

Ignite Attachments Grapple Lineup

Ignite Attachments' grapple lineup offers versatile tools that allow equipment operators to easily pick up and move heavy objects, such as logs, rocks, roots, and debris. The Ignite grapple attachment is designed to fit the machines customers already own, making it an essential tool for any construction, demolition, or landscaping project. The root, rock, and bucket grapples are available in 82, 74, 68, and 62 in. (2083, 1880, 1727, and 1575 mm) models. Ignite Attachment's grapple line features unique designs that allow it to pick up and move objects of various shapes and sizes; and most feature two powerful, independent jaws that can grip irregularly shaped objects securely during transport. Ignite Attachments also backs its attachments with a comprehensive warranty.

—Ignite Attachments, <https://igniteattachments.com>



Hilti SIW 10-22 High Torque Impact Wrench and SF 10W-22 Drill

Hilti North America launched cordless tools on the 22V Nuron battery platform to fill out the portfolio and offer greater value through its subscription tool service, Fleet Management.

The SIW 10-22 3/4 in. (19 mm) high-torque impact wrench delivers more run time using Nuron batteries, whether bolting steel connections or installing large diameter anchors into hard concrete. The SIW 10-22 3/4 in. impact wrench enables more productivity with a high-efficiency brushless motor and impact mechanism that delivers 85% more torque than its predecessor, while being more compact.

The SF 10W-22 Drill driver brings the power of a corded drill to Hilti's compact and power class drill category. Built with four gears, the SF 10W-22 can handle jobs like drilling deep or large diameter holes in wood and metal. In addition to delivering optimized performance, the SF 10W-22 offers increased run time and enhanced user safety with active torque control (ATC).

—Hilti North America, www.hilti.com



Ergodyne Skullerz Safety Glasses

Ergodyne announced the newest additions to its Skullerz Safety Glasses and Goggles line—VORDR Safety Glasses and the upgraded AEGIR Safety Glasses with polarized lens options. Both were designed and tested to meet the ground-level demands of work crews. Weighing in at just 20 g (1 oz), the VORDR are the lightest glasses in the Skullerz line. The eyewear features a soft nose piece that conforms comfortably to the nose bridge and temples that flex to accommodate a variety of head sizes. The VORDR are tested and certified to meet ANSI/ISEA Z87.1+, CSA Z94.3, and EN 166 standards and are available in a 12-pack dispenser box made from recyclable materials. The AEGIR Safety Glasses now come with the option of polarized lenses. Polarized lenses are beneficial in reducing glare from reflective surfaces such as water and roadways, making them ideal for workers who are sensitive to glare or suffer from migraines.

—Ergodyne, www.ergodyne.com



Products & Practice

Blastcrete RD6536 Skid Steer Pump

Blastcrete Equipment LLC's RD6536 Skid Steer Pump attachment is compatible with any skid steer and features Blastcrete's 3 in. (76 mm) hydraulic squeeze pump, making it ideal for block fill, driveways, basements, and shotcrete applications. Contractors can pump materials 250 ft (76 m) horizontally and as high as 50 ft (15 m) with the use of a rubber delivery line. The receiving hopper includes a hydraulic agitator that keeps the mixture well-blended. Operators can run the RD6536 in both forward and reverse to relieve pressure build-up clogs and eliminate potential damage to the pump. The pump also features hydraulically powered controls that operate both agitator and pump speed. The skid-steer pump weighs 2700 lb (1225 kg) and features a 48 in. (1219 mm) wide frame. The RD6536's forklift pockets allow quick and easy loading and unloading from the transport vehicle. Using just water and a sponge ball, the pump can be cleaned in about 5 minutes. Further, the rubber pumping tube can be easily replaced on the jobsite in about 20 minutes.

—Blastcrete Equipment, LLC, <https://blastcrete.com>

Graco Inc. TruMix XT

Graco Inc. introduced the TruMix XT™ variable-ratio mixing system. This solution mixes two-component floor coatings on demand, enabling contractors to reduce labor costs and eliminate costly errors. At the push of a button, the TruMix XT mixes most two-component floor coatings and supports the full range of ratios—from 1:1 to 6:1. The system has a variety of Graco-exclusive technologies to ensure an accurate and thorough mixture, including SmartSync™ Ratio Control, Xtreme Torque™ precision brushless motors, and the CrossLink™ Multi-Stage Mixing Hose. TruMix XT features a high-capacity battery that allows contractors to use it as a stationary mixture station or take it onto the floor and dispense as they go. This system is capable of mixing up to 120 gal./h (454 L/h).

—Graco Inc., www.graco.com



SmartPM Custom Reporting

SmartPM Technologies released its Custom Reporting feature, giving users the ability to visualize their schedule data with ease. This feature is designed to help companies transmit consistent and easy-to-understand information about project status and allow users to design reports that present visual project data that will increase information accessibility. SmartPM's simple drag-and-drop functionality enables users to create a report that "tells a story" rather than just presenting data. Customers can reduce the amount of time spent preparing reports for stakeholder review with the data simply delivered to their inbox.

—SmartPM Technologies, <https://smartpm.com>

Euclid Chemical VERSASPEED RMC

The Euclid Chemical Company announced VERSASPEED RMC, a fast-setting, one-component, cementitious repair mortar that is shrinkage compensated, pozzolan and microfiber modified, and contains an integral corrosion inhibitor. The product is designed for horizontal and formed vertical repairs as well as overhead structural repairs. Typical applications include parking decks, joint repairs, balconies, equipment bases, pavements, beams, and vertical and overhead-formed repairs. Pre-mixed with pea gravel, VERSASPEED RMC is ready-to-use. The product offers low permeability with freezing-and-thawing resistance and is designed to minimize cracking. Due to its rapid hardening, this concrete repair mortar allows users to strip forms the same day, and it can be coated 5 hours after the final setting. VERSASPEED RMC meets ASTM C928/C928M-20a, Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repairs, requirements and is packaged in 50 lb (23 kg) bags that yield 0.37 ft³ (0.01 m³) per bag when mixed with 4.25 pints (2011 mL) of water.

—The Euclid Chemical Company, www.euclidchemical.com

#5 GatorBar Grip

GatorBar announced the expansion of GatorBar Grip production to include #5 sized composite reinforcing bar. #5 GatorBar Grip is available for order with delivery through its network of distribution and wholesale partners. GatorBar is a glass fiber-reinforced composite reinforcing bar made in the United States that is ICC structurally approved. #5 GatorBar Grip is twice as strong in tensile strength than steel and four to seven times lighter than steel. The product is sliver-free and is resistant to spalling and rust.

—GatorBar, <https://gatorbar.com>

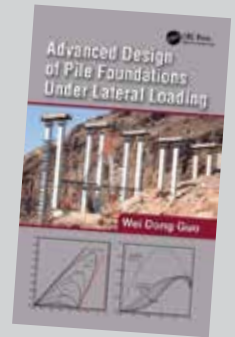
Book Notes

Advanced Design of Pile Foundations Under Lateral Loading by Wei Dong Guo

This book presents models that capture the nonlinear response of piles subjected to lateral forces. Using a consistent approach encompassing new mathematical models, it offers solutions presented as closed-form expressions and underpinned by the same set of three to five measurable soil-input parameters. These focus on nonlinear response of monopiles, anchored piles, pile groups, and torsional piles, as well as passive piles subjected to soil movement induced in shearing, sliding slopes or excavation, and earthquake shaking. The models can also be used for pipelines and similar beam structures. Solutions are provided in the form of design charts, with each parameter obtained using available test data and illustrated with real-world cases. *Advanced Design of Pile Foundations Under Lateral Loading* is ideal for practicing foundation engineers and students at the graduate level.

112 USD (hardback); 276 pp.; ISBN 9781032324760

—CRC Press, www.routledge.com



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Product Showcase

Digital Tools

Zoomlion Digital Twin Platform

Zoomlion's digital twin platform is an all-in-one solution that allows users to achieve virtual inspections, equipment monitoring, and early fault detection with higher speed, better accuracy, and reliability. The artificial intelligence (AI)-powered platform brings the real-time operational status of facilities online, allowing for simultaneous digital factory mapping and data integration and providing information that enables managers to have full coverage of each asset with more transparency and details. With this product, users can virtually manage and access the data of the factory's production and operations, equipment maintenance, on-site material inventory, raw material tracking, intelligent security, and logistics scheduling. The platform possesses several features including: displaying production volume, accuracy, inventory, revenue, and product failures; offering real-time alarms and fault diagnosis for key equipment; connecting to the enterprise resource planning (ERP) system for visual tracking of raw material usage, inventory, and logistics optimization; and analyzing raw material quality and adjusting mixture recipes to ensure consistency.

—Zoomlion, <https://en.zoomlion.com>



Converge Mix AI

Converge announced Mix AI™. This tool uses predictive artificial intelligence (AI) to assist contractors in reducing concrete overdesign and embodied carbon emissions, promoting low-carbon construction practices. Mix AI complements ConcreteDNA®, Converge's AI-based concrete monitoring and data management platform. It analyzes concrete data to offer AI-based forecasts of concrete strength, temperature, and carbon footprint, considering historical and future environmental conditions. Mix AI enables contractors to choose concrete mixtures with less cement, meeting performance specs while cutting down embodied carbon emissions. It balances construction demands with sustainability efforts, offering a solution to address embodied carbon while simultaneously reducing costs and accelerating project timelines.

—Converge, www.converge.io



Altair Inspire 2023

Altair Inspire 2023 combines the power of implicit modeling with graphics processing unit (GPU)-powered rendering and visualization technology for efficient and visually stunning designs. It also features a computational fluid dynamics (CFD) solver for early fluid flow performance analyses. Inspire enables users to create designs that are not only visually stunning but also optimized for peak performance. Inspire 2023 has an all-new graphics pipeline that shares the same GPU memory and provides photorealistic visuals in real time. Simplified pre- and post-processing workflows allow users to explore products' thermal and fluid flow behavior early in the product design process. This product features an enhanced suite of manufacturing tools with optimized workflows for traditional processes, a comprehensive Python customization layer for unparalleled design flexibility, a five-axis machining optimization constraint, generative design enhancements, and seamless construction history integration.

—Altair, <https://altair.com>



Bluebeam Labs and Auto Align

Bluebeam introduced Bluebeam Labs, a collaborative, co-creation workspace in Bluebeam Cloud, and the new artificial intelligence (AI) feature, Auto Align. Built to involve customers in the company's development of new solutions, Bluebeam Labs offers the ability to demonstrate and validate ideas and technologies before they are launched and available to all customers. The first new feature showcased through Bluebeam Labs will be three-dimensional (3-D) drawings, which uses AI to position up to hundreds of two-dimensional (2-D) drawings in 3-D space. Like digital origami, the program intuitively understands where to make the folds for the highest quality 3-D visualization and increased understanding of the project. Bluebeam Auto Align will reduce the tedious, error-prone steps of manually aligning three points on each drawing revision so users can understand the differences between them faster. Bluebeam customers currently use the Overlay and Compare feature that takes several clicks and up to 2 minutes per drawing. With the Auto Align option and a revamped feature interface, this can be streamlined to as little as 15 seconds, helping users understand the differences up to 80% faster.

—Bluebeam, www.bluebeam.com



Trimble Tekla Structures

Trimble announced the 2024 version of its Tekla® software for constructable building information modeling (BIM). Tekla Structures 2024 includes industry-standard communications improvements that allow users to deliver required documentation and model information efficiently, using a wider variety of supported industry formats. The 2024 version of Tekla Structures offers an enhanced user experience for staying on schedule and on budget. It provides engineers and detailers access to more intuitive modeling with fewer iterations from the start. Automated fabrication drawing cloning improvements deliver significant benefits for steel and precast cast unit drawing creation. Tekla Structures' change management allows users to work efficiently with the opportunity to quickly deliver drawings that match industry regulations and transfer model data error-free to support client requirements. As part of Trimble's ongoing efforts to provide enterprise-level security required in environments that thrive on data sharing, all Tekla products are certified to be fully compliant with ISO 27001, the standard for information security management.

—Trimble, www.tekla.com/us



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