience, he will be a great asset to all of our customers who are looking to increase their bottom lines."

Blastrac® NA Expands Headquarters Operations

Blastrac North America, which specializes in manufacture of surface preparation equipment, will expand operations at its Oklahoma City headquarters with an additional 25,000 ft2 (2,323m³) of production space. This expansion will house sales, the Blastrac University service and training center, and an expanded rental equipment department.

Enhancing Blastrac's production capabilities is its recent acquisition of a high tech Press Brake which has a bending capacity of 250 tons up to 10 feet (3m) in width. The Press Brake utilizes a CNC backstop, quickchange tooling, and material specification control for precise and repeatable angle control in a variety of material types. This technology will increase productivity and quality of fabricated parts by Blastrac's experienced CNC programmers and engineers. Last year, Blastrac added a waterjet system that provided shorter lead times with lower labor costs, and the ability to produce more machines per year.

Blastrac University will also expand its training offerings with demonstrations and hands-on instruction in steel preparation. The University already features a comprehensive training program covering popular surface preparation methods and equipment designed for contractors, coatings specifiers, facility owners, architects, engineers, and others involved with application, specification or use of coatings and overlay materials. The two and a half day program includes discussion of common surface preparation methods such as shot blasting, milling/scarifying, scraping, and diamond grinding. Participants are taught when to use different surface preparation techniques, based on job site characteristics, specified coatings, desired results, and costs.

The instructor also includes discussion of industry standards and testing methods. Students' training is focused primarily on intensive hands-on instruction, including training in the start-up, use, and maintenance of equipment.

www.blastrac.com

Avant Tecno Expanding Manufacturing Facilities

Avant Tecno Oy has purchased an adjacent 473,600 ft2 (44,000m2) property, thereby providing the facilities to eventually double its production capacity.

"We were in a situation where we would have had to expand our premises in any case," explains Avant Sales Director Jani Käkelä. "For some of our operations, the facilities were just becoming too small. The property sale enables us to move our operations into new facilities quickly, providing us much-needed space for our production." For Avant Tecno Oy and its subsidiary Leguan Lifts Oy, which manufactures access platforms, the property sale enables the expansion of production in Ylöjärvi for a long time to come.

"With such a large facility, we now have too much space for our own operations, so at first we will be leasing a large part of the property out to external operators," Käkelä says. "However, the property sale will ensure our growth potential for the foreseeable future."

Avant's sales have grown continuously in recent years despite the extremely challenging economic situation in Europe and Russia. Sales for the financial period ending in September 2014 were the largest in the company's history. At the moment, Avant loaders are sold in more than 50 countries around the world. One of the reasons behind the success is the extent and versatile nature of the marketing area. "We believe in a minimum annual growth of five per cent. The goal is to maintain our growth at approximately the same level in Europe," Käkelä says. "We will seek growth in the United States, where we established Avant Tecno USA approximately two and a half years ago."

www.avanttecno.com



The result of 40 years of innovation in demolition.

Imagine what we can accomplish in the next 40.





Relentless Innovation Since 1976.

In 1976 we promised to provide ultimate demolition power for the most challenging jobs on earth. 40 years' worth of demolition robots later, we have kept that promise. By constantly listening to our users from around the world and responding with innovative solutions, we are able to advance the state of the art year after year. Introducing our newest addition: The Brokk 120 Diesel – The ultimate compact, one-ton diesel-powered demolition robot. A remote-controlled demolition machine that is completely 'wireless' and can go where nothing else can go.

Discover a more powerful future at www.brokk.com.





Brokk Inc. | Monroe WA | 1-360-794-1277 | info@brokkinc.com | www.brokk.com

Brokk Celebrates 40 years of Innovation

During 2016, Brokk celebrates 40 years of innovation as the world's leading manufacturer of remoted-controlled demolition machines. The history of remote controlled demolition and the history of Brokk is one and the same. It all started in 1976 when two Swedish entrepreneeurs faced a confined space demolition challenge that led them to develop the world's first demolition robot. This machine led to the establishment of the company, and Brokk has continued to innovate and solve increasingly complex demolition problems ever since.

During these years Brokk has delivered well above 6,000 demolition robots to more than 100 countries across the world. What started as a niche machine for very special needs is now a mainstream vital part of most demolition, process, cement, nuclear decommissioning and underground project across the world. To commemorate the occasion, Brokk has developed a special logo with the slogan "Original Demolition Power since 1976." The celebration began at World of Concrete in January with a preview of the new Brokk 120 Diesel, the world's smallest diesel-powered model. Other celebrations will take place at other major exhibitions during 2016:

- Bauma, April 11-17, Munich
- World Tunnel Congress, April 22-28, San Francisco, Calif.
- Svenska Maskinmässan, June 2-4, Solvalla, Stockholm
- ONS, Offshore North Sea, August 29 September 1, Stavanger, Norway
- Electra mining, September 12-16, Johannesburg, South Africa,
- MineExpo, September 26-28, Las Vegas
- Demcon, September 29-30, Infra city, Stockholm
- BAUMA China, November 22-25, Shanghai, China

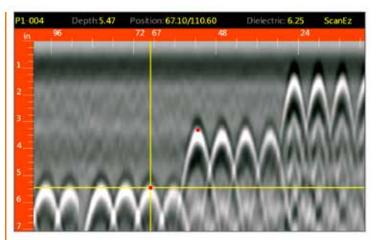
The jubilee will furthermore be celebrated on social media. Customers will have a chance to share their best photo or video of their Brokk machine by publishing it on Brokk's Facebook page. Every month Brokk will choose one winner to be a part of a virtual book, created especially for the celebration and the person submitting the best photo selected every month will receive a unique Brokk jacket.



GSSI Unveils StructureScan Mini XT

GSSI, world's leading manufacturer of ground penetrating radar (GPR) equipment, announces the launch of the StructureScan™ Mini XT – the newest generation of GSSI's popular all-in-one concrete inspection GPR system. Rugged, compact, and flexible, StructureScan Mini XT is ideal for locating rebar, conduits, post-tension cables, and voids.

The Mini XT can help identify structural elements, including pan deck and concrete cover, and can also provide real time determination of concrete slab thickness. StructureScan Mini XT is the perfect blend of price and performance, and is backed by a two-year warranty. The integrated all-in-one concrete inspection tool comes with an antenna, positioning system, and control unit combination. It features an intuitive touchscreen interface and six-button control options. With its 2.7 GHz antenna. the StructureScan Mini XT offers superior target resolution. It can reach depths of 20 in (50cm). The system is positioned .3 in (8mm) off the surface, providing additional ground clearance that allows the Mini XT to be used over rough concrete surfaces. The redesigned StructureScan Mini XT features a rugged compact design, IP 65-rated to withstand a jobsite's toughest conditions. Users get first-in-class data visualization with a state-of-the-art 6.5 in (165mm) HD



touchscreen user interface and different operation modes tailored for beginner to advanced use. Use the Simple mode to collect data with the push of one button, or select ScanMax and Scan3D app-based data collection options for advanced data interpretation.

The StructureScan Mini XT also makes it easy to customize the data display with a variety of color adjustments. Real-time migrated data, onscreen reference markers and real-time signal floor indicator are also available.

Featuring the forward thinking design found in all GSSI's GPR equipment, StructureScan Mini XT incorporates three accessory ports to allow for future expan-



sion. An extension pole accessory, with six-button remote operation, is ideal for walking and wall surveys. Other useful features include a removable handle for reduced vertical clearance, positioning lasers, power saver mode, and 4-wheel drive.

Ritchie Bros. Premier Global Auction is a Record-Setter

In just five days during mid-February, Ritchie Bros. auctioned more than 10,700 items of equipment , valued at more than \$172 million. Items sold included products from Caterpillar, Volvo, John Deere, Komatsu, Terex, Grove, JLG, Kenworth, Peterbilt, Freightliner, International, and several others. The annual February Orlando auction is one of the biggest in the world. This year's event attracted more than 9,850 bidders from 79 countries. "Orlando is one of our flagship operations-and it's clear from the results this week equipment buyers and sellers value the solutions we provide," says Ravi Saligram, Ritchie Bros. Bidders participated in the auction in person, online in real time at rbauction.com, and by proxy. All items were sold without minimum bids or reserve prices.



- 1 All-in-One handheld GPR system
- 2 Ergonomic handle with six-button control
- 3 HD touchscreen display with easy to use operator interface
- 4 Survey wheel encoder
- 5 Guiding laser for locating and 3D surveying

SHOXX Power inside

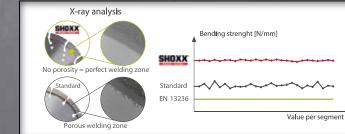
®

FORGING TECHNOLOGY MADE IN GERMANY



PURE INNOVATION FROM EUROPE

SAFER : 300% of EN 13236



50% FASTER CUT & LONGER LIFE

SHOXX [®] Power Inside	I
Laser welded blade	
	Time

SMOOTHER : 25% LESS VIBRATIONS



New Products from Blastrac

BLASTRAC

The Blastrac® BMP-4000 is a new heavy duty ride-on sawing and milling machine. This machine is ideally suited for large sawing and milling applications such as road construction and industrial flooring. By changing the hydraulic motor, users can easily swap the milling and the sawing technology. The BMP-4000 has a double hydraulic micrometric adjustment to set the working depth, to work precisely and eliminate the risk of underground deterioration. Its stout weight and smooth drive sys-



ed with this battery- operated product. The BMS-220ADB/ LPG's functional, ergonomic design makes performing maintenance functions a snap and provides unparalleled operator comfort.

The Blastrac BS-110 floor scraper is a powerful self-propelled machine, ideal for indoor and outdoor medium sized renovation jobs. The BS-110 is constructed of rugged metal for longevity and durability on the worksite. With no hydraulic

components, this floor scraper requires almost no maintenance to keep running at peak performance. The BS-110 ideal for

hardwood parquet, ceramics, linoleum, vinyl, carpet, wove floor, adhesives, glue, and roofing materials.

New Time-Saving Hose Dolly

Blastrac's easily maneuverable Blastrac Hose Dolly saves operators time, and increases job productivity. Three dollies included in Shot Blasting Packages 1-10DSGI,

1-15DSGI & 2-20DTMKII. The 9.2-lb (14.1kg) Hose Dolly has four dual durable rubber casters, two easy on/off velcro straps and fits 5-6 in (127-152 mm) hose.

Dust Collector Accessory Kit

Blastrac offers an optional accessory kit (CP-10676) for Dust Collector models BDC-1112EU and BDC-1216. This wand Package is included with Model BDC-1114-PKG, model also includes HEPA Filter. Accessory kit CP-10676 includes a13-ft (4m) hose; adapter hose cuffs that fit models BDC-1112EU, BDC-1216, and BDC-1114-PKG; and a 14-in (122cm) bare-floor brush with 54-in (137cm) wand.

A New Loop Handle for Handheld Grinder Another New Product just out is the

Blastrac 05-BL233 7-in (178mm) handheld grinder. The handle allows grinding for concrete

preparation along walls, around protrusions, and those hardto-access areas. The loop handle offers operator comfort and limits fatigue by allowing multiple hand positions.

www.blastrac.com

New CPLVT V15 Light Towers Offers Durability, Safetyand Performance

Chicago Pneumatic's new V15 light towers are the company's first to use a heavy-duty polyethylene (PE) canopy. This feature, along with the light tower's small size, ease of transportation, and fuel-efficient performance, ensure that the new models meet the demands of a variety of applications. The CPLT V15 comes with metal halide technology, while the CPLT V15 LED features LED lighting technology and can light an area apppoximately 25 per cent larger and provide additional fuel efficiency benefits.

A Kubota EPA Tier 4 engine powers both options, and to ensure operational efficiency as well as fuel efficiency the units are equipped with a 28-gallon (106-liter) fuel tank. In practical terms this allows the light towers to operate for many days without the need to refuel, helping to maximise productivity and illumination time. The new PE canopy protects vital internal components to ensure peak performance and offer optimised lifespan and resale value. Along with being durable, the new canopy it also features wide wing doors to allow easy maintenance access to the machine, including service components and drains. The V15 range also has an environmentally friendly frame that prevents any excess fluid escaping. Even in the most demanding conditions, the V15s ensure complete safety at site with four heavy-duty stabilizers and a level indicator. Designed for easy transportability to or around the work site with a compact and

lightweight design, the light tower can be transported with the mast in the vertical position, allowing safer transportation and installation.

"These light towers tick all the boxes and provide complete peace of mind when it comes to even the most demanding job site," says Henry Xu, Factory Product Manager for Chicago Pneumatic. "The CPLT V15 range offers customers a choice of options to fit their exact needs and deliver the most efficient product for their site, along with offering great value for money – as customers

have come to expect from Chicago Pneumatic."



tem generate more efficient sawing and milling actions.

For milling technology the BMP-4000 uses a unique concept. The complete milling drum is made from a single piece of specially selected steel. In combination with 60 professional heavy-duty milling picks, the milling drum is more heavy-duty compared with the traditional milling drums. The milling picks quick change design makes removal fast and easy. The BMP-4000 is a multifunctional machine equipped for cutting, removing and sawing of concrete, asphalt and natural stone surface to a depth of up to 2.36 in (60mm) with sawing, and 2.5 in (63.5mm) milling.

Two New Ride-on Scrapers

The Blastrac BMS-220ADB/LPG ride-on scrapers are ideally suited for medium- and large-sized applications, with the added benefit of being battery operated for increased versatility. With its

heavy duty blade and motor, the BMS-220ADB/LPG can tackle the toughest floor coverings, including hardwood parquet, ceramics,

> linoleum, vinyl, carpet, adhesives, glue, and tiles. It is very maneuverable with a zero turn radius, non-marking tires and complete hydraulic control.

> > In addition, with its high level of maneuverability and zero turning radius, the BMS-220ADB/LPG can easily operate in tight spaces. No electrical cords need-

12 Professional Demolition Americase Issue 1 • 2016 • www.pdamericas.com



The New, Smart Way to Coredrill

US Saws' Core EZ offers a new way of coring. The entire unit and a selection of bits up to 7.8 in (200mm) fit into a wheeled case that weighs under 50 lb (2.3kg). The Core EZ drills holes from 3 in to 10 in (75mm to 250mm) with ease.

A lightweight design ensures easy assembly and straight drilling every time. The entire unit is mounted on a central guide shaft rigidly anchored to the wall that will easily hold a person's weight. Having the system's anchor in the middle of the hole eliminates damage to the wall. There are no offsets to measure.

The system holds the core when drilling vertically, and pushes the core out when drilling is completed. The bit walls do not wear out and thin segments can be used. Because drag on the bit is reduced to almost nothing, all the power goes to cutting concrete and the steel. The reduced drag also allows higher speed and less load on the operator, who is also protected by a long-life clutch. Core EZ also makes it also easier to drill off scaffolds, and in confined spaces.

www.ussaws.com





New Products from standard hose connection. The vacuum port is also built **CS** Unitec ture the dust from inside the core bit and maintain a clean work area. It is ideal for drilling holes in floors, walls and ceilings, as well

CS Unitec's new 9in (228mm) walk-behind floor grinder with dust

extraction removes epoxy, paint, and other hard coatings from large surfaces including concrete, screed and natural stone before new paint or coatings are applied. The heavy-duty EBS 235 has a powerful 23.7A/110V



motor, and a no-load speed of 1700 RPM. Applications include preparing living rooms for new carpet and resurfacing cellars, garages and balconies.

10

10

The EBS 235's dust extraction port and brush shield allow for dust-free grinding when attached to an industrial vacuum system. Grind di-

ERSTOCK

rectly to the edge of the work area by removing the side portion of the dust guard, increasing maximum depth and coverage.

The EBS 235 is designed with vibration re-

duction technology, and features a height-adjustable chassis and floor guiding device that adapt to the needs of the operator for precise guiding, comfortable working and optimal grinding results. Weighing 84 lbs (38kg), the grinder includes an additional handle on the motor for easy transport. Interchangeable diamond and PCD inserts are available for a variety of applications.



EHD 2000 S Core Drill

The hand-held EHD 2000 S Diamond Core Drill is the ideal tool for plumbers, electricians, contractors, and other professionals needing to drill anchor holes or through holes. The two-speed gearbox and powerful 13.6A motor provide the optimum RPM (0-1000 / 0-2000 RPM) to drill installation holes up to 6 in (152mm) in diameter in internal brick, brickwork, blockwork, soft concrete, and other abrasive materials. Features include electronic soft start, temperature control, and overcurrent cut-off. The safety slip clutch prevents

jamming and allows for handheld operation.

When coupled with an industrial HEPA dust collection vacuum such as CS Unitec's CS 1445 H, the EHD 2000 S reduces airborne dust to provide a cleaner and safer work environment. The EHD 2000 S is supplied with an M18 male

spindle, a .625 in (15.8mm) x 11 UNC adapter and a convenient carrying case. Optional diamond core bits are available from CS Unitec.

Wet or Dry Diamond

Core Drill for Holes up to 6" Diameter CS Unitec's ETN 162/3 PSV Diamond Core Drill is ideal

for wet drilling holes up to 6.375 in (162mm) in diameter in concrete, reinforced concrete, natural stone, and asphalt; and dry drilling up to 8 in (203mm) in brick and block. Supplied with the BST 162 V stand and a vacuum pump, the drill is fully adjustable up to 45 degrees. A quick-change mount on this unit allows the user to switch from stand-mounted to handheld operation guickly and easily. The powerful 19A/110V motor has a load speed of 0-510/0-1150/0-2500 RPM. Electronic torque limitation and speed control guarantee constant RPM, even under load. The safety slip clutch prevents jamming and protects the operator during handheld operation. The motor includes a GFCI for operator safety during wet drilling applications.

An integrated water swivel is built directly into the spindle for wet drilling, when required. For concrete dust extraction while dry drilling, the ETN 162/3 PSV can be connected to a vacuum with a directly into the drill spindle, allowing the operator to cap-

as for concrete anchoring systems. Optional accessories include a portable water tank, water collection ring kit and Unicore Diamond Core Bits.

PLD 450 B Electric Core Drill Motor

The PLD 450 B core drill motor from CS Unitec is ideal for wet drilling up to 18 in (457mm) in diameter holes in concrete, reinforced concrete, asphalt, and natural stone. Weighing only 28 lbs (12.7kg), it has a powerful 30A/110V high-torque motor, and a rugged three-speed gearbox with drilling speeds of

190, 400, or 840 RPM. An internal oil pump lubricates the gearbox and shaft for longer life. The PLD 450 B features soft start and overload protection and has a mechanical slip clutch to protect it in case of jamming. A dovetail slide mount holder easily connects the motor to the core drill stand. Optional core drill bits and stands are available.

Remove Coatings and Corrosion With TFP 200 **Floor Scarifier**

CS Unitec's Trelawny™ Floor Scarifier tackles the most demanding surface preparation and material removal applications. Powered by a 5.5 hp (4kW) Honda GX160 gas motor, Model 320.2000T removes coatings and corrosion from concrete and steel surfaces, roughens concrete and

creates a keyed or grooved profile for waterproofing and non-slip surface applications. The TFP 200 has an 8"(203mm) cutting width, and 1/8 in (3.175mm) maxim cutting depth per pass. Depth control enables removal of surface materials without damaging the substrate, maximizing performance and extending cutter life. Other features include a fully adjustable handlebar, integrated vacuum connection and hold-to-run handle. CS Unitec offers a selection of cutters for a variety of applications. Tungsten Carbide Tipped (TCT) cutters are ideal

for concrete roughing and heavy corrosion removal, as well as grooving roadways for non-slip surface. Beam cutters remove light paint and corrosion with minimal damage to the substrate. Star cutters are optimal for mastics and rubberized coatings.

news

New GDT Razer from Genesis Attachments Tackles High-Reach Applications

Genesis Attachments announces its new GDT Razer demolition tool designed for today's new classes of excavators and specialty, high-reach applications. Featuring a lighter-weight design, the GDT 190 and GDT 290 are optimized to fit on standard 200 and 300 class excavators, respectively, as well as most high-reach demolition machines. A short, flat-top head with bolt-on bracket makes installation simple, shortens the center of gravity and makes it easier to switch the tool between excavators.

The GDT Razer easily processes a variety of materials with its customizable crushing tooth configurations. The number of crushing teeth and their locations can be customized to meet project needs, and the bolt-on teeth are not only easy to install, but can be interchanged and reversed front to back for longer life and lower cost of operation and ownership. Metal cutting blades in the back of the jaw are four-way indexable and feature an apex design that draws material deeper into the jaw for more efficient cutting.

To further improve productivity and reliability, the GDT Razer also features a pass-through lower jaw to prevent material build-up and jamming, as well as a reverse-mounted cylinder for protection from damaging debris.

www.genesisattachments.com

New Husqvarna KV 760 and KV 970/1260 Add More Applications to Power Cutters

Husqvarna Construction Products has launched the new KV 760 and KV 970/1260 cutting carts. Both are specially designed to fit Husqvarna gas power cutters, making it easy to cut in straight or curved lines, and close to walls or curbs.

The carts include a 3.5-gallon (13.3 liter) pressurized water tank and a 10-ft (3 m) hose that connects to the water nozzle on the blade guard. Together with the power cutters' DEX system, operators can adjust to the flow of water to use only what is needed to suppress dust. Quick connections make it easy to install the cutter on the cart, which means operators are ready to start cutting within a matter of seconds. The depth limiter facilitates easy adjustment of the cutting depth. In addition, the carts' wheels can be moved to the left or right, allowing the machine to cut close to walls or curbs. The handle has also been redesigned with a soft insert, making it more comfortable to operate. The fuel cap has been relocated to the right side to make refueling more efficient. The cart also folds to facilitate transporting the cart as well as storing the cart.

The KV 760 fits the K 760 power cutter and the KV 970/1260 fits the K 970 or K 1260 power cutters.











Trip Hazard & Traffic Marking Removal Marine Corrosion Control Concrete Polishing & Grinding Coatings, Adhesive Removal & Surface Preparation

www.SASECompany.com +1.800.522.2606 sales@SASECompany.com news

New PRO hammers From Rammer

Rammer has introduced two new PRO hammers-the 2577 PRO and 5011 PRO. Both are suitable for carriers in the 21-32 ton range, and the 43-80 ton range respectively, and are designed to work horizontally and undertake tunnelling duties in hard rock.

The 1.94-ton Rammer 2577 PRO and the 5.3-ton Rammer 5011 PRO are based on the proven Rammer 2577 and 5011 hammers. Both new models possess features such as an Idle Blow protector that works regardless of working mode to provide greater levels of protection. Additionally, they are equipped with long-life, high-tension VIDAT tie rods for improved reliability, extended service periods, and lower operating costs.

These standard Rammer features are backed by a range of enhancements that help the PRO range to withstand extreme working conditions. Customers will be able to benefit from a sealed housing structure that prevents the ingress of dust and dirt, thereby extending the working life of both the hammer and the tool. A top cover plate has sealed through apertures for stump hydraulic hoses, and features sealed hose connections for grease, air and water.

The PRO hammers have a housing

design and wear plates that make them perfect for horizontal working duties, including applications such as tunnelling. To match the demands of extreme applications, special tools for horizontal primary breaking are available to work with a broad range of auxiliary systems.

For customers working in tunnelling applications, Rammer has a package of auxiliary systems and solutions such as the air grease water. The air grease water unit comprises special features designed to aid tunnelling activities. These consist of the Ramair air flush system that prevents potentially harmful dust ingress; the Ramlube I automatic lubrication system to ensure consistent and thorough greasing; and the water jet dust suppression package to minimize the creation of dust during breaking.

Hydraulically actuated and requiring no additional power supply, the air grease water unit is easy and safe to install and maintain. It helps ensure that all Rammer PRO hammers are protected and productive throughout their working life. All these key features are backed by long life, wear resistant Rammer parts available from the Rammer global dealer network.





New Products from Stanley La Bounty

Stanley Infrastructure is a division of Stanley Black and Decker. It consists of four divisions: Dubuis, HS Blades, Stanley Hydraulic Tools and LaBounty. All have new products that will be on display at Bauma.

La Bounty

LaBounty now has a wide range of universal processors from 1.77 tons to 14 tons using a variety of changeable jaw sets. Since 2014, the range of MSD mobile shears for scrap metal processing and demolition haas been updated with two new models-the MSD2250 is for carriers of 25-50 tons, and MSD 800 for 9-12 ton carriers. At Bauma the company will release a modernized universal processor multi-system with faster interchangeable jaw sets for concrete cracking, concrete pulverizing, reinforced concrete processing, scrap metal shearing, and plate shearing.

Stanley Hydraulic Tools Stanley Hydraulic Tools launched a full line of light compaction tools this year. This included a line of rammers, forward plate compactors and reversible place compactors, all made in Germany. At Bauma, Stanley will show different sectors of activity and demonstrate handheld hydraulic tools. Hydraulic power packs will be shown working with breakers, chain saws and grinders.

HS Blades

HS Blades, formally known as Horst Sprenger recycling tools, has more than 30 employees and a large network of distributors. Despite the change in name to HS Blades, the range of products remains the same. The blades will be on display for the LaBounty MSD 2250 Shear, along with an accessory kit for a briquetting machine, and hammer pins for shredders.



MANUFACTURER OF DIAMOND TOOLS AND MACHINES

a professionals

made in Holland

Modular drill stands for the professional **CNC PRECISION**



SPECIALIZED IN

DRILLING SAWING * * * * *

maijen

Meijer Diamond Tools

www.meijertools.nl

email: info@meijertools.nl

FACTORY

*





- IOO% Made in Italy
- Remote control operated
- Metal gear transmission box
- Adjustable work pressure
- Front transportation wheel
- Available in 6/4/3 heads
- High performance with DCS
- Exclusive Quick Attack tools
- Industrial Dust extractors



Floor grinders • Dust extractors • Diamond tools • Burnishing machines • Chemicals • Floor Solutions



Klindex s.r.l. SS 5 Tiburtina valeria km209+200 • Manoppello (PE) Italy | Tel +39 085 859 546 • Fax +39 085 8599 224 • www.klindex.it • info@klindex.it

news

New Husqvarna 190 Power Pack

The 268 hp (200kW) Husqvarna PP 490 power pack allows users to power all their Husqvarna PRIME™ power cutters and drill motor, allowing them to get more work done with less equipment. Delivering 400V, the PP 490 is designed to be run with the WS 482 HF, CS 10, K 6500, K 6500 Ring, K 6500 Chain, and DM 650.

"With PP 490, you have the advantage of a modular system, that makes it possible to use several machines with one single power source," explains Helena Lindkvist, Product

Manager, Husqvarna Construction Products. "Users have the flexibility to do both wall saw cuts and over cuts as well as other jobs with one system. It saves valuable set up time,

bringing higher efficiency and productivity to customers, and in the end, higher profit."

Weighing 55 lbs (25kg), the PP 490 also comes with a wireless remote control. This gives the user excellent control of the sawing along with the freedom to move around the worksite. The remote control has a clear display that shows the current performance of the product in use.

www.husqvarnacp.com

General Equipment Company Offers Long Reach Air Tools

General Equipment Company's MDF Series of Long Reach Air Tools is designed for a wide variety of removal and surface preparation applications. They feature ergonomic throttle valves and protective enclosures to maximize operator comfort and reduce the risk of equipment damage.

Weighing only 10 lb (4.5kg), the MDF15 is ideal for above-waist and overhead projects. Popular applications

include the removal of vinyl, ceramic tile and material buildup. The MDF15 produces 3,700 blows per minute.

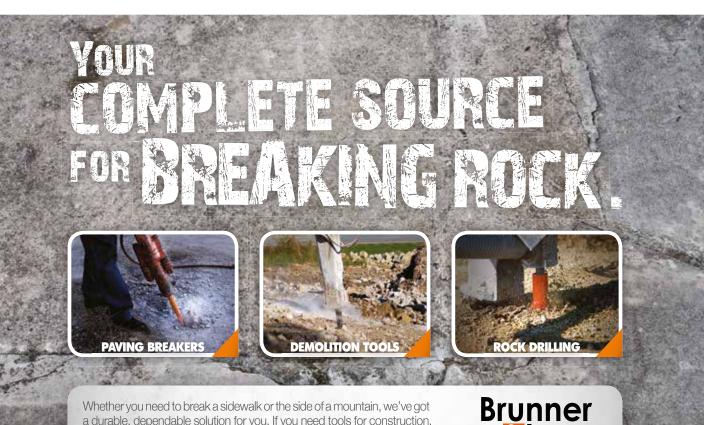
For heavier duty jobs, the MDF35 utilizes an internal valving mechanism, which makes the piston deliver a more powerful blow. This allows the tool to chip away concrete and asphalt, and it can also be used to remove slag and scale materials on industrial and marine jobsites. The MDF35 produces 3,100 blows per minute.

Both models feature General's exclusive Tool Integrated Protection System (TIPS™), which provides additional 360-degree support around the tool shank. This helps

> minimize receiver damage from forces created when prying. The MDF series also comes standard with a 60-in (152.4cm) whip hose. An optional tool caddie is available to provide the continuous clean, lubricated air necessary to maximize service life and productivity.



www.aquajet.se



a durable, dependable solution for you. If you need tools for construction, mining, or demolition-we're the only name you need to know.

Call (800) 872-6899 or visit BrunnerLay.com

&Lay "Quality First" since 1882

SYSTEMS AB

THE WHOLE WORLD IS WATCHING

World of Concrete, the annual gauge of the concrete industry's health, shows a distinct warming trend.

WGRIND

GOLD LOT EVENTS





Unseasonably chilly Las Vegas temperatures may have disappointed some World of Concrete 2016 attendees seeking a respite from their wintry homes. But enthusiasm for the annual exhibition of the latest in concrete construction and demolition equipment was as warm as ever. Organizers proclaimed this year's show to be the largest in seven years, with 60,110 registered professionals and more than 1,525 exhibitors occupying just under 743,900 ft2 (69,111m2) of space.

No doubt there was more on attendees' minds than just whether they'd packed properly for the weather. The good news of a recently passed U.S. highway bill and uptick in the housing market competed with the uncertainties of the impending Presidential election, China's downward economic spiral, and the effects of plummeting oil prices, which may mean good news at the gas pump, but grim prospects for those who work closely in the energy sector.

And with Bauma 2016 looming in April, European manufacturers as a whole seemed to have a somewhat lower profile at World of Concrete, perhaps preferring to give their "backyard" markets first crack at new product offerings. A notable exception was Brokk, which previewed its new diesel-powered model 120 D demolition robot.

Billed as the world's smallest diesel-powered demolition robot, the 1.2-ton, 31-in (787mm) wide 120 D is a counterpart



to the company's popular B100 electric-powered model, but one that doesn't require a separate power source. A 24-hp (18kW) Kubota engine allows the 120 D to operate up to 10 hours on a single fill-up, while the 661-lb (300kg) lifting capacity supports the B100's range of heavy-duty hydraulic attachments.

Peter Bigwood, vice president of Brokk's North American arm, says the 120 D fills a gap in the diesel-powered demolition machine market, with its ability to perform "medium" construction tasks.

"Other machines in this category are smaller—designed mainly for inspection-type jobs—or are too heavy at 4 tons or more to do confined space work," Bigwood said. "The 120 D also provides the flexibility for use in quick, short-term jobs."

New product stalwart Hilti likewise made sure its typically expansive outdoor display was worth a venture into the cold air, with the new handheld DSH 700-X and DSH 900-X 70cc gas saws. The first of what Hilti North America President Cary Evert promised will be 45 new product introductions for his company this year, the easy-to-maintain saws are also easy to start thanks to a new automatic choke technology called Easy Start. The saws are also matched with a new portfolio of blades tailored for the North American market.

Perhaps presciently, Hilti also showed its new HIT-RE 500 V3 adhesive anchor system, which has a temperature range of 23°F to 104°F (-5°C to 40°C), as well the shortest cure times for any epoxy. Thanks to a 60 percent increase in published load performance, the HIT-RE 500 V3 is ideal for applications such as structural connections with post-installed rebar, substituting of misplaced and/or missing rebar, and anchoring structural steel connections.

Hilti's innovative SafeSet[™] with the hollow drill bit and VC20/40 vacuum allows contractors to perform chemical anchoring applications more efficiently and reliably with no required manual hole cleaning. When used with the new TE-YRT roughening tool, HIT-RE 500 V3 can be utilized in both cracked and uncracked concrete diamond-cored holes, greatly reducing the cleaning typically required for cored-hole installation.

Back inside the Las Vegas Convention Center, Genesis Attachments showed its new GDT 290, one of the company's new lighter-weight GDT Razer demolition tools. Optimized to fit on a standard 300 class excavator and most high-reach demolition machines, the GDT 290 features a short, flat-top head with bolt-on bracket that simplifies installation, shortens the center of gravity, and makes it easier to switch the tool between excavators.

A key feature, adds National Account Manager Justin Palvere, is Genesis's ability to manufacture interchangeable plates for the GDT Razer's wear parts.

"We can do customized profiles of the crushing teeth to meet the user's product needs," he says. "The plates can also be switched out and reversed front to back to even out where, which extends the life of the teeth and lowers cost of ownership."

Other features include an apex design that draws material deeper into the jaw for more efficient cutting, a pass-through lower jaw to prevent material build-up and jamming, and a reverse-mounted cylinder that is protected from the risk of damage during operation. The GDT Razer is also available in a 190 model for 200 class excavators. An even larger 390 model will be introduced soon.

The year of propane in surface preparation

Though demand for polished concrete floors remains strong among owners of new and existing facilities, the market for grinders and polishers appears to have experienced a natural shake-out, with many recent upstart manufacturers absent from this year's World of Concrete.

The survivors aren't simply resting on their laurels, however. Superabrasive introduced the latest addition to its LAVINA line, the new 25-in (635mm), self-propelled L25M-X grinding and polishing machine. Along with a 370-lb (168kg) grinding Pullman Ermator

DUST EXTRACTION SYSTEMS THAT MAKE YOUR EQUIPMENT WORK BETTER

Meet Us At Bauma 2016 Hall A1:Booth 450



*Specials apply to T7500 & T8600

BUY A S36 & GET A C3000 & VAC TRAILER FREE \$1800 VALUE BUY A S26 & GET A

"Y" Kit & 2 SHROUDS

\$500 VALUE

PULLMAN ERMATOR IS THE LEADING INNOVATOR IN THE COMMERCIAL & INDUSTRIAL HEPA VACUUM MARKET

- Through design, our complete line of vacuums and dust extractors are the only ones that will increase productivity and save the contractor money
- Jet Pulse filter cleaning that works unlike automatic systems that don't
- No doors to open to clean out filters that expose workers to dust
- The INVENTORS of the Longopac system for vacuums. Eliminates the need to dump dust from a can.
- Highest CFM and Waterlift in their class make Pullman Ermator the only choice for grinding, cutting, coring, blasting, demolition, and all other industries that create harmful dust

All Pulman Ermator Vacuums Include These Features:

- Cyclonic Separation with Pre Filter
- Longopac Bagging System
- Individually Tested & Certified
 99.99 @ .3 micron HEPA filtration
- Jet Pulse Filter Cleaning
- ► 3 Year Warranty

DUST ACCESSORIES



CALL TODAY FOR COMPLETE DETAILS ON THESE OFFERS! See distributors for extra grinder package savings

855.736.2869 | www.ermatorusa.com









pressure, the 695-lb (315kg) L25M-X has a second motor that propels the machine forward, and guarantees a steady work speed and consistent scratch pattern. The self-propelled motion makes grinding much easier for the operator and minimizes the risk of mistakes, improving productivity and reducing time on the jobsite.

Superabrasive also unveiled a new LAVINA V-32-G propane vacuum featuring a Kawasaki propane engine, Longopac bagging system, and HEPA filter. The V-32-G will be available for sale in the summer.

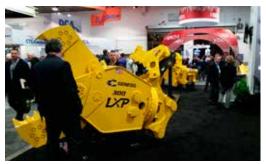
Propane was also the rule for other grinding and polishing introductions. Scanmaskin showed its new 25.5-in (648mm) SCAN 650 propane with a 15-hp (11kW) motor, and "fullblown" planetary heads. DITEQ showed its 22-hp (16.4kW), 30-in (762mm) TG30, which has 350 lb (159kg) of grinding pressure and a quick-change tooling plate.

HTC produced a 27-hp (20kW) propane version of its 32-in (813mm) 800RXP, which also features remote-control operation along with 530-726 lbs (240kg to 329kg) of grinding pressure. Todd Lambel, from the company's Sales and Technical Support group, explained that while propane is new to HTC, "so many projects take place in buildings that don't have power, which makes it expensive to run generator all the time. It just made sense to put propane on our best-selling grinder."

Also dipping a toe (or a tool) into the propane market was Diamatic, which showed its 35-hp (26kW) BMG 735P with a





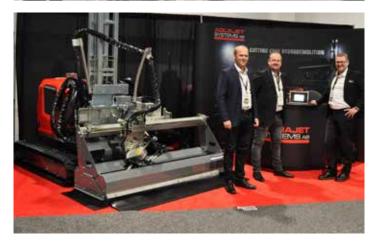
























variable working width of 6 in to 27 in (182mm to 686mm).

"We've mostly been oriented to electric, but customers are asking for propane," said John Ripperman the company's Vice President of Product Development, adding that the BMG 735P features a quick-change belt system that can be replaced in as little as 30 minutes.

"Time is everything," Ripperman says, "and the three hours it takes to disassemble and repair other grinders can ruin productivity. Just undoing 12 bolts on our machine is all you need to get to the belt, which is designed to serve as a 'fuse' to protect the more complex and expensive components from damage."

To be sure, there's still a place for electric-powered equipment in the concrete grinding and polishing business. Aramsco showed a 110-volt, 265-lb (120kg), 17-in (432mm) grinder that part of its new Tru-Brand product line, while U.S. Saws exhibited a range of new electric products including the 10-in (254mm) VSG 10, with a 115V, 4-hp (3kW) variable-speed high-torque motor. The VSG 10's adjustment wheel allows the grinding plate to be angled as needed, while the weight bar can be positioned for aggressive weight.

To help power these tools—and other electrical equipment—more safely, Honda unveiled three of its generators enhanced with ground fault circuit interrupter (GFCI) technology, which safeguards users from electrical shock by shutting down the circuit when current is flowing along an unintended path. Leading the enhanced models is the EB6500 Industrial Series generator, which provides 6,500 watts 120/240V of backup power.

The EB6500 also features Intelligent Automatic Voltage Regulation (*i*AVR) Power feature that can produce up to 7kW of power for as long as 10 seconds, allowing users to start





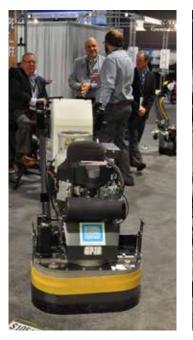
























high-amp load applications, such as air compressors, that require additional power to start. In addition, the Honda EB6500 boasts a long run time, (up to 10.4 hours at the 50 percent load) for extended work hours

Other Honda models with enhanced with GFCI technology are the 5kW EM5000 Deluxe Series generator, and 4kW Honda EG4000 Economy Series generator. Honda also introduced a newly designed Cyclone Air Cleaner to be made available on select Honda GX Series commercial engine models beginning in 2017.

Wheeled wonders

Because construction and demolition contractors are often just kids at heart, a highlight of World of Concrete are seeing and kicking the tires of the BIG "toys." And there were a few new products around the show floor.

John Deere's new five-model G series of small skid steers and loaders boast more power and fuel capacity along with an upgraded cab. Plus, the vertical lift models feature lift heights of more than 10 ft (3m) while the radial models boast a 20-percent increase in breakout forces. The radial lift option on the 312GR and 316GR features an exclusive one-person boom lockout system for safety that can be activated from the cab.

Bobcat offered the new 74-hp (55kW) S595 skid-steer loader with a 2,200-lb (998kg) rated operating capacity (ROC). The vertical-lift-path S595 is able to lift loads higher, making it easier to clear high-sided truck boxes and hoppers. The S595 also features two-speed travel, with a top speed of 11 mph (18kph). The push-button feature allows operators to choose between low and high travel speeds to match the jobsite conditions and tasks.

Next door at Caterpillar, the 307E2 mini hydraulic excavator for the 7- to 8-ton weight class was on display. The 307E2 is powered by a 50.3-hp (37.7kW) Tier 4 Final/EU Stage IIIB engine, and features Cat's High Definition Hydraulic load sensing and flow sharing system. Other features include standard secondary



auxiliary lines, a rear-view camera, and a COMPASS monitor that provides greater control over the excavator's operations. Some pieces of big equipment were present in name only—a













reminder of Bauma's remote, yet nevertheless looming shadow. They included Gehl's 650 and 750 articulated loaders, which feature 65-hp (49kW) and 74-hp (55kW) engines, respectively; proportional auxiliary hydraulics with case drain and circuit pressure dump; and high-flow auxiliary hydraulics. The models will be marketed in North America under the Mustang brand as the 608 and 708.

With Las Vegas Convention Center now emptied of the last displays, equipment, and the ubiquitous booth giveaways, the countdown is already underway for World of Concrete 2017, which will take place January 17-20 due to the calendar proximity of its other tri-annual competitor, CONEXPO. For now, the volume of business leads and new product ideas should be enough to keep contractors warm well into spring.





The Hands-On EXPERIENCE

A look at the latest in handheld tools for concrete construction and demolition work.



Anyone who's ever watched the popular Canadian-produced program, The Red Green Show, will remember the title character's frequent reminder that, "if the women don't find you handsome, they should at least find you handy."

That was good advice, though Red's "handiness" usually involved fashioning make-do contraptions relying extensively on duct tape. Though his results worked, for a while anyway, the craftsmanship was always rather suspect—hardly something a concrete construction and demolition professional wants to be known for.

Of course, tools don't guarantee good results or repeat business, but they can help good contractors be even better through reliable performance, long-term durability, and affordability. They can also help enhance a contractor's reputation by offering the right amount of versatility to help solve the occasional tricky problem or perform an intricate task—that little something extra that means so much to customers today.

Handheld tools are often the best choices for working those little "miracles"—either on the jobsite or in the

accounting books. They live up to their "handy" reputation through go-anywhere portability, accessibility, and productivity. And thanks to improved ergonomic features found on most handheld tools today, they are comfortable to use throughout even the longest work shift.

The products profiled below are a sampling of products that have debuted over the past several months. More are sure to be unveiled throughout the spring, culminating at Bauma. But all represent a welcome trend toward making concrete-related workplaces as productive and efficient as possible.

That's a good thing, because attractiveness, regardless of gender, is highly subjective and changes with time. Being considered handy at one's chosen profession, on the other hand, is forever.

Hitachi DH40MEY rotary hammer debuts in March

Hitachi has combined innovative brushless motor, aluminium construction, and vibration protection technologies to create the DH40MEY 40mm SDS MAX Rotary Hammer. The brushless motor significantly extends the life of the tool, eliminating the risk of premature burnout, layer shorts, and commutator wear. The motor unit's durability is significantly enhanced by a sturdy aluminium die-cast body that incorporates a plastic internal stator holder, thereby achieving internal double insulation characteristics. With its User Vibration Protection, Hitachi is one of the few manufacturers that offer both an internal counterweight and shock absorbing handles for reduced user exposure. Less vibration on the tool means less vibration on the internal components, which greatly improves the tool's life.

www.hitachipowertools.com

New handheld gas saws from Hilti

Hilti's next-generation DSH 700-X and DSH 900-X handheld saws incorporate an innovative technology called Easy Start that automatically sets the proper amount of choke for more first-pull starts. With Easy Start, users simply flip the switch "on" and pull the starter rope.

The 70cc DSH 700-X is available in 12- and 14-inch





Hydraram develops and produces over more than 20 years attachments for use in demolition- & recycling industries. We supply a complete line of hydraulic attachments for each excavator from 1 to 200 tons.



WORLDWIDE DEALER NETWORK

HYDRARAM b.v. Meander 7 9231 DB Surhuisterveen The Netherlands Tel. +31 512-365981 Fax +31 512-365761 www.hydraram.com info@hydraram.com Stand 717/1 - FREIGELÄNDE NORD

- New attachments
- Used attachments
- Rental
- Service & maintenance
- Repairs
- **Spareparts**



DA-Goldmember 2016

feature.



models, while the 90cc DSH 900-X comes in 14- and 16-inch models. Both feature the innovative Cyclone Air Filtration System that removes most of the dust and debris from the engine air intake flow using centrifugal force. This process is perfected by suctioning the cleanest air from the centre of the cyclone which is then sent to the filter. This dramatically increases the filter's lifetime and performance, meaning less downtime for contractors.

On-site maintenance for the new saws is made simple, thanks to an easy-to-access and change starter rope, air filter housing and a reinforced blade guard. Common maintenance parts such as air filters, starter ropes, spark plug, and fuel filter are included to deliver unparalleled productivity, ease of use and reliability.

Combined with Hilti's new portfolio of diamond cutting discs in three new performance levels—Equidist SPX, SP and P, the DSH 700-X and DSH 900-X—the DSH 700-X and DSH 900-X excel in cutting all types of concrete, masonry (hollow-brick, limestone, etc.), and asphalt. Each blade operates with its own unique capacity to increase productivity, versatility and speed even in the most demanding applications.

www.hilti.com

695XL is ICS's deepest, most versatile gas-powered saw

Based on the best-selling 695 saw platform, the 4.8kW 695XL is the highest horsepower ICS gas saw for frequent-use by general construction, utility contractors, and concrete professionals. Weighing 9.5kg the 94cc saw delivers 5.7Nm of torque at 7,200 rpm. Features include an easy-to-start engine with higher energy ignition system and durable, long-lasting components such as a new muffler, carburettor, piston and cylinder. The 94cc saw is available with 30cm to 40cm guidebars, and the entire line of MAX, ProForce, and PowerGrit series diamond chains.

Also from ICS, 680ES-PG gas-powered utility chain saw

Built to provide a combination of performance and

portability for cutting in-ground utility pipe, the 76.5cc 680ES-PG gas powered utility chain saw with PowerGrit chain will change the way to cut pipe. This affordably priced 3.7kW saw delivers 4.1Nm of torque at 6,500 rpm, allowing users to cut up to 254mm deep from one side into ductile iron, cast iron, PVC, HDPE, and Insituform lining. Weighing 9.5kg, the saw is also designed to run the full line of MAX series chains. With a quick switch of guidebar, chain and drive sprocket, you have the ability to use this saw in masonry, stone, and reinforced concrete.

Makita presents world's first 4-stroke power cutter

Makita's 356mm EK7651H is the world's first 4-stroke power cutter. The 13.8kg EK7651H eliminates the risk of improper fuel and oil mixing, one of the most common failures of 2-stroke commercial power cutters. The 75.6 cc, 3kW engine has a no-load speed of 9,350 rpm, yet runs quieter (92.7 dB(A)), idles smoother, and is more fuel efficient, using only 1.7 litters per hour. The automatic engine decompression valve is engineered into the cam gear to reduce pull start force by 40 percent for easier starts.

In addition, the pressure-compensating carburettor with vented choke plate is engineered to reduce flooding by automatically adjusting to deliver the proper amount of fuel. For increased ease-of-use and maintenance, the EK7651H has a five-stage foam-paper-nylon filtration system with Advance Direction Air Flow to provide cleaner air to the engine for improved engine durability.

www.makitatools.com

Also from Makita, new 18-volt brushless 3-speed impact wrench

The new cordless 12.7mm XWT02M combines the extended run time of brushless motor technology with the new 18V LXT® Lithium-Ion 4.0 Ah battery, as well as the speed settings for unmatched performance for fastening applications. Maximum torque ranges from 80Nm to 285Nm. For added durability, the XWT02M features Makita Extreme Protection Technology (XPT),









ARIX Generation 3

Advanced multi-layered diamond segments with precise distribution of diamond particles

THREE GENERATIONS BEYOND

TURN YOUR DREAMS INTO REALITY

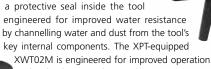
Meet the third innovation of the original diamond array technology that changed the industry in 2005. ARIX G3, superior performance you can see and feel.



W CENERATION DIAMOND TOOL

36B-10L Namdong Industrial Complex, 610-9, Namchon-dong, Namdong-gu, Inchoen, 405-100, Korea TEL. +82.32.820.3801 | FAX. +82.32.810.3456 | E-mail. terry@shinhandia.co.kr

feature-



EIBENSTOCK

In harsh jobsite conditions. The XWT02M is powered by Makita's efficient BL™ Brushless motor, which is electronically controlled to optimize battery energy use for up to 50 percent longer run time per charge than similar non-brushless tools. Electronic

controls efficiently use battery energy to match torque and RPM to the changing demands of the application for increased power and speed when needed. And since there are no carbon brushes, the BL™ Brushless motor runs cooler and more efficiently for longer life. An added benefit of Makita Brushless Motor Technology is increased motor efficiency in a more compact size. The XWT02M is 146mm long, and weighs only 1.78kg with an ergonomic design and superior balance. Similar to all Makita impact drivers and impact

wrenches, the anvil impact mechanism in the XWT02M is engineered using the best raw materials with the highest quality steel and unique heat hardening process for maximum fastening and driving power.

www.makitatools.com

Two core drills from CS Unitec The handheld EHD 2000 S diamond core drill is the ideal tool for drilling anchor holes through existing holes. The two-speed gearbox and powerful 13.6-amp motor provide the optimum speed (0-1000 / 0-2000 rpm) to drill installation holes up to 152mm in diameter in internal brick, brickwork, blockwork, soft concrete and other abrasive materials. Features include electronic soft start, temperature control, and overcurrent cut-off. The safety slip clutch prevents

jamming and allows for handheld operation.

When coupled with an industrial HEPA dust collection vacuum such as CS Unitec's CS 1445 H, the EHD 2000 S reduces airborne dust to provide a cleaner and safer work environment. The EHD 2000 S is supplied with an M18 male spindle, a 15.875mm x 11 UNC adapter, and a carrying case. Optional diamond core bits are available from CS Unitec.

CS Unitec also offers the ETN 162/3 PSV Diamond Core Drill, which is ideal for wet drilling of holes up to 162mm diameter in concrete, reinforced concrete, natural stone and asphalt; and dry drilling up to 203mm in brick and block. Supplied with the BST 162 V stand and a vacuum pump, the drill is fully adjustable up to 45 degrees. A guick-change mount on this unit

allows the user to switch from stand-mounted to handheld operation quickly and easily. The powerful 19/110 Volt motor has a load speed of 0-510/0-1150/0-2500 RPM. Electronic torque limitation and speed control guarantee constant rpm, even under load. The safety slip clutch prevents jamming and protects the operator during handheld operation. The motor includes a GFCI for operator safety during wet drilling applications.

An integrated water swivel is built directly into the spindle for wet drilling, when required. For concrete dust extraction while dry drilling, the ETN 162/3 PSV can be connected to a vacuum with a standard hose connection. The vacuum port is also built directly into the drill spindle, allowing the operator to capture the dust from inside the core bit and maintain a clean work area. Optional accessories include a portable water tank, water collection ring kit and Unicore diamond core bits.

www.csunitec.com

AG50-10TG angle grinder from Bosch

The 157mm angle grinder features a new tuckpointing guard with tool-less installation, making it guick and easy to install and remove. The variable depth adjustment allows the guard to collect dust throughout the duration of the cut, from the initial plunge until the blade is removed from the material. A large viewing window makes it easy to see the line of cut when in operation, while the dust extraction port ensures a cleaner work piece and job site when used with a vacuum. At 2.3kg, the AG50-10TG features a 10-amp, 11,500 rpm motor design with direct motor cooling and more air vents, which reduces hand blockage to extend tool life and provide higher overload capabilities to prevent overheating. Improved carbon brushes offer more than double the lifetime of previous brushes, which means less downtime for maintenance. The textured gear housing rotates 90 degrees for better ergonomics, grip options, and control. A two-position vibration control handle reduces vibration, providing uncompromising user comfort.

www.boschtools.com

A new handle for Blastrac handheld grinders

The Blastrac 05-73900 Loop Handle is specifically designed and made to fit the Blastrac 05-BL233 178mm handheld grinder. The handle allows grinding for concrete preparation along walls, around protrusions, and hardto-access areas. The loop handle offers operator comfort and limits fatigue by allowing multiple hand positions. Hardware for mounting the loop handle is included.

www.blastrac.com



Made in America Since 1968

5280HD Gladiator

FULL THROTTLE

When you have a job to do, it gets done. No excuses, no delays. National Equipment is your go-to partner for a complete line of American-made surface preparation machines that are built with rigor. With our superior customer support and training, it will be full steam ahead at any job site.

6280 Commander

nationalequipment.com Main: 763.315.5300 | Toll Free: 800.245.0267 | Fax: 800.648.7124

Husqvarna Launches New Redi Lock Series for Hard Concrete

Husqvarna Redi Lock G 1400 is a new range of metal-bond diamond tools for the Redi Lock system, used for surface preparation. G 1400 is especially developed for very hard concrete surfaces. The bright orange color highlights the fact that its metal bond is softer compared with the previous series for hard concrete, thus making it the softest range of the Redi Lock system. Available in a variety of grit sizes (20, 30, 50, and 100), the G 1400 series has a very high removal rate on hard concrete, (up to two times more than the second softest series G 1110), which will help increase productivity on difficult jobsites. The aggressive shape together with the big grit sizes allows a larger removal of the material. The diamond segment height is .5 in (13mm), and the optimal diamond selection enables the highest performance on hard concrete. This new competitive range will offer both dealers and professionals one of the best solutions for hard concrete on the market. The range will be supplied with a new package design that allows storage of segments when not in use. G 1400 is the latest addition to Redi Lock, which is an instant and hassle-free system for changing diamond tools.



Redi Lock® G 1400 is a metal-bond diamond tool for very hard concrete. Each grit size has its own shape to be easily recognized. The shapes of the big (lower numbered) grit sizes are very aggressive and are to be used at the first steps. The shapes of the smaller (higher numbered) grit sizes are more round and smooth and are to be used at the last steps. The segments are here placed in grit size order from left to right, starting with the biggest grit size.

Rockster Recycler Showing New Strength in North America

With a highly motivated and dedicated representative, the Austrian manufacturer of mobile crushers and screens wants to expand its U.S. network. Since the end of 2015, Daniel Civinski has been part of the Rockster team. He has 20 years of experience in crusher operating, mechanics and after-sales support, and is therefore a very competent partner for dealers as well as for the final customers.

"Once I found out the reliability and ease of operation I was convinced of Rockster crushers," Civinski says. "I wanted to grow with a company that supports the end-user as well as the dealers. The patented duplex system finalized my decisions to work for Rockster. Knowing that a small contractor can use this crusher and repair it with the operator and not a special technician makes it one of the best crushers for me to support."

The Duplex system enables the exchange of impact crusher and jaw crusher and vice versa on one basic chassis within a few hours. This technology allows flexible recycling, operating with hard stone, asphalt, concrete or any other C&D. The hydrostatic drive system provides the technical base for this highly sophisticated system: It allows a continuous variation of the crusher speed as well as a clockwise or anti-clockwise operation of the crusher (or vice versa). Through this drive system Rockster users enjoy more convenient operation without the wear issues of a conventional clutch. Moreover the maintenance is simple and high performance across all applications due to an optimal adaptation to the various requirements is guaranteed.

In January, Civinski represented Rockster North America at the AED summit in Washington, D.C. He believes that Rockster is going to end up being a well-known name for crushers in the U.S.

"My goals this year are to make a strong dealer network, get our name to be truly worldwide," he says.





Rotar, the Dutch manufacturer of hydraulic attachments for the demolition and recycling industry, is expanding its production capacity with an additional 13,400 ft2 (1,300m2) factory hall.

"We want to meet the increasing demand for our products and for that reason we need to grow together with the success of our customers," says Rotar Technical Director Roel Barelds. "For that reason, we are expanding our production plant with an additional factory hall.

As a result of expanding the factory and moving the rough machining procedures to the new hall, Rotar has created more floor space in the existing production facility. Rotar plans on using this space for manufacturing more product ranges in larger series. The company has also invested in new machine tools, heavy forklifts and a new spray booth.

The new factory hall will be completed for use at the start of April. This is another



milestone for the company after opening their North American division in November 2015.

"We are extremely proud on the thrust our growing group of customers have in our products and our company," says Rotar sales director Louis Broekhuizen. "Their success with our attachments is the ultimate goal we strive for. Broekhuizen also credits Rotar's dealers for contributing to the success.

"We work hard and will go that extra mile to keep growing in the coming years," he says.

New Hilti Detection Software

The new Hilti Profis detection software combines unites scan analysis for Hilti detection systems PS 200/250 Ferroscan and the GPR unit PS 1000 X/Scan, providing multiple measurements from non-destructive structural analysis and coverage data in one software program. Whether using the Hilti Ferroscan PS 200 system, Ferroscan PS 250 system, or the Hilti PS 1000, X-Scan users will find the Profis detection software provides full data processing that can be evaluated and/or integrated into 3D models, including 2D and 3D plan views or cross-sectional images.

The Hilt X-Scan PS 1000 system was developed with the aim of locating metallic and non-metallic objects in concrete structures up to 27.5 in (700mm) by pulse radar. The PS 1000 can locate post-tensioned cable normally located under the rebar. Operators can be more confident about avoiding cutting or drilling into post tension cables.

With the integrated EM-current sensor, the system reports whether the object is a live electrical cable inside the concrete member. The Hilti Ferroscan PS 250 and 200 systems determine the position, diameter and number of rebars in the concrete up to 6.7 in (171mm) below the surface by electromagnetic induction. By combining the scanned data of both Hilti systems, larger prestressed reinforced concrete structures can be analyzed. Users can now overlay scan data from three different sensors and view the information on one data output for three views in one. This makes it easier to identify, classify, and show rebar diameter, while accurately displaying the depth of cover information gathered from a Hilti Ferroscan.





Brokk Brings Independence to Compact Demolition

Brokk, the world's leading manufacturer of remote-controlled demolition machines. announces the all new Brokk 120 Diesel, the world's smallest diesel-driven demolition robot. This compact machine can operate independently and un-tethered for more than 8 hours, and effectively tackle jobs that no other machine can.

The Brokk 120 Diesel's compact size—only 30 in (780mm) wide—enables it to enter through any standard door opening and makes it easy to maneuver in tight spaces. Meanwhile its low weight of only approximately 2,645 lb (1,200kg) gives it access to work even on weak floors. and makes it easy to transport to and from work sites.

Powered by a compact but powerful diesel engine it has a minimum of eight hours of operation without refueling, making it truly independent from any power source for at least a full work shift. And all this flexibility comes without sacrificing any of the power and performance of its similar-sized electrical sibling Brokk 100.

The 120 Diesel uses the same tools and attachments (e.g., Atlas Copco SB152, Darda CC340. Brokk G50. and others), and has the same hydraulic power.

"The Brokk 120 Diesel was developed based on the needs communicated to us by our customers facing especially challenging situations, where they need a very compact machine that is completely independent from a fixed power source," says Martin Krupicka, CEO of Brokk Group. "We are



therefore convinced that this new model will bring great value to a variety of difficult applications."

BROKK

The Brokk 120 is the third, and by far the smallest, diesel-powered machine in Brokk's lineup. For several years, the Brokk 400 Diesel and the Brokk 800 Diesel have been available in the market, but they are

significantly larger machines. The Brokk 120 Diesel weighs less than one-fourth of the Brokk 400 D.

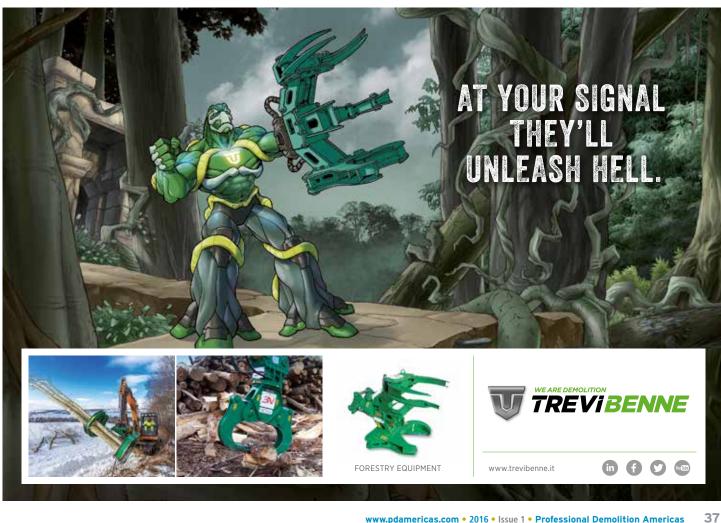
news

Brokk 120 Diesel with

a SB 152 breaker.

Thus, the Brokk 120 Diesel breaks new ground by establishing an entirely new segment: the compact diesel-powered demolition robot.

www.brokk.com



Superabrasive Adds New Grinder/Polisher and Vacuum

At World of Concrete in Las Vegas, Superabrasive introduced the latest addition to the LAVINA family - the new L25LM-X self-propelled 25-in (635mm) grinding and polishing machine. Weighing 695 lbs (315kg), the L25LM-X features a second motor that propels the machine forward and guarantees a steady work speed and consistent scratch pattern. The self-propelled motion makes grinding much easier for the operator, and minimizes the risk of mistakes, improving productivity and reducing time on the job site. A 15-hp (11kW) motor and chain-driven forced planetary drive powers three 8.85 in (225mm) heads that provide a grinding pressure of 370 lbs (168kg).

Superabrasive also unveiled a new LAVINA Propane vacuum. The V-32-G features a Kawasaki propane engine, Longopac bagging system, and HEPA filter. Switching to a propane grinder and now a propane vacuum as well completely eliminates the need for generators and all power / wiring issues, and allows for a faster and easier set up on the job site. The LAVINA propane vacuum will be available for sale in the summer. www.superabrasive.com





Superabrasive's Full Range at Bauma



Superabrasive, manufacturer of the LAVI-NA® line for concrete grinding and polishing, will showcase and demo its full range of floor machines, vacuums and diamond tools at Bauma – booth A1.211 (inside) and 12A.4 (outside).

The latest addition to the LAVINA® X series is a new self-propelled L25LM 25-in (655mm) grinder, ideal for commercial

projects with heavy grinding. Superabrasive will also showcase its ShinePro® line for floor maintenance. ShinePro® is a simple, efficient, and versatile system of diamond screens and pads for restoration and maintenance of polished concrete, natural stone, VCT, terrazzo and overlays. The ShinePro® diamond screens, designed for spot repair and restoration, are offered in 220, 400 and 600 grit, and the ShinePro® pads are offered in 220, 400, 800, 1800, and BUFF grit.

However, most maintenance schedules require a single step – the BUFF pad, which micro-polishes sealed and non-sealed floors without removing sealers or wax, or causing any orange peel effect. The pads and screens are available in all popular sizes for use on almost any floor machine such as buffers, autoscrubbers, burnishers, etc. They are ideal for use with the new 36-in (914mm) propane LB36G-S burnisher, a true hybrid machine that can hone, polish, burnish, and clean floors. The ShinePro and Lavina floor maintenance system provides outstanding cost and time savings.

KNOW-HOW, MACHINES & COMPONENTS FOR THE DIAMOND TOOLS INDUSTRY

SM-SEAHORSE CO., LTD. 《上海仕赫实业有限公司

THE ONLY COMPANY WHO CAN PROVIDE KNOW-HOW, MACHINES & COMPONENTS FOR THE DIAMOND TOOLS' INDUSTRY...... SUCH AS:

- **1. DIAMOND POWDERS**
- **2. METAL POWDERS**
- **3. GRANULATION BINDERS, BORON NITRIDE POWDERS**
- 4. STEEL CENTERS, CORE DRILL TUBE, CUP WHEEL & BEADS BODIES, FICKERT/FRANKFURT/CASSANI/HTC/HUSQVARNA SHOE BLANKS & ANY TAILOR-MADE METAL PARTS
- 5. GRAPHITE MOULDS, STEEL MOULDS & INJECTION MOULDS
- 6. GRINDING/ABRASIVE WHEELS, SHARPENING STONES
- 7. POWDERS GRANULATING MACHINES
- 8. POWDERS WEIGHT AND VOLUMETRIC PRESSES
- 9. POWDERS HOT PRESSING MACHINES
- **10. TUNNEL FREE-SINTERING OVENS**
- **11. BRAZING MACHINES, GENERATORS**
- 12. GRINDING, TENSIONING, INJECTION MACHINES AND SO ON.

Phd. Marco Fiore & Eng. Ping PanEmail: ceo@sm-seahorse.comManaging Partners of:Website: www.sm-seahorse.comSM-SEAHORSE CO., LTD.24 Hours Hotline: +86-186-1600-8022"Know-How, Machines & Components for the Diamond Tools Industry"Fax: +86-21-66582220

www.sm-seahorse.com

Bauma holds its position after decades as by far the biggest international building and construction machinery show in the world. In fact Bauma is the biggest show in the world all categories. **During April 11-17 this** year, it is again being held at the Munich International Exhibition Centre.



BAUMA 2016 Selected list of exhibitors

ADAMAS B.V.	A1.231
AIRTEC AG	A1.118
Akerströms Björbo AB	A6.104
ALLU Deutschland GmbH	FN.718/2
ALLU Group	FN.718/2
Ammann Group	FS.909
Anac Makina	A6.517
Anaconda Equipment	B2.131
Aquajet Systems AB	A1.127
Arden Equipment SAS	FM.615/2
Arjes GmbH	FN.1018/2A
Ashine Diamond Tools Co.,	A1.529
Astec Industries, Inc.	FS.1111/3
Atlas Copco MCT GmbH	FS.1108
Maschinen GmbH	FM.612/1
ATN	FS.1102/4
AUSA	FM.808/2
AVANT TECNO Oy	FM.615/3
BAIER, OTTO, GmbH	EWE.o2
Bell Equipment	B5.148
Dr. Bender GmbH	A1.537
BERCO Deutschland	A5.349
BERCO S.p.A.	A5.349
Black Cat Blades Ltd.	A6.224
Blastrac	A1.414
Bobcat	FM.612/3
Bosch, Robert GmbH	A4.327
Bosch, Robert GmbH	A4.327
Breaker SRL	A1.203
Briggs & Stratton Germany	A3.449
Brokk AB	FM.613
Broendum A/S, V.	A1.434
BYG, S.A.	A6.336
CAMS Group	FM.615/5
CAMS SRL	FN.618/3
Cangini Benne s.r.l.	B3.236
CASAGRANDE S.p.A.	FN.521/5
Caterpillar S.A.R.L.	B6.106
Cavotec Germany GmbH	C2.438
CEDIMA	A1.448
Chicago Pneumatic	FS.1210/4
Conjet AB	A1.424





What can we say, it is Bauma again. The show is the world's biggest playground for the construction industry. For our sector—demolition, concrete cutting, recycling, and related service trades—it is the show that everybody is waiting for. The concrete cutting industry is gathered mainly in hall A1, which is like a show in the show. Many suppliers and visitors don't even leave the hall during the whole Bauma week (except in the evenings when they are heading for Alt Stadt).

In hall A1, you find everything having to do with diamond tools, concrete sawing and drilling, concrete floor grinding and polishing, all sorts of dust extraction units and air cleaners, and hydro demolition equipment, plus some standard demolition equipment as well. The more



heavy-duty demolition equipment, loaders, excavators, and mobile recycling equipment are spread out all over the Bauma premises both indoors and outdoors. To see everything you surely need a week.

Bauma is the world's biggest trade show both in terms of space and the number of visitors. It is impressive that this show has managed to become this big since it was first held in 1954. The original Bauma show has always been held in or near Munich in Germany. But today there are also Bauma shows in China, India and South Africa. During the last 15 years, the German show has been located at the former site of Munich's airport, which was cleared (except for the control tower) and rebuilt with new exhibit halls.





Concrete cutting and demolition is all together

At Bauma you find all machines, tools, and equipment related to the building and construction industry. In total the show area measures more than 6 million ft² (575,000m²). This year, some 3,400 companies will exhibit in the nine halls and on the almost 4 million (400,000m²) outdoor area. It is expected that some 535,000 people will visit the show this year.

At the most recent Bauma in 2013, exhibiting companies came from 57 different countries, while visitors represented 200 different nationalities and countries. The show was visited by 1,500 journalists or representatives of media.

Today the show has reach its limits in size. There is no more



room to expand the show anyway in this location and there is no plans to move the show. Messe Münchens President Klaus Dittrich, tells PDa that there is no plan to grow even more.

"Now we focus on remaining the biggest and most popular building and construction show in the world," he says.

A true international show

As the airfare tickets are slowly getting cheaper, many visitors around the world travel to international shows like Bauma. The only problem is to find a decent place to sleep. All hotels are booked almost a couple of years ahead. For any rooms that may still be available, the rates are tripled during this week. To find a room with a normal rate ,you need to look in

Consec Hakken Corporation	n A1.543
CONTEC	A1.212
CORAZZA Srl	B5.251
CORIMAG s.r.l.	B3.439
Cormidi Srl	FN.1017/4
CRANAB AB	FN.824/2
Daemo Engineering Co.,	B5.137
DARDA GmbH	FM.613
DEMAREC	FM.613
Deutscher Abbruchverband	FN.1020/8
DEUTZ AG	A4.337
Diamantwerk Ltd	A1.403
Diamond Products	A1.238
Diatop Sama Co.	A1.542
DIECI S.r.l.	FS.1007/1
DIEWE GmbH	A1.315
DIGGA Ltd.	B3.510
Doosan Benelux S.A.	FM.612/3
Doppstadt, Werner	FN.916/6
DRESSTA Co. Ltd.	FM.417
dsb Maschinenbau GmbH	
	A1.549
DYNASET Oy	FN.1017/5
E-Z Drill, Inc.	C4.615/A
EHWA DIAMOND IND.	A1.136
Eibenstock	A1.537
Element Six GmbH	C3.430
EMI Controls GmbH	B3.231
engcon Germany GmbH	FM.708/3
ERKAT Spezialmaschinen	
EURODIMA GmbH & Co KG	
EVERDIGM Corp.	FS.1106/2
Fachverband Betonbohren	A1.138
Fast Verdini S.R.L.	FM.808/4
Flex Elektrowerkzeuge	A1.317
Dr. Fritsch Sondermasch.	A1.538
FRUTIGER Company AG	B3.248
Furukawa Rock Drill	FM.614/2
Fuzhou Bontai Diamond	C4.220/B
GENESIS GmbH	FM.615/7
GIPO AG Aufbereitungssys.	FN.924/1
GÖLZ GmbH	A1.548
Hammelmann GmbH	A1.524
Hartl Engineering	B2.226
Hatz GmbH & Co. KG,	A4.548
Heger GmbH	A1.438

Shov	NS -
Dr. Heinemann Diamond	EWE.06
HEYLO GmbH	A1.509
HIDROMEK A.S.	B5.126
Hilti Deutschland AG	A1.412
HINOWA S.p.A.	FS.1103/8
HINOWA S.p.A.	C4.325
Hitachi Construction	FM.
Honda Motor	A4.348
HTC Floor Systems	A1.325
Huada Superabrasive Tool	B4.242
Huddig AB	FS.1309/4
Husqvarna Deutschland	A1.236
Hycon A/S	FS.1013/6
Hydraram B.V.	FN.717/1
Hydro-Tec GmbH	A1.502
Hyundai Heavy Industries	FM.813A
ICS Blount Europe S.A.	A1.415
Idrobenne s.r.l."	A4.305
Idromeccanica Ramtec	FS.1204/2B C4.135
Inan Makina Sanayi Ve Tic.	B4.348
INDECO Ind S.p.a.	FM.709/8
Janser GmbH	A1.102
JCB Deutschland GmbH	FM.713/1
JLG EMEA BV	FS.904/5
Joy Global	FM.715/4
Kärcher, Alfred,	A1.202
KAESER	FM.708/15
KERN – DEUDIAM	A1.134
Kiesel	FM.616/1
Kingthai Diamond Tools	A1.515/C
KINSHOFER GmbH	FM.613
Kleemann GmbH	FS.1011
Klindex Srl"	A1.229"
Kobelco Construction	FN.817/3
KOMATSU EUROPE FN.1115/2, B5.201, B5.	
KONVERMA	B5.250
Kranlyft, AB	FS.1003/1
KUBOTA	A5.249
KUBOTA Baumaschinen	FN.1018/5
Layher, Wilhelm, GmbH	A2.425
Layher Bautechnik	A2.424
LBS Conveyor Belts	B2.126
Lehnhoff Hartstahl GmbH	
Liebherr-International	FM.810
Link-Belt Construction	FS.903/3
Enix Deit Construction	1.0.000

LISSMAC Maschinenbau

A1.348



the countryside around Munich maybe an hour with train or car. Some people even find their accommodation in Austria, which is not that far away. Often, it is very nice and cozy to stay in a typical German gasthaus and a good contrast to the busy exhibition.

Still the German visitors dominate in numbers at Bauma, with many other visitors coming from central Europe. At the most recent Bauams, visitors from Eastern, Southern, and Northern Europe have also grown. But so too have visitors Asia, Australia, the U.S., South America, and Africa. Indeed, Chinese exhibitors and visitors are now strongly representated at the show.

If you are in the concrete cutting, demolition, concrete floor grinding and polishing, diamond tools, hydro demolition, and related businesses ,you don't need to go far when you come to the main entrance of the exhibition. Just pass the gates and turn right into hall A1. But be prepared, it is crowded all week, and it will take time for you to navigate through only this first hall. In the outside areas around hall A1, several exhibitors demonstrate their machines, so everything is gathered in one place. This hall is really boiling of activity. There are a lot of discussions about new equipment, tolerances, efficiency, and methods, to name but a few topics. Colleagues from all over the world are meeting each other for perhaps the first time in years, so there is also a lot of laughter and happiness. And of course, don't forget to visit PDi Magazine in hall A1, Booth 519.

2016 IACDS Meeting

Whenever Bauma takes place, IACDS, the international association for concrete cutters, holds its annual meeting as well. On Friday April 15 at 5:30 pm, there will be a special networking activity at the Bauma show that probably will gather quite a number of people from all around the world. The networking activity will take place at the German Sawing & Drilling Association's (Fachverband Betonbohren und -sägen Deutchland e.V.) booth A1, 138, just next to PDi's booth. It is free of charge to attend, and everybody are welcome.

The official annual meeting of IACDS starts at 10:00 am on Sunday April 17, and continues all day at the Holiday Inn Munich South. The meeting will include presentation of the IACDS Diamond Awards.

Find your way

This particular issue of PDa is the show issue for Bauma 2016.









Shows

Liugong Machinery Co., MAGOTTEAUX FRANCE B2.338 Mantovanibenne s.r.l. B3.125 FN.832/3 MB Crusher MB Crusher C4.146 FN.720/5 MB Dustcontrol B.V. McCloskey International FN.618/2 Mecalac Baumaschinen FM.715/1 Menzi Muck AG FS.1212/1 MEP S.p.A. C3.202 Merlo Deutschland FS.1008/3 Metso Germany GmbH FN.1016/3 Metso Germany GmbH FN.418/1 MONTABERT-JOY GLOBAL FM.715/4 MultiOne s.r.l. FM.715/2 MULTIQUIP, Inc. FS.1106/7 B2.322 Nakayama Iron Works A5.402 Nordic Lights B2.131 Northern Crushers NPB Bearing (China) Co., A3.627/A NPK Europe Mfg s.r.o FN.1015/6 OilQuick AB FM.616/9 Okada Aiyon Corporation B5.230 Padley & Venables Ltd. C2.436 PDa Magazine A1.519 A1.519 PDi Magazine Portafill International FN.620/1 PROMOVE SRL B3.312 Pullman Ermator AB A1.450 Ramtec Oy B3.427 FN.1018/7 Remu Oy Ritchie Bros. Auctioneers C4.139 RIVARD FS.1104/4 C1.412 RM srl Rockster Recycler GmbH B2.214 ROTAIR S.p.A. B3.238 Rotar International B.V. B3.536 Rototilt Group AB FN.815/4 ROZZI S.P.A. FN.922/1 RUBBLE MASTER HMH FN.620/1 RUBBLE MASTER HMH B2.236 Saint-Gobain Abrasives A1.536 B3.514 SAMEP Tools SAMI S.R.L. C1.136 SaMoTer 2017 EOE.14











SANY Group Co., Ltd.

FN.620/9



As you will see, the magazine is really stuffed with information about new products and advertisements from our manufacturers concerning among other new products to be displayed at Bauma. On the following pages, you'll also find a selected list of exhibitors related to the product sectors PDa covers. You also find an illustration of the famous hall A1, and a general plan over the whole Bauma exhibition area. So enjoy Bauma, and don't forget to meet the PDi staff in hall A1, Booth 137. *www.bauma.de*







A1.338 As you will about new turers conc A1.314 at Bauma. A1.539 also find at FM.712 plan over t and don't f A3.124/B

Schwamborn Gerätebau	A1.314
Seelbach International	A1.539
SENNEBOGEN	FM.712
Sensors & Software, Inc.	C4.503/J
Sept-Tools	A3.124/B
SIMA, S.A.	A1.125
Simex s.r.l.	B3.226
Sobratema	B6.412
Solga SL	A1.313
SSAB Swedish Steel GmbH	A6.439
Stanley Infrastructure	FN.821/1B
Stihl Vertriebszentrale	A1.426
Superabrasive LTD	A1.211
Swepac AB	FS.1309/3
Takeuchi Generalimporteu	r FN.1016/
Terex Corporation	FM.711
TEREX Deutschland GmbH	FM.616/1
Thwaites Limited	FM.615/14
Tiger Machine Co. Ltd.	C1.301
Topcon Positioning Group	A3.249
TopTec Spezialmaschinen	A1.312
Tractive AB	A1.502
Trelawny SPT LTD	A1.130
TREVI BENNE S.p.A.	B3.414
Tyrolit Schleifmittelwerke	A1.238
UNACEA Unione Nazionale	e A2.227
UNIJET Waterjetting	A1.108
URACA GmbH & Co. KG	A1.248
VDMA	EOO.200/P
Volvo Construction	C4.327/C4.650
VTN EUROPE SPA	B3.502
Wacker Neuson Group	B0.110E
WEKA Elektrowerkzeuge	A1.113
WIDECUT CO., LTD.	A1.126
WIMMER HARTSTAHL	A6.113
Wirtgen GmbH	FS.1111
WLP SRL	B3.425
Wolff GmbH & Co.	EWE.01
WOMA GmbH	A1.202
World of Concrete	EOE.09/B
World of Concrete Europe	EOE.01
Yamamoto Rock Splitter	B3.541
Yanmar Europe B.V.	A4.425
Zeppelin Baumaschinen	FM.709/9

Scanmaskin Sweden AB

Dr. Schulze GmbH













What's the Best Way to Get to Bauma?

Over 3,400 exhibitors and over more than half a million visitors: That's what we are expecting at this year's Bauma, the world's largest trade show, which takes place in Munich from April 11 to 17, 2016. These numbers also spell pressure on the roads around the Messe München exhibition center and on the local public transport system. To ensure your journey here is as trouble-free as possible, as Messe München is offering a number of services.

From the airport to the exhibition center

A regular shuttle bus service runs from Terminals 1 and 2 at Munich Airport direct to the North Entrance of Messe München. During Bauma these buses operate on a 15-minute schedule. Once you arrive at the North Entrance, you can then take the on-site shuttle bus connecting up to all the other entrances to Bauma.

By local urban rail (U-Bahn and S-Bahn) to Bauma

The best way to avoid any traffic jams is to travel on local public transport. Line U2 on the underground system (U-Bahn) takes you from Munich Central Station (Hauptbahnhof) to the exhibition center in less than 20 minutes. At peak times during bauma trains on the U2 line depart every three minutes for the two underground stations serving the Messe München exhibition center, i.e. to "Messestadt West", at the western end of the center, and "Messestadt Ost", at the eastern end. bauma can also be reached by the city's urban railway system, the S-Bahn, and bus. The S2 line takes you to the stop called "Riem". From there it's about a 15- minute walk to the West Entrance at the exhibition center. Alternatively, you can get bus no. 190 from "Riem" station to "Messestadt West". Another option is to take the S4 to "Trudering" station, and then change to the U2 underground line to get to "Messestadt Ost".

Arriving by car

You have a choice of autobahn exits when coming to the exhibition center. These are: A94—Exit 4, "Am Moosfeld"; A94—Exit 5, "München-Riem"; A94—Exit 6, "Feldkirch-en-West"; and A99—Exit 15, "Kirchheim", then continue on road no. 2082. A modern traffic-routing system guides you to the free parking spaces. Important note: As you approach the exhibition center, please follow these electronic signs, which give the latest information. Do not rely on your navigation system.

Where to park?

In addition to the parking spaces at the exhibition center, Messe München is also offering free decentralized parking spaces during bauma—these are in Aschheim and Feldkirchen. On Saturday, 16 April, additional capacity will be available at the MOC multistory car park, and on both Saturday, April 16 and Sunday, April 17, the BMW Parkhaus FIZ am Hart (a multistory car park) will also be available for use, free of charge.

From the car parks in Feldkirchen (2,200 spaces) and Aschheim (2,500 spaces) and at the MOC (1,200 spaces) there is a free shuttle bus service to the exhibition center. The journey time is between ten minutes (Feldkirchen and Aschheim) and approx. 20 minutes (MOC). From the BMW Parkhaus FIZ am Hart it takes about 30 minutes by underground railway (U2 line). You can, of course, park next to or close to the exhibition center itself. Here, however, there is a charge for parking and these spaces fill up quickly. Parking is not permitted in spaces not designated as bauma car parks. **www.bauma.de**







HTC Launches the 800 RXP **Remote Controlled Propane** Floor Grinding Machine

HTC launched a propane-powered version of its popular 800 RX grinder at the World of Concrete trade show in Las Vegas. The new four head 800 RXP offers up to 50-percent higher productivity, using remote control and drive on wheels. It can be used in areas without access to power or a generator, or where electrical equipment is not allowed.

"HTC is always innovating to make life easier for our customers", says Brad Burns, Technical Director. "Together with our excellent diamond tooling, the new 800 RXP will help customers save time, deliver top notch quality, and be more profitable", he adds.

The 800 RXP grinder has been designed with ergonomics in mind, and is simple to use. The propane power is environmentally sustainable, and the floating grinding cover helps reduce airborne dust.

www.htc-floorsvstems.com



Avant Tecno Presents New Avant 200 and E series

Avant Tecno's new Avant 200 series multi-purpose loader is an excellent tool for professionals in places where space is limited, and a lightweight machine is necessary. It can tackle even smaller scale demolition jobs. One of the most important new technical features of the new Avant 200 series can be found in the longer and wider chassis, providing better ergonomics and more spacious legroom. There is also more storage space for tools, while the fuel tank and battery are considerably larger than before. The new 200 series also features the same quick-attach system found on Avanti's bigger models. It not only makes coupling of the attachments easier, but also makes the mounting of the attachment on the loader more solid. The loader is equipped with a multi-function display as standard equipment, including hour meter, fuel gauge and indicators for the engine and the optional road traffic light kit. Other options are a suspension seat with heater, six-function joystick, anti-slip valve, and LED work light kit.

The new Avant 200 series consists of three models. The Avant 220 is equipped with a strong 20 hp (15kW) gasoline engine, making a real multi-task machine for homeowners. When more power is needed, the right choice is the Avant 225 with a completely new 25 hp (18.6kW) Kohler EFI gasoline engine and auxiliary hydraulics oil flow as high as 13 gallons/min (50 l/min). Production of the models Avant 220 and 225 has started in the beginning of 2016. Avanti will soon complete the series with the 225LPG. Equipped with a low-emission LPG engine, this model will be well-suited also for indoor refurbishing and demolition jobs, where a low-weight machine is essential.

The New Battery-Powered AVANT e5

Avant e5 is a totally new, fully battery-powered loader concept that offers zero emission, extremely low noise, and low running costs. The e5 has approximately the same technical capabilities as an Avant 500 series and it can run many Avant attachments. A battery-operated machine is especially suited for indoor areas where little or no ventilation is possible.

The machine can operate

with full capacity in a non-ventilated space

without creating any emission related health hazards for the operator or co-worker. The extremely low noise offers the possibility to work also in noise restricted areas, or where minimum interference caused by worksite noise is a benefit.

The e5 is equipped with a 201Ah lead acid battery. It has two separate electric motors-an 8 hp (6kW) motor for driving the machine, and a 2.8 hp (2kW) motor for loader boom operation and auxiliary hydraulics. Avant e5 has 8 gallon/min (30 l/min) auxiliary hydraulics flow, which allows working with various Avant attachments, including hydraulic hammer and various grapples. Operation time of the Avant e5 varies highly depending on the type of work it is performing. The following times describe the operation cycle in different applications:

- 45 minutes 1 hour in Heavy Duty application (a lot of pushing and heavy use of auxiliary hydraulics)
- 1.5 4 hours in Medium Duty application
- (some pushing and heavy to medium use of auxiliary hydraulics)
 4 5 hours in Light Duty application (mainly transport driving and lifting, light or no auxiliary hydraulics use)

The loader has an integrated battery charger, which makes it possible to charge batteries anywhere a 220 volt/ 10A power outlet is available. A battery pack exchange system will be available in the serial production loaders, enabling quick changing of the batteries and guarantees continuous full-day operation in all applications. Charging time of the battery pack to 100-percent capacity is approximately 5 hours; charging to 80 percent capacity requires about 3 hours.

www.avanttecno.com



news.

Furukawa Rock Drill New Products

Furukawa Rock Drill will use Bauma to launch several new products, including Fx hydraulic breakers, the VXB primary crushers and RC22ER rail cutter.

The five new Fx series hydraulic breakers, with an operating weight of 152 lb (69kg) to 606 lb (275kg) are designed for use on excavators ranging from 0.5 tons to 7 tons. They are fitted with an adjustable pressure/flow adjuster to ensure optimum performance with the host carrier excavator.

As with all FRD products, the Fx ? series comes with interchangeable parts such as rod liner and front cover. The rod liner can be changed easily and the rod pin is easy to reach, so that the rod can be changed without any problems.

FRD offers these small breakers in three different frames. The models FX15 to Fx55 in a standard version for pin mounting, the models Fx25 S to Fx55 S in a silent version, and the Fx25 XS to Fx55 XS in the Xtra silent version.

Alongside the Fx series of hydraulic breakers FRD will display three models of its VXB series of primary crushers for excavators weighing from 2 tons to 13 tons. The VXB series have a compact design, large jaw opening and high crushing power. The crushers have an integrated booster system, which allows smaller excavators, with limited operating pressure, to achieve extremely high crushing force.

All models are fitted with the FRD hydraulic rotation system for precise positioning. As with the whole FRD range, the crusher body and their jaws are made out of Hardox. Depending on the model, the jaws are fitted with replaceable teeth.

FRD has responded to the growing demand for cutting railway tracks with ts first rail cutter model. The RC22ER is designed to precisely cut high tensile bars and all current Vignol rail tracks with the S7 UIC 60/60 UNI profile size can be cut precisely. A force of 312 lbft (1,390kN) and a movable jaw with an 8.85 in (225mm) opening provide the necessary power to cut all common profiles, as well as the UIC 60 profile.

The RC22ER, for use with 21 ton to 35 ton class excavators, weighs just under 2.5 tons. This model is fitted with special cutters, which can be rotated so all four sides of the cutters can be used. The reverse-mounted hydraulic cylinder has maximum protection, while body is made of heat-treated Hardox.

FRD will also use Bauma to add two models to its FXJ series of hydraulic breakers, bringing the range to six models for use on excavators weighing from 9 tons to 75 tons.



site report

Concrete Cutting Systems

Pentrud

The 8 - 20HF Wall Saw

Golf and Country Club Benefits by Using Blastrac Products



The Greens Golf and Country Club in Oklahoma City, Okla., has a resurfacing project underway on the concrete area around one of the pools they have on site. Blastrac NA is supplying the right equipment for removing several decades' worth of paint layers.

Combined equipment includes the BMS-220LPG which can tackle the toughest

The 8-20HF wall saw system features:

- Powerful 22 kW (30hp) motor
- 4 speed gear box
- Cutting depth up to 36"
- Precise cutting with rigid, lightweight track
- Longer life components machined from billet aluminum
- Systems available for 480V, 220V and 200V

Get More Done

Parts and systems stocked in Arizona for immediate shipping.

Call to order: 800.321.1240



© 2016 ICS | Blount Inc. Pricing and specifications subject to change without notice.

other Blastrac dust collectors, the BDC-1216 is available with a HEPA filter.





level of maneuverability and zero turning radius, the BMS-220LPG can easily operate in tight spaces. The BG-250GMKII is perfect for those applications that require heavy duty surface preparations of small to medium jobs, and

floor coverings. In addition, with its high

applications that require neavy duty surface preparations of small to medium jobs, and is able to grind closer to the wall than older models. This versatile grinder can be used for a variety of jobs such as surface leveling and preparation before coating.

The Blastrac quality handheld grinder is designed specifically for those hard-to-access areas, and offers great dependability for removing epoxies and mastics when utilizing appropriate grinding disks and wheels.

Both grinders can be coupled with the Blastrac BDC-1216 dust collector that offers a virtually dust-free operation. As with many

DEMCON 2016

Exclusive Platinum Sponsor DEMCON and The Swedish Demolition Awards

Husqvarna

Gold Sponsors



Bronze Sponsors



JITASCTIVE

Pentruder[°]

29-30 September 2016 • InfraCity, Stockholm, Sweden • www.demcon.se

New Husqvarna PG 680 RC's Unique Oscillation Function Improves Productivity

Husqvarna's new PG 680 RC floor grinder features a unique oscillation function that allows the operator to mimic manual operation movements for higher efficiency and greater productivity.

"The oscillation feature is a new function for all

new function for all Husqvarna's remote controlled floor grinders," says Joakim Leff-Hallstein, Global Product Manager Floor Grinding, Husqvarna Construction Products. "The user achieves the best possible grinding pattern by adjusting amplitude and frequency. It also gives a flatter floor by eliminating so called ridges otherwise created between passes. At the same time, the oscillation function saves time for the operator, as you only have to go over the floor once with the machine, instead of using the cross hatching technique."

Oscillation also provides the grinder with a broader sweep when operating, reducing ridging on soft floors. The remote control function that comes with PG 680 RC can also be tailored to different surfaces to achieve superior results.

Weighing 1,098 lb (489kg), the new PG 680 RC has a 26.7 in (680mm) grinding width, provides 593 lb (269kg) of grinding pressure, and easily fits through a stan-





dard door opening. The PG 680 RC also comes with Dual Drive Technology™ and is one of the market's most efficient machines that can be optimized for each application. It is an excellent choice for concrete floor preparation and repair as well as all polishing and grinding applications, both wet and dry. It is also perfect for HiPERFLOOR® concrete floor polishing system.

Husqvarna FS 3500 G Flat Saw – Designed With the User in Mind

Husqvarna has launched an updated version of the FS 3500 G, a self-propelled walk-behind flat saw with a 37 hp (27.5 kW) Kohler gasoline engine.

The FS 3500 G has a cutting depth capacity of up to 12.375 in (311 mm) with a 30-in (750 mm) diamond blade. It is easy to maneuver and ideal for small and medium patch or service jobs cutting in concrete or asphalt.

Updated features include a Poly-V bladeshaft belt drive system with an automatic tensioner that helps reduce vibrations and increases production by transferring more power to the bladeshaft. The automatic tensioner maintains constant pressure on the Poly-V belt to provide stable power levels at the bladeshaft, and eliminates the need to manually tension the bladeshaft belts.

The FS 3500 G comes standard with an engine tachometer, hour meter and water safety blade protection. The tachometer enables the operator to monitor engine rpms and performance. The hour meter



tracks hours for use during rentals and also service intervals. When activated, the water safety blade protection automatically shuts off the engine if water is lost, keeping the blade from overheating and going out of tension. The saw can also be equipped with an optional water pump kit and/or light kit.

Available blade guard sizes are 20, 26, and 30 in (508, 660, and 762 mm). The FS 3500 G comes with adjustable handlebars to fit the operator and the project.

www.husqvarnap.com

Trevi Benne goes to press

During Bauma the Italian manufacturer Trevi Benne, which will be based in Hall B3 -414, will present a magazine entitled "We are Demolition". The move follows the transformation of the brand and the company's message. The project has a photographic style and high impacting graphics and will feature jobsites, emotions and passion of people who work every day in demolition.



It will be a tribute to our world, made by real men, machines, talent and challenges to overcome.



MB Dustcontrol Ai

Hague-based dust and odor control specialist MB Dustcontrol has been growing rapidly over the last three years. Its spray cannons are already well known in many **European coun**tries, and now time has come for the Dutch manufacturer to make its mark on the American market. MB Dustcontrol's principals Michel de Jong and Ben van Fruchten told PDa's Andrei **Bushmarin about** the recent developments at the company and their shortterm plans.

When PDa first interviewed MB Dustcontrol back in 2012, it was only stepping into the international fray under an ironically humble slogan "we bite the dust." Well, not anymore. What was appropriate for a young company with little more than ideas and drive hardly applies to the current-day MB Dustcontrol.

One of the biggest ranges

Having started as a two-man venture in 2008, MB Dustcontrol has grown into a major player with one of the biggest ranges one can find in the dust control market. Within the space of a few years, MB Dustcontrol has quadrupled sales revenue, and extended its machine lineup from one to 15 models, including sophisticated self-supporting systems.

Nowadays, MB Dustcontrol employs seven people, with another production specialist due to join them in the coming January. Three years ago, the manufacturer moved to a new 10,764-ft² (1,000m²) office and production facility in Voorschoten, just off the Hague. That's how fast the once-humble dust biters matured into formidable dust warriors.

MB Dustcontrol broke into the international market in 2012 by presenting the SC35, SC45 and SC100 cannons at Intermat in Paris. It was the SC45 model with a throw distance of 147 ft (45m) that grabbed most attention at the show. Robust and versatile with the integrated fog system made of stainless steel, this mid-range machine proved to be one of the manufacturer's bestselling models.

The Product Range

Buoyed by its success, MB Dustcontrol soon built a whole battery of cannons ranging in spraying capacity from 30 ft to 300 ft (10m to 100m). The SC 60 model found itself in particular demand, thanks to a winning combination of performance, and water and energy consumption.

Designing of the so-called "self-supporting" dust suppression systems was another stepping stone in the company's rapid development. These are mobile self-contained systems that can operate for a maximum of eight hours without using additional water or an external electricity supply.

For example, the bestselling SprayCannon 35 SS system





consists of the SprayCannon 35 powered by a 11-hp (8kW) generator and fitted on a manually adjustable 16-ft (5m) mast, which is installed on a trailer with a 528-gallon (2,000 liter) water tank. Especially effective for odor control, these systems met with a resounding success, becoming the manufacturer's signature product.

Last but not least came the "SprayWall NM20" – a dust suppression system for outdoor applications. Its main element is a fire hose with special exchangeable nozzles and supports. The system can distribute the water mist up to 30 ft (10m) high. A dust suppression system for indoor tasks, which consists of a pipework fixed to the ceiling and walls, is also available from the Dutch manufacturer.

Aiming for the US

It is fair to say that MB Dustcontrol is now an established brand across Europe. Apart from the domestic Benelux market, the Dutch company supplies its machines to Scandinavia, Germany, Switzerland, France, and the UK. Talks are underway with prospective dealers in Spain, Russia, and India. Challenging as they may be, these markets are nonetheless potentially very lucrative; and if Spain and Russia are not in the best shape at the moment, the Indian economy keeps growing.

Thanks to a Qatar-based dealer, MB Dustcontrol brand is gradually getting recognition in the Middle East. The manufacturer also sells its products in Southeast Asia countries through a trading partner in Singapore.

When asked about short-term priorities, Michel de Jong said

reports

m Cannons at USA



that although the company is on a constant lookout for dealers worldwide, the main thrust would be on penetrating the U.S. market. North America's demolition and recycling industries are doing well, so this would be the place for MB Dustcontrol to go.

Michel de Jong adds that he is upbeat about the company's prospects in North America due to a number of factors. For one, it offers a wide range of high-quality dust and odor suppression solutions at mid-range prices. Secondly, being a small-sized enterprise, MB Dustcontrol is flexible, fast and responsive with short lead times. But the company's biggest strength lies in its ability to treat every dust suppression project as unique, each time coming up with a tailor-made solution fitting the project's specific requirements.

www.mbdustcontrol.com





www.demcon.se





Gold Sponsors of DEMCON 2016

Husqvarna

Exclusive Platinum sponsor of DEMCON 2016

In co-operation with the Swedish Construction Federation, IACDS and EDA

29-30 september 2016 InfraCity, Stockholm

•

0

Tyrolit Presents New Concrete Cutting Products at Bauma 2016

The 31st Bauma trade show is an important platform for TYROLIT to present the latest innovations and solutions in the area of concrete cutting to international visitors.

New Light Weight Wall Saw

Heading the list is the WSE811, the world's lightest wall saw in its class. The fully integrated design of the WSE811 wall saw saves valuable mounting time, while the proven P2® Technology makes it an utterly reliable, user-friendly machine.

New Dry Drilling System The TYROLIT Dry Drilling System is the world's first solution



The HRE400 electric ring saw for universal use in construction.



The 17.4 lb (7.9kg) HBE350 hand saw for wet and dry cutting.

for easy and inexpensive dry drilling of reinforced concrete. The perfect interaction of the DME19DP drill motor with soft impact function, and specially developed TGD® dry drill bits guarantees outstanding results. Specially developed dry drilling accessories as well as the lightweight and sturdy drill rig DRU160 complete the range. The TYROLIT Dry Drilling System impresses with its easy handling and the outstanding price-performance ratio. New TYROLIT wet drilling bits with an intelligent geometry for an increased stock removal rate and longer lifetime.

Above: Wall saw WSE811, the world's lightest wall saw in its class.

1000

New Hand Held Saws

With the HRE400 ring saw, TYROLIT offers construction professionals a lightweight and handy alternative to corner drilling and diamond chain saws. Its unrivalled cutting depth of 12.4 in (317mm) and the 4.1 hp (3.1kW) motor with fully integrated electronics make it very reliable and suitable for universal use.

The new HBE350 hand saw also comes with impressive special features. At just 17.4 lbs (7.9kg), it is extremely lightweight and its compact design also makes it very easy to handle. The integrated dust extraction connection and the 230V electric drive allow for clean and flexible working. It can be used indoors and outdoors for wet or dry cutting applications.

New Drill Bits

The TYROLIT drill bit range is being extended to include the new wet drilling bits with an intelligent geometry and a new segment height for an increased stock removal rate and longer lifetime. Other TYROLIT products on display at Bauma 2016 include: Below TYROLIT Dry Drilling System comprising DME19DP drill motor and appropriate TGD® dry drill

- The SB wire saw, now also available with electric drive.
- The new brick grinding wheel with TGD® Technology, which was specially developed for the brick and refractory industries, increases productivity by up to 30 percent, thanks to the intelligent distribution of the diamond grain.
- The PC4500 bump grinder for grooving and grinding concrete surfaces such as motorways and airport runways.
- The comprehensive TYROLIT floor sawing range with floor saws and durable floor saw blades.
 - The best-selling, highly versatile WSE1217 saw, with modular components that can be used for wall sawing, wire sawing, circular wire sawing and core drilling.
 - The comprehensive range of TYROLIT diamond tools for dry cutting applications.
 A wide selection of TYROLIT
 - diamond wires. A special exhibition of the product
 - A special exhibition of the product range with proven TGD® Technology.

U.S. Construction Equipment Exports Close Out 2015 Down 19 Percent

Exports of U.S.-made construction equipment ended 2015 with a 19-percent decline compared with the previous year, for a total \$13.9 billion shipped worldwide. All world regions experienced declines, led by Africa and South America, according to the Association of Equipment Manufacturers (AEM), citing U.S. Department of Commerce data it uses in global market reports for members. AEM is the North American-based international business group representing the off-road equipment manufacturing industry.

Year-end 2015 U.S. construction equipment exports by major world regions compared to year-end 2014:

- Canada (-18%): \$5.5 billion
- Asia (-10%): \$1.8 billion
- Europe (-12%): \$1.7 billion
- South America (-33%): \$1.7 billion
- Central America (-23%): \$1.5 billion
- Australia/Oceania (-1%): \$882 million
- Africa (37%): \$777 million

Benjamin Duyck, AEM's director of market intelligence, notes that in the fourth quarter of 2015, construction machinery exports continued to experience year-over-year declines for the 12th consecutive month. "The yearend also marked the third consecutive yearly decline," Duyck says. "These declines do need to be placed in the proper context as exports boomed after the Great Recession and strongly supported the U.S. construction equipment industry. Additionally, there are regional differences affecting exports."

Duyck adds that the deteriorating export position does not come as a surprise as the U.S. faces strong external headwinds. "Global economic markets such as China and Brazil are experiencing deep-rooted structural problems," he says, "and a strong U.S. dollar is making U.S. exports more expensive for international buyers." Lower commodity prices for metals and energy are also causing shifts in some market segments and equipment demand, domestically and internationally.

As noted before, U.S. exports are not deteriorating as strongly for every region. For example, 2015 exports to Australia, the U.S.'s third largest trading partner, grew 2.5 percent compared to 2014, and were up 20 percent in the 4th quarter compared to the same quarter in the previous year. Even with its 1-percent regional decline, Australia/Oceania clearly outperformed the global community.

Exports by Top Countries

The top countries buying the most U.S.-made construction machinery during 2015 (by dollar volume):

- 1. Canada \$5.5 billion (-18%)
- 2. Mexico \$1.2 billion (-24%)
- 3. Australia \$829 million (+2.5%)
- 4. Belgium \$334 million (-28%)

- 5. Chile \$492 million (-20%)
- 6. U. Arab Emirates \$272 million (+73%)
- 7. South Africa \$344 million (-49%)
- 8. Peru \$330 million (-28%)
- 9. Brazil \$403 million (-44%)
- 10. China \$267 million (-27.5%)

Jenny Products Electric Compressors Now Certified UL 1450 and C22.2 No. 68-09

Jenny Products, Inc. has recently announced that every electric air compressor produced by the company can now be certified to UL 1450 and C22.2 No. 68-09, the safety standards covering motor-operated air compressors, vacuum pumps, and painting equipment, for the U.S. and Canada. The requirements met for the certification were issued by CSA (Canadian Standards Association), which found that Jenny air compressors met the high safety standards of the UL 1450 code. CSA, a UL-approved test laboratory and facility, certifies, validates, tests, inspects, audits, and advises and trains in order to provide knowledge and expertise for customers to navigate vari-

ed States. The Jenny air com-

pressors, now certified UL 1450

and C22.2 No. 68-09, include all electric

units, from the small AM-Series hand-carry

models up to the largest T-Series stationary

compressors. "Being UL 1450 and C22.2 No.

68-09 Certified adds even greater peace of

mind to the purchase of a Jenny air compres-

sor," said Daniel Leiss, president of Jenny Prod-

ucts. "Our models are already known as some

of the most durable and reliable on the market,

and this certification gives customers another

With roots dating back to the 1870s,

reason to place their trust in our products."

ous markets in Canada and UnitJenny Products, Inc. has been an OEM manufacturer for several major manufacturers of air compressors. Today, Jenny manufactures and markets its own line of hand-carry, wheeled-portable and industrial-stationary air compressors.

New Pitbull 2300 Propane Screener a Cost-Effective and Low- Emission Alternative to Diesel

Lake Erie Portable Screeners introduces a propane- powered screener as a clean and cost-effective alternative to diesel power. The new Pitbull 2300 Propane Screening Plant is one of the first of its kind, delivering maximum efficiency and high outputs with a wide range of materials, including topsoil, mulch, gravel, stone and asphalt. The machine's low-emission propane components provide an alternative to diesel equipment affected by the spike in prices caused by Tier 4 Final emission standards.

The Pitbull 2300P is almost the same machine as the Pitbull 2300, aside from the power source. Featuring a Zenith 1.6-liter, 4-cylinder,

48-hp (38kW) propane engine that could also be easily converted to natural gas, it can do any job its diesel-powered counterpart can. The propane also results in a cleaner engine that's easier to maintain, allowing it to run longer with fewer repairs.

Extremely low emissions make the Pitbull 2300P ideal for operation

in confined spaces, such as buildings and

mine shafts, and eliminate the need to obtain special permits. The Pitbull 2300P also provides a significant return on investment by making it unnecessary to buy or rent expensive ventilation systems and masks that would be required to run a diesel model in a tight space. The propane engine is also quieter than most diesels.

The Pitbull 2300P is easy to move from site to site. A 10K Torflex axle with oil bath hubs provides a cushioning effect so the unit tows smoothly, reducing stress to the tow vehicle. Upon arrival, users can quickly and easily lower the unit to operating position with the hydraulic system, eliminating pressure on the axle, tires or wheels during screening. When the machine is ready to be moved, the operator can return it back to towing position with the flip of a lever. The unit also features heavy-duty suspension, electric brakes and trailer lights for safe and legal travel.

The Pitbull 2300P's 20-ft (6m) stacking conveyor adjusts hydraulically to feed material directly into a dump truck or tri-axle trailer. The height of the conveyor also allows operators to create bigger stockpiles, increasing efficiency by reducing the number of times equipment needs to be moved. These attributes, combined with the ability to place the machine at the point of excavation, minimize spillage and dramatically reduce cycle times and haulage costs often associated with loading and unloading material when using stationary plants.

Lake Erie Portable Screeners builds Pitbull 2300P frames with high-quality, structural tube steel, which reduces noise and vibration, and minimizes the risk of cracks and structural failures common in machines with C-channel construction.

With its low dump height of 8.4 ft (2.5m), operators can fill the hopper using typical construction equipment, such as skid steers, backhoes, loaders or excavators.

The portable screening plant also has an upper and lower screening deck, each with more than 41 ft² ($3.8m^2$) of screening area. The decks are each equipped with two sections of screen media. The company offers optional finger decks for the top deck in addition to a wide range of screen openings for processing all types of materials. Operators can change screens quickly and easily by loosening the tension bolts holding them in place. The screeners also can be equipped with optional upper and lower discharge chutes to allow for classifying up to three different sizes of screened materials.

In addition to the adjustable stacking conveyor, the Pitbull 2300P features a hydraulically driven transfer conveyor that moves screened material from the hopper to the stacking conveyor. Hydraulic motors on the conveyors provide continuous power flow to achieve production rates up to 100 yards of clean, saleable material per hour. The Pitbull 2300P conveyors are hydraulic

rather than chain- or belt-driven like many competing models, a feature that eliminates the risk of power loss and downtime due to broken chains or belts.



LEADER IN

Blasting | Scarifying | Scraping | Grinding | Dust Collection

BLASTRAC.

5-220ADE

Blastrac* offers a wide line of equipment for surface preparation. Shot blasting, scarifying, scraping, grinding and dust collection systems are used by professional contractors and are recommended by coating manufacturers for a wide range of applications. Blastrac systems are the preferred method for surface preparation used by professional contractors and recommended by coating manufacturers for a wide range of applications used in today's market.

13201 North Santa Fe Avenue, Oklahoma City, OK 73114 | 800-256-3440 | Blastrac.com se habla español Call: 800-256-3440 ext 3191 | Madrid, Spain Tel: +34 91 660 10 65

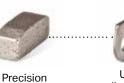
GETMORE DONE

Performance is in the Details

FORCE4® Diamond Chains from ICS feature SealPRO® O-ring Technology. FORCE4 Chain is engineered to ensure longer chain life, minimize chain stretch, and keep you in the cut.

THE FORCE4 ADVANTAGE

Patented SealPRO® Techology



engineered diamonds



Unique alloy chassis

CALL US: 800.321.1240 for details VISIT US: icsdiamondtools.com for a complete list of all products

123

© Copyright 2016 ICS, Blount Inc.

