

# Products & Practice

## Bosch GLL3-330CG

The Bosch GLL3-330CG 360° Connected Green-Beam Three-Plane Leveling and Alignment-Line Laser provides an all-in-one level and alignment solution for one-person job setup. The leveling laser generates three green-beam laser chalk lines in 360-degree laser planes—one horizontal and two vertical. With Bluetooth® connectivity, the user can control the setup of the laser from across the room with a smart phone and the free Bosch Leveling Remote App. The laser has a standard working range of up to 200 ft (60 m). In pulse mode, the laser range extends up to 330 ft (100 m) using the optional LR6 or LR8 receivers. This laser features VisiMax™ Technology to drive maximum line visibility, CAL Guard for calibration assurance, and robust over-molded construction to withstand rainy or dusty jobsite conditions.

—Robert Bosch Tool Corporation, [www.boschtools.com](http://www.boschtools.com)



## Theodolite

The Theodolite app combines the concept of a real theodolite with modern GPS, sensor, camera, and hardware/software technologies on mobile devices. The app makes extensive use of OpenGL graphics for smooth and realistic performance, and it uses advanced computation and fusion algorithms to combine sensor data and camera imagery. Users can take geo-tagged data-overlay photos, screen shots, and movies. Users can view their positions on built-in maps, with optional offline maps that include topo contours, trails, and landmarks. Live map markers continually update distance/heading from the user's location and display wayfinding information on the main screen. Locations can be indicated in numerous grid systems, six latitude/longitude formats, and optional U.S. State Plane coordinates (SPCS27 and SPCS83). Data can be exchanged with other users. Applications include land surveying, accident investigations, spotting of wild fires, triangulation of landmarks, and tactical observation/targeting.

—Hunter Research and Technology, <http://hrtapps.com>



## Comau MATE

Comau's MATE is a compact and ergonomically designed wearable exoskeleton. The MATE Fit for Workers exoskeleton uses an advanced spring-based passive structure. MATE delivers lightweight, breathable, and postural support without the need for batteries or motors. MATE can replicate shoulder movements while adhering to the body like a second skin. It is also the first of a series of wearable robotics that Comau is developing and commercializing in partnership with IUVO and Össur.

—Comau, [www.comau.com](http://www.comau.com)

## Hard Hat Solution for HoloLens

Trimble offers the Microsoft-endorsed hard hat accessory for Microsoft HoloLens. It is certified to ANSI/ISEA Z89.1-2014 Type 1, Class E for impact protection and electrical resistance. The accessory includes an industrial-grade suspension and clip system with adjustable height settings to ensure an optimal viewing angle. Quick-release clips and lanyard allow for rapid removal of HoloLens from the hard hat in case of emergency. Each accessory comes with a zip-up carrying case to ensure safe transport of HoloLens and hard hat without disassembly. A TX7 screwdriver and brochure with instructions are also included for assembly.

—Trimble, [www.trimblemepstore.com](http://www.trimblemepstore.com)

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## KINSHOFER NOX-Tiltrotator Series

KINSHOFER NOX-Tiltrotator Series feature a universal joint providing 360-degree continuous rotation and tilting angles of up to 2-by-55 degrees. The Tiltrotator's elliptical piston streamlines design and high-power performance in a variety of tight areas and applications, such as road construction and general construction. When paired with a narrow bucket, the attachment can access small, deep canals and under and between existing tubes. The attachment can also be used for slopes, as its ability to grade at an angle improves productivity. The NOX-Tiltrotator has only two greasing points. Its integrated hydraulic system provides ample protection for the industrial valves, increasing equipment longevity. An optional electric swivel is available with integrated sensors for 2D/3D excavating systems. KINSHOFER also offers a gripper, which mounts to the tiltrotator to easily grasp and position posts, tubes, rods, pallets, rocks, and sewer covers.

—KINSHOFER, [www.kinshofer.com](http://www.kinshofer.com)

## BASF MasterEmaco T 1060DR and 1061DR

BASF's MasterEmaco® T 1060DR and 1061DR low dust repair mortars help reduce jobsite dust that occurs during concrete repair mortar mixing. The MasterEmaco T 1060DR allows very rapid return to service, with structures being opened to vehicular traffic in as little as 1 hour. MasterEmaco T 1061DR offers extended working time of 25 minutes for jobsite flexibility, yet structures can be opened to traffic in as little as 2 hours. Applications for MasterEmaco T 1060DR and MasterEmaco T 1061DR include interior and exterior horizontal concrete surfaces, structural concrete repairs, and partial and full-depth repairs.

—BASF Corporation, [www.master-builders-solutions.basf.us](http://www.master-builders-solutions.basf.us)

## Brokk SmartConcept Technology

Brokk's SmartConcept™ consists of three features—SmartPower™, SmartDesign™, and SmartRemote™.

SmartPower helps the operator start the machine on a poor power supply while at the same time protecting the Brokk machine from harmful faulty power. The company's SmartDesign extends machine life and provides ease of maintenance. Brokk's SmartRemote consists of an ergonomic remote-control box. To avoid unintentional operator strain, a wide adjustable belt holds the control box comfortably around the operator's waist, away from the upper back. In addition, intuitive controls allow the operator to work the machine without having to look down at the display. The SmartConcept technologies are available on Brokk's next generation models as well as select established models.

—Brokk, [www.brokk.com](http://www.brokk.com)



## Resonate Pictures

Resonate Pictures creates training videos that use Hollywood-style storytelling, shooting, and editing techniques. Employees pay attention, and the training becomes effective because it gives workers an experience to draw upon—the messaging sticks with them long after viewing. The company's products include "Covered," a safety video that tells the story of a construction worker's first day on the job. Training objectives include: Impressing the "why" of safety into the hearts and minds of workers; increasing safety awareness, including anticipating accidents before they happen; observing techniques and mindsets that ensure a safe work environment; and normalizing an attitude of safety, helping workers resist being pressured into unsafe practices.

—Resonate Pictures, Inc., [www.resonatepictures.com/safety-training](http://www.resonatepictures.com/safety-training)

## Web Notes

### AltusGroup Precast Concrete Educational Courses

AltusGroup, a North American collaborative of precast concrete manufacturers, has produced three, 1-hour online continuing education sessions for architects and building teams. Each course is available through AEC Daily and provides one AIA CEU/HSW. “Ultra-thin Prestressed Precast Panel Technology” describes a lightweight panel technology, “Creating Distinctive and Attractive Designs on Precast Concrete Faces” demonstrates the technology used to produce graphically imaged precast concrete, and “High-Performance Insulated Sandwich Walls Using Component Design” explains precast wall panels with continuous insulation sandwiched between two layers of concrete.

—AltusGroup, <https://altusprecast.com>

## Book Notes

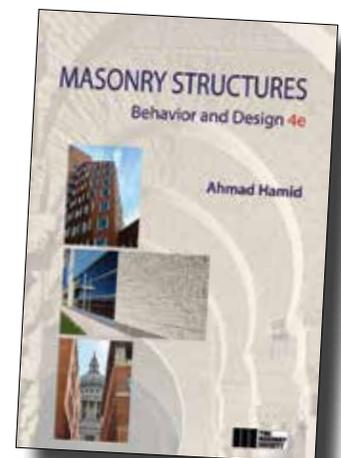
### Masonry Structures: Behavior and Design, 4th Edition

by Ahmad Hamid

*Masonry Structures, Behavior and Design* has been completely updated and includes much of the discussion that made previous editions so useful in both the classroom and in the workplace. The new edition reflects the design provisions in the 2016 TMS 402/602 Building Code Requirements and Specification for Masonry Structures. Chapters include: Ancient Masonry, Contemporary Masonry, Building Design, Masonry Materials, Masonry Assemblages, Reinforced Beams and Lintels, Flexural Wall, Loadbearing Walls Under Axial Load and Out-Of-Plane Bending, Columns and Pilasters, Shear Walls, Infill Walls and Partitions, Masonry Veneer and Cavity Walls, Connectors, Fire Resistance and Design for Environmental Loads, Construction Considerations and Details, Design of Loadbearing Single-Story Masonry Buildings, and Design of Multi-Story Loadbearing Masonry Buildings. The textbook includes numerous design examples, including designs for a single-story building and a multistory building. This textbook can be used for undergraduate and graduate-level courses and as a reference for practicing designers.

—The Masonry Society, <https://masonrysociety.org>

\$180; 723 pp.; ISBN: 978-1-929081-56-1



## Products & Service Literature & Videos

### The Precast Podcast: An Audio Account of Shea Concrete Product's History and Quest for Continuous Improvement

Shea Concrete Products has introduced The Precast Podcast, an audio account of the company's evolution in the precast concrete industry. In the recordings, the company's insiders and longtime leaders reflect on the company's history, its culture, and their aspirations. The first five episodes of The Precast Podcast can be downloaded through iTunes, Spotify, and Stitcher. Episodes and transcripts can also be accessed on the Shea Concrete Products website.

—Shea Concrete Products, <https://sheaconcrete.com>