

# Products & Practice

## Orion Labs Onyx

Onyx is a wearable walkie-talkie that can connect users across a single property or different time zones. It syncs with a Bluetooth LE 4.0+ enabled smartphone and uses the phone's Wi-Fi or cellular data to keep users connected through the Orion Labs app. The device's antenna allows it to operate anywhere within 30 ft (9.1 m) of the connected smartphone. With a small, lightweight profile, Onyx can easily be clipped to a lapel, pocket, or elsewhere. A built-in lithium-ion polymer battery can be recharged via an included micro-USB cable. An Orion Service Plan is required for use. The Orion Basic plan is free for up to five users in a group, and it provides access to a language translation app. The Orion Pro plan requires a monthly fee for each user but allows creation of communication groups of unlimited size and with multiple leaders, group management, and optional addition of customized automations. The automations include Emergency AI Workflow, which allows lone workers to easily call for help, and SOP Workflow, which allows voice-activated automation of standard operating procedures such as checklists and inspections.

—Orion Labs, [www.orionlabs.io](http://www.orionlabs.io)



## Scale-Tron Dosmec Bulk Fiber Dispensers

The line of Dosmec bulk fiber dispensers automatically weigh and feed synthetic and metal fibers into a mixture. A batch formula's fiber quantity may be entered in cubic yards or cubic meters; fibers will then be weighed in proportion to the batch size. These fiber dispensers use a vibrating bowl feeder to untangle bunches of fibers. The fibers then travel up the spiral channel and continuously drop onto the aggregate belt. Capacity ranges from 80 to 200 kg/min. (176 to 441 lb/min.) for metal fibers and 3 to 25 kg/min. (7 to 55 lb/min.) for synthetic, depending on the dispenser being used. Dispensers are also available for truck mounting.

—Scale-Tron Inc., [www.scaletron.com](http://www.scaletron.com)

## KINSHOFER C40HPX

The C40HPX is a cylinderless rehandling clamshell bucket for loading bulk materials. It is designed for use with 18 to 25 ton (16 to 23 tonne) excavators for loading bulk materials and 20 to 40 ton (18 to 36 tonne) rehandling excavators. The C40HPX uses a newly developed drive unit, based on KINSHOFER's patented HPXdrive, to open and close the two shells simultaneously. Hydraulically driven pistons, running opposed with four helix threads, generate rotation of the grab to deliver full and constant closing force throughout the entire gripping process. An integrated nonreturn valve guarantees secure retention of loads, and swivel and bevel are sealed for integrated rotation. The C40HPX clamshell bucket's cutting edges are manufactured with HB 500 steel, extending the attachment's life cycle. This also improves the ability of the shell's back walls to resist highly abrasive materials. In addition, the C40HPX features hardened shafts and high-strength bronze bearings that improve durability.

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



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## Best Process Solutions Bag Dump Station

The Best Process Solutions Bag Dump Station allows users to dump bags manually. These Bag Dump Stations include a dust port, a gas strut to hold the door open, a vibrator-mounting channel, and a metering device. In addition, they are customizable, both in size and in terms of features. Optional features include a vibratory sifting screen, conveyors, and feeders. The station can be equipped with a self-contained, dust-contained environment for 50 to 100 lb (23 to 45 kg) bags to be broken and unloaded. The screen deck retains paper, foreign products, and oversized lumps, keeping them from entering the process system. With the self-contained dust options, the air vibrator and shaker grate clean the bag in the collector and return the collected dust into the product flow hopper beneath the system.

—Best Process Solutions, Inc., [www.bpsvibes.com](http://www.bpsvibes.com)



## FallTech Rotating Deck Anchor

The reusable FallTech® Rotating Deck Anchor is designed for use in temporary fall arrest and fall restraint applications. The anchoring bracket is zinc-plated stainless steel, while the bushing and 360-degree self-orienting D-ring are plated alloy steel. The bracket is installed over a No. 10 reinforcing bar or 1 in. (25 mm) diameter threaded rod that is anchored in and projects from the top of a concrete deck. Installation is simple: the Rotating Deck Anchor is dropped onto the bar or rod and is secured with a user-supplied reinforcing bar wing nut or hex nut. This product meets ANSI Z359.18-2017 and OSHA 1926.502 and 1910.66 standards.

—FallTech, [www.falltech.com](http://www.falltech.com)

## DJI Matrice 200 Series Drones V2

The second generation of DJI's Matrice 200 Series drones can be used for inspections of construction sites and industrial facilities at temperatures ranging from -4 to 122°F (-20 to 50°C) and winds up to 39.4 ft/s (12 m/s). The Matrice 200 Series V2 allows reliable and high-resolution transmission for a maximum range of 8 km (5 miles), and it provides secure communication via data encryption using the AES-256 standard. Flight safety enhancements include anticollision beacons for low-light and nighttime conditions. A "discreet mode" is also available—all lights on the drone can be turned off using the DJI Pilot app for unobtrusive nighttime operation.

—DJI, [www.dji.com](http://www.dji.com)

## Allen Engineering HDX605 Riding Trowel

The HDX605 riding trowel is a hydraulically controlled, 8 ft (2.4 m) class ride-on power trowel that is powered by a 57 hp (43 kW) Kubota gasoline engine. It was designed with high-volume flatwork concrete contractors in mind. The trowel comes with cruise control, digital readouts for accurate fuel levels and diagnostics, and a 13 gal. (49 L) fuel tank. It is also equipped with pumps that help maintain excellent torque even at high rotor speeds, making it suited to panning or finishing operations. Additional standard features include a two-point, top-mount lifting system; four-point tiedowns; and twin 46 in. (1170 mm) rotors with five bladed spiders.

—Allen Engineering Corporation, [www.alleneng.com](http://www.alleneng.com)



## Aquajet Systems Ergo Climber Attachment

The Ergo Climber attachment, designed for Aquajet's Ergo System hydrodemolition robot, attaches to any standard scaffolding pipes and robotically moves along them to deliver hydrodemolition forces for systematic vertical concrete or refractory removal in such applications as high-rise construction. The Climber weighs 48 lb (22 kg) and travels well over aluminum or steel pipe, even if the pipe is bent and includes pipe joints. The Climber's roller beam and hydraulically synchronized left and right climbers robotically move and position the attached power head, directing the water jet to remove concrete from areas 9.8 in. (250 mm) to 6.6 ft (2 m) wide. Aquajet's high-pressure power pack provides the required water pressure and flow. The system's controller unit powers and controls the hydraulics. It uses intelligent sensing to allow the operator to program the lance for optimal material removal.

—Aquajet Systems AB, [www.aquajet.se](http://www.aquajet.se)



## Products & Service Literature & Videos

### ***Integrated Materials and Construction Practices for Concrete Pavement: A State-of-the-Practice Manual, 2nd Edition***

by Peter Taylor, Tom Van Dam, Larry Sutter, and Gary Fick

The second edition of *Integrated Materials and Construction Practices for Concrete Pavement*, published by Iowa State University and the National Concrete Pavement Technology Center, emphasizes concrete as a material and examines how its quality is affected by all aspects of a paving project. It discusses concrete sustainability, design, material fundamentals, mixture design and proportioning, quality and testing, and more. This manual also includes tests for evaluating the multiple properties governing pavement performance.

—National Concrete Pavement Technology Center, [www.cptechcenter.org](http://www.cptechcenter.org)

## Web Notes

### **ASCC Job Hazard Analysis Sheets**

The Concrete Polishing Council (CPC), a specialty council of the American Society of Concrete Contractors (ASCC), has developed seven job hazard analysis (JHA) sheets for tasks related to the process of polishing concrete. Tasks covered in the new polishing JHAs are changing pucks, emptying the vacuum, filter changes, sealing concrete floors, work location setup, portable generator setup, and fueling generators. ASCC's Safety & Risk Management Council (SRMC) has developed a comprehensive set of JHA sheets for multiple facets of concrete contracting. All are available to ASCC members through the ASCC website.

—American Society of Concrete Contractors, [www.asconline.org](http://www.asconline.org)