

CUSTOM UTILITY TRUCKS



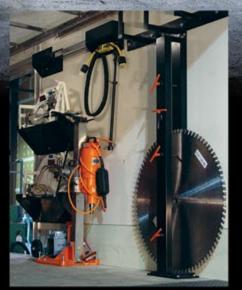
Integrated Heavy Duty Lift Gate



Hydra-Gen Power Unit Can Be Installed for Maximum Power Options



Power Reel Racks with Hoses and Cords



Customize It With:
Blade Racks
Bit Racks
Wall Saw Track Holders
Blade Guard Holders
Shelving Units
Water Tanks
Water Pumps
Auxiliary Fuel Tank
Ventilation Fans
and Much More!

Compact Version

Compact Version
Utility Truck Available



MADE THE WAY YOU WANT WITH YOUR JOBS IN MIND









800-321-5336 diamondproducts.com

President's Page



MATTHEW FINNIGAN CSDA President

his time last year, none of us could have seen the year materializing the way it did. In many ways, both personally and professionally, life has been turned upside-down. Plans have been disrupted, schedules have been altered and virtually everyone has been affected in some manner – whether large or small. To say that what we have long accepted as 'normal' has changed, would be an understatement of the grandest proportions.

For CSDA, COVID has meant the cancellation of our Annual Convention, our 101 and 201 training classes, our quarterly committee and Board meetings and a host of other activities. And yet the business of CSDA, hopefully like yours, has moved forward in a positive manner. The pandemic has meant that we have begun doing business in new and exciting ways by conducting our meetings virtually which has meant that you – our members - can more easily participate in CSDA activities without having to travel to the various locations where our meetings occur. Included among our significant accomplishments this year is the completion of the revision of the Cutting Edge online training program, with an early 2021 release date. This project has been ongoing for over two years and we are

excited to finally present it to our membership. Next, we will work on revisions to the safety video series CSDA has developed.

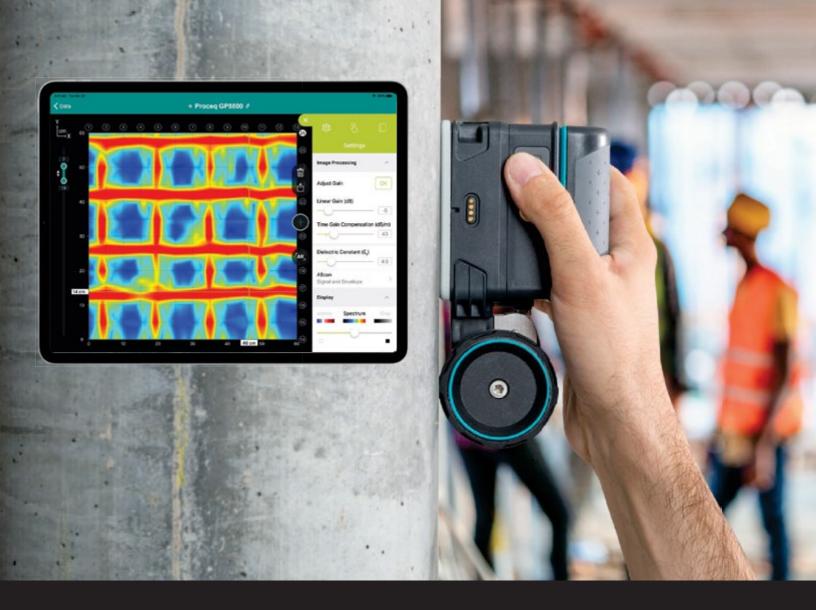
As we move forward into 2021, it is our plan to attempt to resume our normal meeting and training schedule, beginning with our Annual Convention from March 2–6 in Bermuda at the Fairmont Hamilton Princess Resort, so be sure to make your plans to attend the Convention in this new and exciting venue.

Over the past year I have written about adopting goals. While the happenings of the year likely had an effect on goals you may have set, it is again the time of year to follow the same process for 2021. CSDA and its committees will be working on setting goals for the year during our upcoming meetings and will present them to you as a part of the program when we meet in Bermuda. If there are areas or topics that you would like addressed, please contact me or the CSDA office, for CSDA can only be as beneficial for you as you make it.

I wish you all the best this holiday season and look forward to seeing you at a CSDA event in 2021!

Cheers.

WWW.CONCRETEOPENINGS.COM CONCRETE OPENINGS | 1



The last GPR solution you will ever own

Proceq GP8800 & GP8000 - now available with subscription model

- Built tough for jobsites and engineered to provide real world solutions.
- Higher resolution and deeper penetration as a result of Step Frequency Continuous Wave (SFCW) GPR technology.
- Continuous updates and upgrades are pushed automatically to your app-based subscription downloaded on your iPad.

... and much more





Scan this code or refer to this ad to our team to get a free demo







CSDA OFFICERS

President, Matthew Finnigan National Concrete Cutting Inc. matthewf@nationalconcretecuttinginc.com

> Vice President, Mike Orzechowski DITEQ Corporation mikeo@diteq.com

> Secretary/Treasurer, Kellie Kimball Holes, Incorporated kellie@holesinc.com

Past President, Jack Sondergard Central Concrete Cutting, Inc. jacksondergard@sprynet.com

Executive Director, Erin O'Brien Concrete Sawing & Drilling Association erin@csda.org

CSDA BOARD OF DIRECTORS

(Terms expiring 2021)

Ty Conner Austin Enterprise tconner@austin-enterprise.com

> Mark DeSchepper Echo GPR Services mark@echogpr.com

Jami Harmon GSSI harmonj@geophysical.com

Bruce Ferrell PROSOCO bruce.ferrell@prosoco.com

Greg Lipscomb Diamond Products glipscomb@diamondproducts.com

CSDA BOARD OF DIRECTORS

(Terms expiring 2022)

Bill Fisher National Research Company bfisher@nationalresearchcompany.com

> Donna Harris Concrete Renovation donna.cri@sbcglobal.net

Jeff Keeling Brokk, Inc. jeff.keeling@brokkinc.com

Ryan McBride Polished Concrete Consultants mcbride.ryan@me.com

> David Perkins Hilti, Inc. david.perkins@hilti.com

Kevin Warnecke ICS, Blount Inc. kevin.warnecke@blount.com

CONCRETE CASES



CSDA Contractor Leads Demolition for Eight-Story Barbadian Government Building



Salt Mine Core Drilling—with Bears!



CSDA Contractor Readies West Texas Mountain for 10,000-Year Clock

CONCRETE OPENINGS MAGAZINE

Official Magazine of the Concrete Sawing & Drilling Association Volume 29, Issue 4 ISSN: 1093-6483

Concrete Openings magazine is published by O'Brien International, Inc., four times each calendar year in March, June, September and December. Editorial contributions are welcomed and advertisements are encouraged. Please contact the Concrete Sawing & Drilling Association

646 2nd Ave S
St. Petersburg, FL 33701

t. Petersburg, FL 33701 Tel: 727-577-5004 Fax: 727-577-5012 WWW.CSDA.ORG

Magazines, newspapers and private individuals are welcome to reproduce, in whole or part, articles published herein provided that acknowledgements are made in the following manner: "Reprinted courtesy of the Concrete Sawing & Drilling Association,

Concrete Openings magazine, Issue Date."

No alterations should be made in the text of any article.

PUBLISHER

O'Brien International

EDITOR

Erin O'Brien

CONCRETE CASE CONTRIBUTORS

Duke Long Ralph Ortega David Rogers

EDITORIAL REVIEW COMMITTEE

Tim Beckman Pat Stepanski Doug Walker

The information and recommendations in this magazine are provided for use by fully qualified, professional personnel. The Concrete Sawing & Drilling Association and the publisher disclaim any responsibility as to their use by readers and shall not be liable for damages arising out of the use of the foregoing information.

All bylined articles published in this magazine represent solely the individual opinions of the writers and not necessarily those of the Concrete Sawing & Drilling Association.



CONTENTS

10 Core Health

Bitter is Better

16 Polished Perspective

Respect and Recognize the Value of a Good Worker

26 Safety Counts

Keep Out: How to Stop Drugs and Alcohol from Entering in the Workplace

30 The Business of Business

Passing of the Torch: What to Expect from OSHA in a Biden Administration

32 Industry Bits

- **40** Certification
- 42 Membership
- 44 Calendar
- 48 Director's Dialogue





DIAMOND TOOLS



Fresh Cut Early Entry Blades are designed for use on SOFF-CUT™ saws when cutting green concrete. These blades will last longer and cut smoother than any competitive product.

100%
COMPATIBLE WITH
SOFF-CUT— SAWS



COPPER PLUG segment versions of our Fresh Cut are designed for faster & smoother cutting. The copper plugs reduce the drag allowing the blades to cut faster and smoothes the cut performance. Great for applications where speed is more important than longevity.





Next Day Fresh Cut Blades are

FRESH CU



CSDA Contractor Leads Demolition for Eight-Story Barbadian Government Building

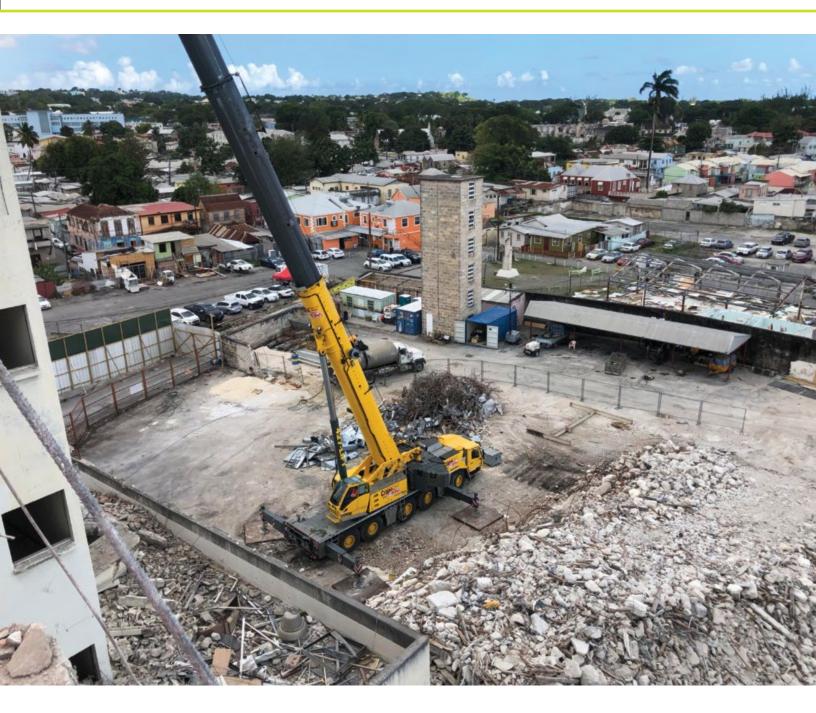


nown for its lustrous white beaches, warm cerulean waters, extravagant shopping scene, exceptional food, relaxed atmosphere and lively nightlife, Barbados is one of the most sought-after destinations to live, do business and play. Under the leadership of the progressive Prime Minister Mia Mottley, Barbados is redeveloping its capital of Bridgetown, further increasing the interest of developers and investors to its shores.

Barbados' Investment in Tourism

In 1998, The Barbados Tourism Investment Inc. was created to facilitate Barbados' investment in tourism and urban regeneration. Led by Prime Minister Mia Mottley and her government, they have radically overhauled the Town and Country Development Planning Act, making their planning and construction process faster, more predictable and more transparent.

The Bridgetown Transformation Project is one of The Barbados Tourism Investment Inc.'s latest investments. With the Prime Minister's vision, Bridgetown's redevelopment will be the anchor for the complete restoration of the



communities. This will produce livelihood, infrastructure and sustainable futures for all, while adding twelve new hotels and five sites for significant expansions. One site, the Fairchild Street Market, will include 100 new stores, updating the current vendor market that was a temporary tented area. Mottley says in a video on the Bridgetown Transformation's Instagram, "The conditions under which we have made our vendors live for the last two decades are nothing short of awful, and it is this government's intention to be able to not only make them better, but to make that location an area where all Barbadians and visitors will want to congregate."

C.O. Williams Construction Ltd. of Barbados Calls Interstate Sawing & Demolition

C.O. Williams Construction Ltd. of Barbados is the biggest general construction contractor servicing Barbados, along with many other surrounding islands. As such, C.O. Williams and the Prime Minister are working closely during the phases of this project. In January 2020, Duke Long, owner of CSDA member Interstate Sawing & Demolition, of West Bend, Wisconsin, received a call from C.O. Williams and the Prime Minister regarding an eight-story government building, the former National Insurance and Social Security (NIS) Building in Bridgetown,

that needed demolishing. "C.O. Williams is in every aspect of construction on Barbados and the surrounding islands, C.O. Williams tackles all concrete, quarries, carpentry, demolition and general contracting," explains Long.

Because Barbados's infrastructure is older, the major concern of the demolition was that the NIS Building was surrounded on three sides by businesses with very old and confined construction. There was no way to safely implode the building or get a high-reach excavator to complete the task without risking all adjacent properties. Long explained, "Knowing what my company does, C.O. Williams and the Prime Minister wanted my professional opinion." When Long toured the site, he recommended two 4,500-pound Brokk 200 demolition robots for tearing down the challenging top four stories of the building, approximately 10,000-square feet on each floor. "They thought they needed 12,000-pound Brokk demolition robots when it would actually be overkill. Two 4,500-pound Brokk 200 robots with three crushers and four hammers would be more beneficial, especially since it was unclear how durable the floor structure was. It would eliminate the risk significantly if the smaller 4,500-pound Brokk robots were used," says Long.

Interstate Sawing & Demolition estimated the job to take six weeks with the support of a 250-ton Crane Carriage and 20 operators. Since C.O. Williams wanted to purchase their own robots, they worked out a deal with Brokk and Interstate. Brokk would send the robots to Barbados for Interstate

Sawing & Demolition to take care of the top four stories while simultaneously teaching C.O. Williams's operators how to run the robots safely. In February 2020, all the supplies needed for the job were prepared in West Bend, Wisconsin, and shipped to Stanhope, New Jersey, where Brokk added their robots to the fleet and shipped everything to Miami, Florida. For the trip's final stretch, the equipment was shipped to Bridgetown, Barbados, a journey that took two weeks.

Finishing Ahead of Schedule

Interstate Sawing & Demolition worked at a rate of five days per floor, completing the job three weeks ahead of schedule. To work more efficiently, Interstate Sawing & Demolition cut and broke a 12-foot by 12-foot elevator shaft on both sides of the building so that the robots could rip up the concrete and push the debris into the holes as they worked. The beams, which were 2 feet thick by 4 feet tall, were delaminated so that when the crane picked up the debris, it would be completely clean with the concrete separated from the steel. The robots added a level of safety for operators, and standard PPE was used. Since it was a demolition and air quality was a factor, air tank respirators were used as well as skin coverings.

Long admits, "At the end of the job, my wife, who was there the whole three weeks sitting on the beach as we worked twelve hours a day, seven days a week, told C.O Williams that next





year we're coming back and working for free. It was incredibly beautiful. Everything was so awesome, including the beaches, the food and the people." As far as the project, Long explains, "I started my business in 1996 at a point when I was hoping I wouldn't lose my home. Look at us now. We're not only working in every corner of this country, but internationally too. It's beyond my wildest dreams."

Interstate is an accomplished company, which is made clear by the fact that they were chosen for a complex job almost 3,000-miles from home. Selective demolition is a delicate task, and in older and weaker infrastructures can be extremely dangerous. It takes knowledge, experience and creativity throughout an entire staff to accept these risky undertakings and complete them with sophistication. This job was particularly rewarding since the operators for Interstate were able to pass their expertise to the Barbadians and help them acquire Brokk robots that will certainly aid in the future phases of the restoration of their country.

The Bridgetown Transformation Project has just completed Phase 1 successfully and is continuing to transform Bridgetown into a better city for residents and tourists alike. More information can be found at **barbadostourisminvestment.com** or at instagram.com/bridgetowntransformationbti, where you can see detailed photos and videos of Interstate's demolition of the NSI Building.

REVIEW AND COMMENT ON THIS ARTICLE AT:
WWW.CONCRETEOPENINGS.COM

COMPANY PROFILE

Interstate Sawing & Demolition has been the leader in concrete cutting, confined space and robotic demo, confined space lifting solutions, electric interior excavating, grinding and scanning since it was founded in 1996.

Their vast knowledge of concrete renovation and removal, innovative ideas and continuing commitment to excellence has helped customers save time and money on their projects.

Owner, Duke Long, is a working owner who has over 37 plus years of on the job experience. His "working hard in the field" ethics helps solidify Interstate Sawing & Demolition's teamwork philosophy. Duke's unique "on the job" work approach has helped keep the company and their 40 employees on the leading edge of industry trends and technology.

Interstate Sawing & Demolition and its employees take pride in their professional artistry and performance. Their fully enclosed

their professional artistry and performance. Their fully enclosed fleet of service trucks are self-contained and mobile-ready, and their box trucks are entirely equipped to act just like an actual on-site workshop. Interstate Sawing & Demolition brings a fully equipped and complete workshop right to your location while providing safe and reliable service for all of their customers.

RESOURCES

General Contractor

C.O. Williams Construction Ltd.

CSDA Contractor

Interstate Sawing & Demolition

Duke Long

Tel: 262-334-7522

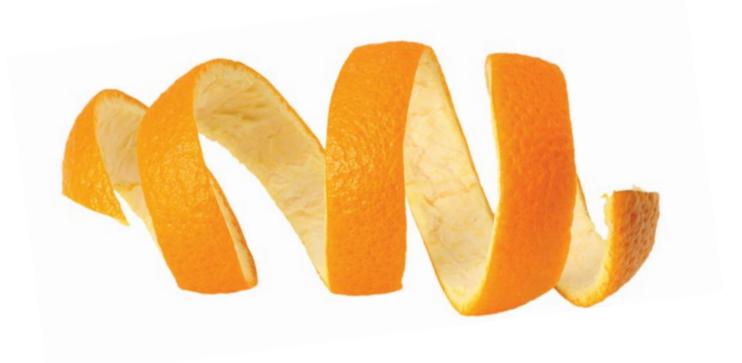
Email: we-saw-it@interstatesawing.com

Methods Used

Robotic Demolition

Bitter is **Better**

By Erin O'Brien



trange title, right? We're all supposed to be sweet and wholesome. Not bitter. But when it comes to your diet, bitter could be the missing link in your quest for better health.

First, we need to talk about liver detoxification. Calm down-I'm not suggesting you give up alcohol. The liver detoxifies with the help of a fluid called bile. Bile is produced by your liver, stored in your gall bladder and helps to break down fat in your diet. And not just fat, but toxins and heavy metals, excess chemicals and hormones. Bile is one of the main ways the liver detoxifies. Bitter foods stimulate this bile production process by stimulating the pancreas to produce digestive enzymes and the liver to produce bile. A win-win! Without getting into all the complexities of the many other relationships to bile after breaking down fat, let's just say that without the ability to digest fat in the body, you will not survive for long. If you can't break down fats, you can't absorb fat-soluble vitamins like A, D, E, K.

Modern living and poor food quality create a poor environment for the liver to produce healthy bile. On top of that, bitter is not a taste that many people enjoy. When the bile gets unhealthy (think sludgy), it can lead to many health problems, including gallstones. The modern solution is to simply remove the gallbladder. Often, zero guidance is given to some patients after this procedure. So, while the problem is fixed temporarily, the underlying issue is not, and that same person can now get even sicker. From thyroid issues to lower digestive problems, bile plays a key role in many processes. This system must be cared for and nurtured as much as any other system of the body.

Unhealthy bile is linked to many common conditions such as:

- Constipation
- Varicose veins
- Unable to lose weight
- Bitter taste in mouth after meals
- Digestive problems after eating fatty meals

- Dry skin and hair
- Leaky gut syndrome
- Hormone disruption
- Thyroid issues
- Autoimmune issues (Hashimoto's, allergies, arthritis)

If you have had your gallbladder removed you can still produce bile (you just can't store it) and there are many helpful things you can do to maintain and or improve the situation. Of course, taking bile salts is mandatory and timing this with meals is important. It is suggested to take a bile salt supplement containing at least 100-150 mg of bile salts. An all-natural diet while eliminating the usual suspects of wheat and dairy is the best place to start.

It would be much better for you to never get to that point – so don't be SAD (Standard American Diet)! Be bitter! After being so popular in the early 20th century, bitters were part of an everyday healthy plan. Bitters were used in everything from food dishes to mixed drinks. Today, the homely bottle of bitters sits on a tiny obscure shelf by the mixed drink accessories. Unless you are a bartender, you probably have never used bitters. The lesson here is to drink more Old Fashioneds – one of the ingredients is Angostura bitters.

For those that can't tolerate the alcohol, there are plenty of other options for getting more bitter in your diet. One of the five main tastes of the human tongue, the bitter sensation that our tongues detect when tasting foods is not to be overlooked. Use and embrace bitter. Green tea, hibiscus tea, jasmine tea, dandelion root tea, chicory, most greens, especially arugula and dandelion, spices like cumin, fennel, bitters, dark chocolate, dill and ginger. All these foods/drinks/spices/herbs can easily be added to your diet daily.

Other bile building foods: beets, artichokes, macadamia nuts, anchovies, apple cider vinegar, horseradish, orange peel, grapefruit and coconut oil. Other nutrients in foods like choline, taurine and lecithin also provide bitters to your diet. A lot of these recommended foods are naturally high in fiber, which is a much-needed element to assist in bile production.

If you struggle with gall bladder issues, or any of the health concerns listed above, some surprising foods might be worth eliminating as a test: onions, pork and eggs. All great foods, I know, however, they may be making you sick. It may be worth your time to check for food sensitivities. There are even test kits you can order at home that just need a finger prick and a small blood drop sample to detect any potential food sensitivities.

Re-evaluate your diet, how you feel and see if you could use more bitter in your diet. Chances are, adding some of these foods will make you feel better and ensure your longterm health!

Erin O'Brien, MS, ATC is a Certified Athletic Trainer and VP/COO for O'Brien International, the association management company that manages the Concrete Sawing & Drilling Association, and Executive Director of CSDA. O'Brien received her Bachelor of Science degree in Athletic Training from Ohio University and her Master of Science degree in Applied Physiology and Kinesiology from the University of Florida. She is also a Certified Level 2 CrossFit Instructor and member of CrossFit9 in St. Petersburg, FL. She is a regular contributor to Concrete Openings magazine. She can be reached at erin@csda.org or 727-577-5002.



New CSDA Training Website and Cutting Edge Online Training

Launching in January 2021

WWW.CONCRETEOPENINGS.COM CONCRETE OPENINGS | 11



Salt Mine Core Drilling

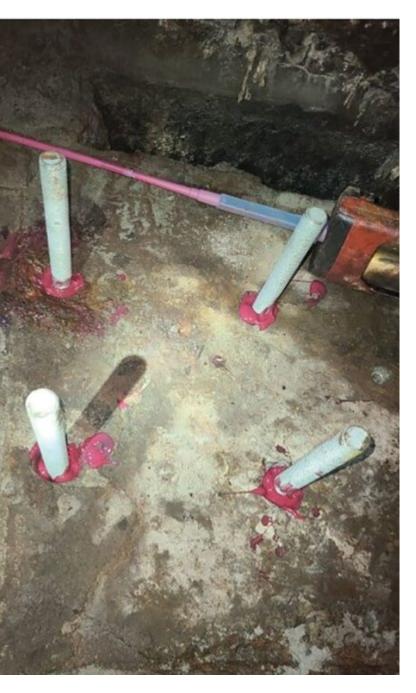




very year between March and April in
Louisiana, the black bear begins to emerge
from its dormancy. Louisiana black bears
are large mammals with black fur and
rounded faces. Adult males weigh in at
about 300- to 400-pounds, and females
weigh substantially less, typically 120- to 200-pounds. Even
so, these are not creatures you would want to find yourself
face-to-face with unprepared. The bears typically breed
through summer and begin to prepare for their dormancy
through autumn. Louisiana is home to an estimated
500-800 bears, classifying them S2, or imperiled. Still, it is
more than possible to encounter them, and CSDA member
Aggregate Technologies found themselves eye-to-eye with
a few of them in November of 2020.

In Southwest Louisiana, GC Coastal Contractors reached out to CSDA member Aggregate Technologies to renovate a deteriorating salt mine. Aggregate Technologies has two locations, one in Houston, Texas and another in Baton Rouge, Louisiana. They are well-known for their highly skilled operators and extensive fleet of equipment for complex jobs. This assignment was already complicated because they were commissioned to core drill 91 holes into the mine shaft, ranging from 18-inches to 40-inches deep. This job would require safety harnesses for all operators to ensure no one is dropped into the 1,600-foot shaft. However, this job had a couple of extra risk factors: a massive hurricane sweeping through the gulf and displacing the local black bears.

The operators had to figure out a plan for drilling the 91 holes of varying depth and 1-inch width into the rebar reinforced concrete into the mine shaft. Once the job was surveyed, they quickly realized that the mine shaft was far too small to fit the base of the tower, and thus





made the decision to slab saw the mine shaft to widen it. Using a Husqvarna 7000 slab saw with DDM Concut diamonds blades, Aggregate operators sawed roughly 65-feet around the opening, about 10-inches deep. Once the mine shaft was widened, operators used safety harnesses with integrated fall limiters, also known as yoyos, secured to a beam to safely lower themselves and the necessary equipment into the mine shaft. Then, the core drilling could commence.

Along with the safety harnesses with the yoyo tie-offs, typical PPE including hard hats, safety glasses and gloves were worn during this job. The scaffolding was also constantly inspected to ensure it was stable and safe. Without harnesses, the operators risked a daunting 1,580-foot drop to the bottom of the mine, a fall no one wanted to risk. The black bears in the area added another obstacle. Bears are more likely to be seen this time of year as they get ready for hibernation, and in



this case, Louisiana had just been ravaged by Hurricane Zeta, upheaving most of the wildlife in the area. One operator said a bear approached within 60-feet of him, and when it stood upright, was eye level with him!

Working at the top of the mine shaft, workers used Shibuya core drills with Diteq core bits to drill the holes in the desired locations into the hard concrete. The holes were then cleaned and roughed. After the holes were prepped, they were filled with Hilti epoxy and 7/8" rebar was inserted. Aggregate had three days to complete their portion of the renovation but managed to complete it in only two. David Rogers, the project manager for Aggregate Technologies, said he was extremely satisfied with the results of the project. "All of the operators did amazing work to get the project done on time with zero incidents," stated Rogers.

If you happen to be wondering what to do if you are encounter a bear, Black Bear Project Leader Jaime Sasjecki advises, "Never run from a bear. Don't approach a bear – just quietly move away and leave the area. However, if a bear does approach you, make yourself look big, make loud noises, clap your hands and continue to back away."

CSDA contractors are used to being called to complete challenging jobs. Aggregate's reputation for problem-solving, excellence and quality work ensured that they were selected for this job and will secure them future work, especially with their new-found experience with bears!

REVIEW AND COMMENT ON THIS ARTICLE AT:

COMPANY PROFILE

Aggregate Technologies has been in business an impressive 23 years and a CSDA member for eight years. They have 35 staff members, 31 trucks and two branch locations. Their physical locations are in Houston, Texas as well as Baton Rouge, Louisiana. Aggregate has an impressive resumé, with their list of skills including concrete breaking and removal, GPR scanning, core drilling, electric sawing, hydrodemolition, pile cutting, robotic demolition, slab sawing, wire sawing and wall sawing.

RESOURCES

General Contractor

Coastal Contractors

CSDA Contractor

Aggregate Technologies

Contact for Story: David Rogers

Email: davidr@aggregatetechnologies.com

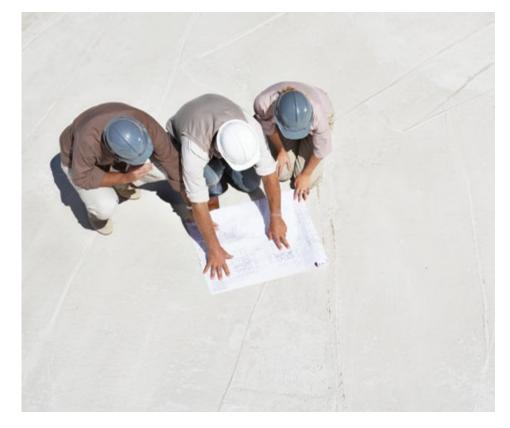
Tel: 225-772-7320

Methods Used

Core Drilling, Slab Sawing

Respect and Recognize the Value of a Good Worker

By David Stephenson



enerally, as polished and decorative concrete contractors, you are very aware of the cost and value of your equipment. Inventory is key to getting jobs done, so you know how much product and what tooling you have on hand, so we have a clear understanding of the value of the inventory. Contractors are mindful of the value of their vehicles and trailers on the road since each was paid for with hard-earned dollars. All of these things are assets. However, the largest asset you have—your employees—is regularly missed when you're tallying your worth.

Between the money you dole out each week on wages, payroll taxes, insurance and worker's comp, you spend more on employees than all your other assets combined. Even though this is a hard fact, most contractors have a hard time recognizing employees as assets. Why is this and how can you remedy that situation?

KNOW THEIR WORTH

In the polishing and decorative concrete industry, employees are even more valuable than in most businesses. When I was a contractor, I figured each of my supervisors or crew leaders had a value of about \$75,000 - \$100,000 for each year they had worked for me. I got to this value by looking at the lessons each crew leader

learned on specific projects. This could be anything from recognizing concrete hardness and its effect on diamond tooling to properly applying densifier and specific colors of dye and safely disposing leftover materials.

I then tried to figure out how much money I spent to do the repairs necessary from their learning on the job and how much money I lost as a result. Low-end estimates were around \$75,000 a year.

When a lawyer goes to college and then law school it costs about \$250,000 total according to U.S. News & World Report. On average, it takes seven years to get through law school, so that's a cost of about \$36,000 a year. Based on these calculations, we as an industry can easily pay double the cost of a lawyer's education to properly train and educate our crews through on-the-job training.

Experience is and will always be the single greatest training in our industry. All the classes you can send new employees to will at best give them 25 percent of the knowledge they need to do a job from start to finish.

ON-THE-JOB TRAINING IS KEY

When you have experienced crews, you can supplement their training effectively if you can use project-based experience to educate them. One large contractor recently had me come in to train their crew leads on concrete repairs because the owner realized each crew had unique methods for performing repairs. When different crews were required to work on projects at different times the repairs were different, which caused questions from the customer.

By taking photos of projects and using real job experiences to educate, we created a standardized repair manual for all crews and all projects. This owner realized the value of his employees and their training enough to invest in their education. Congratulations to Dave Stratton of Pacific Decorative Concrete.

Another owner recently flew me and one of my associates, Ryan McBride, to his shop where all the crew leads were brought in for the day to receive training on polished concrete overlay installation. Again, the owner realized different crews had different methods for prep, placement and polishing of overlays. Some differences were inherent based on the product being installed, but many products require similar installation practices and when improperly placed experience similar issues.

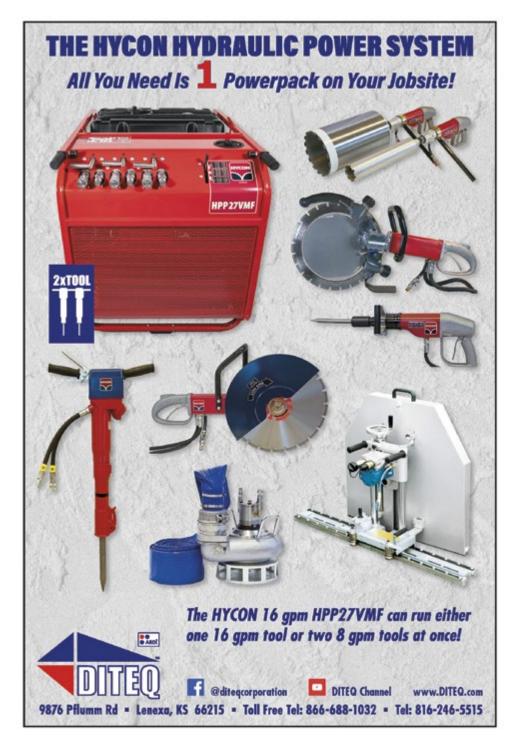
By having us train the crews based on hundreds of application reviews, the owner made a significant investment in the education of his employees. Hats off to John Jones of Budget Maintenance Concrete for recognizing the value of training his leaders. The value of project-based training, in conjunction with on-the-job training, is a way to capitalize on your crews' experience and make them a more valuable asset.

RETENTION, RETENTION

Do not underestimate the value of your employees. Almost all new hires come from other industries and have to be trained how to do decorative concrete. Think about it, finding a trained employee is extremely rare. I hear the same thing from contractors every week: "If you happen to know any good guys, I am hiring." It almost does not matter how much you are willing to pay, finding the people is extremely hard.

As a result, employee retention is extremely important if you want to have a successful contracting company. I can tell you from experience that regularly reviewing your pay scale—and providing benefits if you're big enough or small side perks if you are not—is much less expensive than hiring new, lowerwage employees and having to constantly pay for their education through losses on projects.

I am not suggesting that you need to hold on to bad apples. If guys won't work, will not learn or are troublemakers, you are better off dropping them immediately. Consider that each day of on-the-job training is comparable to a day of college. You are paying the bill. If you have a student who is unwilling to learn do not waste the money. Drop them quickly and find a



new student. You will be paying either way so spend your money wisely.

I cannot tell you how many times as a contractor I kept employees, thinking they would turn around only to look up a year later with them making the same mistakes. All I could think about was how much money and time I had just wasted. Think about this and work on what incentives you can offer to keep your good workers and consider

dropping the dead weight in favor of new students. The jobs will not stop so each day of training has a value.

Every day the most money you spend will be on your employees. This makes them your greatest asset. Treat them as such and remember that if you do not, there is undoubtedly another company in our industry that will.

WWW.CONCRETEOPENINGS.COM CONCRETE OPENINGS | 17

Concrete Cases



n 1986, computer scientist Danny Hillis came up with the idea to create a clock that would withstand millennia and possibly humanity as we know it – 10,000 years. The clock would tick once a year, the century hand would advance every hundred years and a cuckoo would emerge each millennium. Hillis's dream of the clock is now being realized with the help of his foundation, The Long Now Foundation, and a hefty \$42 million investment by Amazon's CEO, Jeff Bezos.

The Clock is most commonly referred to as the 10,000-Year Clock or the Clock of the Long Now, and is just the first of what the designers hope will be many multi-millennial clocks constructed around the world and throughout time. The 10,000-Year Clock is meant to encourage us as a civilization to think more long-term and is among other long-term projects by the foundation, such as PanLex, the world's largest panlingual lexical database. The Long Now Foundation's mission is to, "[foster] long-term thinking and responsibility through diverse projects aiming to inspire, educate and challenge our concepts of the future."



Not only is the concept of a mechanical clock running for 10,000 years a monumental undertaking, but so are the proportions. The Clock in the mountain will be roughly 200-feet tall, located beneath a remote limestone mountain in the Sierra Diablo mountain range in West Texas. Inside the tower, you will enter what the designers refer to as a "crude airlock," with one stainless steel door followed by another. This chamber is meant to keep as much dust and wildlife out of the actual clock tower as possible. Through here, you walk through a tunnel that is a a few hundred feet long, followed by a 500-foot deep vertical shaft that is about 12-feet in diameter.

While the machinery of the clock itself is being assembled in California and Seattle. General Contractor Glen Ragsdale Underground Associates from Angwin, California who was in charge of all underground construction, contracted CSDA member Austin Enterprise of Bakersfield, California to assist in readying its future home. The structure for the Clock was carved directly out of the mountain and required a lot of specialty equipment. To prepare the mountain, Austin Enterprise began by flush cutting the concrete chamber floors to an 18-inch depth with a Diamond Products CC8000 curb cut machine in order to achieve the correct chamber size. Next, an Austin operator used a Longyear 360 hydraulic wall saw to create seating and stairs leading out of the chamber walls. Ralph Ortega, the Project Manager for Austin Enterprise describes, "We alternated by cutting individual steps







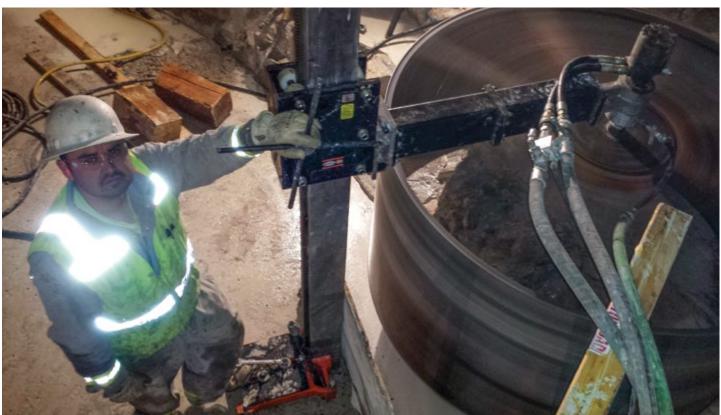


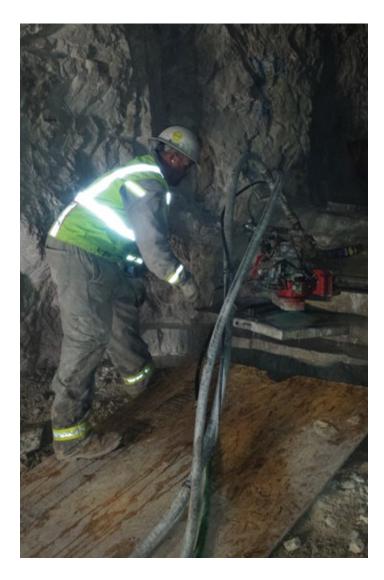
during the day, and then had another contractor, Glen Ragsdale Underground Associates Inc. in to remove the material at night by smooth wall blasting." By the end of the flush cutting, they had completed 300-linear feet of cutting in the chamber.

Carved into the main chamber are five room-sized anniversary time capsules. The anniversary chambers are designated for the first, tenth, hundredth, thousandth and ten-thousandth year anniversaries. The one-year anniversary chamber contains a special orrery, or planet tracking display, of our solar system that will play annually on a pre-determined date based on solar noon. The other anniversary capsules are yet to be adorned with anything and the designers plan to leave the future designs to future builders.

In the anniversary capsules, Austin Enterprise used a Meco 4-speed hydraulic core drill to drill five 72" holes in the chamber, one for each capsule. Five 6" holes for gears to run from the chamber's center to the time capsules were also drilled. In addition, a Diamond Products CB30EXL Electric Hydraulic Pump Unit wall saw was used to create a 6" trench from the chamber's center to the time capsules. Lastly, Austin Enterprise used diamond disk grinding to expose the natural limestone in the floors. Diamond blades were the best and obvious choice to provide a smooth, finished surface.

Austin faced several challenges in completing this daunting project. The Clock's location is a grueling pilgrimage through the west Texas desert to a remote mountain near Van Horn, roughly about 1,500-feet above the scrubby desert. Rough terrain and





weather made it difficult for the crew to get their trucks and equipment to the job site, and each trip took anywhere from 45 minutes to an hour to reach the actual site from the jobsite camp. The weather that time of year could be extreme, and the construction started in February, continuing through the punishing summer and concluding in October. However, careful planning from management and the general contractor ensured that trucks and equipment reached the destination successfully each day and that employees remained safe during renovation.

As always, safety was a major concern of everyone onsite. The tedious daily commute through the desert landscape meant everyone involved needed to be sure to protect the natural wildlife, as well as keep themselves safe from any potential dangers. Aside from the desert, the mountain posed its own risks. Once Austin was done sawing and grinding through the chambers, a concern was being able to remove people and equipment through the exits of the extremely confined spaces. Also, because of the confined spaces, water was used to control the dust from

the construction. Austin said that they were always acutely aware of their surroundings on this jobsite.

The sawing and drilling of the project was completed on time and regarded as a huge success. Austin Enterprise Project Manager Ralph Ortega stated, "We're 100% satisfied. We were determined to do this job, overcoming all obstacles throughout the way. Finding solutions to get any job done is what we thrive on and makes us who we are." Ortega went on to say that he believed Austin Enterprises was chosen for this tough job because of their reputation for being skilled with specialty equipment. CSDA contractors are often selected for difficult and technically challenging jobs such as this one because of their reputation for quality, professionalism and experience.

The Clock will be an incredibly interesting marvel once it is completed, and there is much more to say than has been detailed here. For those interested in keeping up with the progress of the Clock, there is more information at longnow.org, such as the prototypes of the Clock or other Long Now projects, as well as more details and images of the first anniversary orrery. Bezos's team has created another resource at 10000YearClock.net, with information for the public about the project, a page to send in any suggestions for the tenth anniversary capsule as well as a public sign up page for learning about the eventual visiting opportunities there.

REVIEW AND COMMENT ON THIS ARTICLE AT:

COMPANY PROFILE

Austin Enterprise boasts an impressive 53 employees and 47 truck fleet. They pride themselves in having the best people and equipment to get any job done well and on time. Austin Enterprise specializes in flat sawing, core drilling, hand sawing, wall sawing, wire sawing, bump grinding, loop sawing, saw and seal, crack seal, bridge joint, floor grinding, curb cutting, recess markers and stripes, jackhammer, rock drills and dowel drilling. With 27 years in business, customers can rest assured they are getting quality work with the experience and knowledge behind it. Austin Enterprise has been a proud CSDA member since 2010.

RESOURCES

General Contractor

Swaggart Brothers

CSDA Contractor

Austin Enterprise

Contact: Ralph Ortega

Email: sales@austin-enterprise.com

Tel: 661-589-1001

Methods Used

Core Drilling, Wall Sawing, Floor Grinding



BROKK JOHNSTHE NEW MINISUPER HERO

Packed with demolition power, faster than ever and extremely compact. The BROKK 70 is the perfect solution for safe and efficient demolition in very confined spaces.

BROKK

IACDS President's Insight

t's done! The Christmas goose is eaten, the presents are unpacked, the family is back home and New Year's Eve is over. In short, we have passed the year 2020, we have made the year of the years.

We can finally look ahead, look forward to a new era and set new goals in mind. What is your goal? For example, I made a resolution this year to devote the time I didn't have for my children to my grandchildren. I think that is a very good resolution, because the time you spend with your children or grandchildren cannot be taken away from you and what do we really want to achieve in this life? Do we want to get rich like Elon Musk? Do we want to have power like Donald Trump? In the end, we can't take both with us. It's not for nothing that people say - the last shirt has no pockets. But, what we can take with us is the love of our children and grandchildren. So, let's take the time, it's a time that won't come back.

And what did we achieve in the past year? The IACDS held a virtual annual general assembly in October at which it was decided to hold webinars over the running year. In autumn of last year, a structural survey was started among the member companies of the member associations and member associations which can be accessed at www.IACDS.org.

As you know, the IACDS would have loved to celebrate its 25th anniversary last year. Unfortunately, the celebrations had to

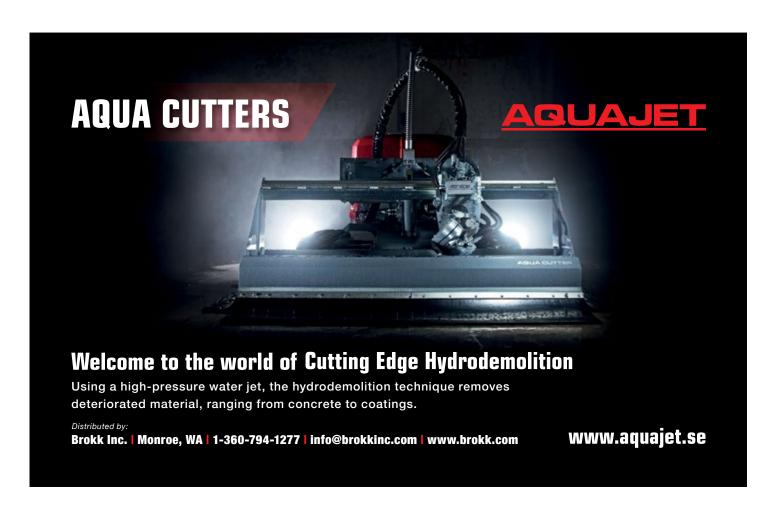
be canceled, but as a small compensation our anniversary yearbook has been available at www. IACDS.org since December 2020.

In early March, the
CSDA is planning to hold
its annual general assembly
at the Hamilton Princess
Resort & Beach Club in
Bermuda. In April, the FBS is
planning to host the BeBoSa
and the annual general
assembly in Willingen.
In autumn, DEMCON
is planned to take place in
Stockholm and also the annual
general assembly of the IACDS.



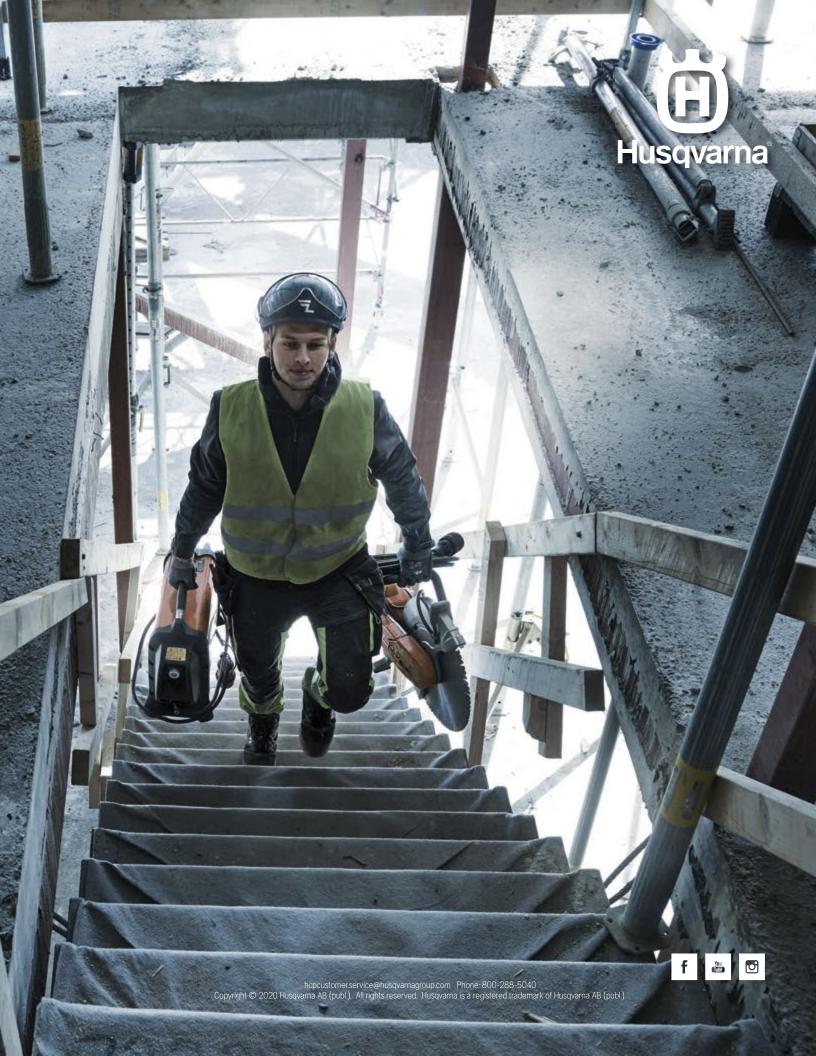
IACDS President

I hope I can meet you personally again very soon at one or the other event and we can find some time for a personal exchange. I wish you a good start into the New Year, good business and above all: stay healthy!



WWW.CONCRETEOPENINGS.COM CONCRETE OPENINGS | 23







Keep Out: How to Stop Drugs and Alcohol from Entering in the Workplace

By: Mark A. Lies, II and Adam R. Young

espite the COVID-19 pandemic, drugs and alcohol remain a significant occupational safety issue for employers across the country. The legal environment is rapidly changing for many drugs, and additional drug use and/or drug impairments has found its way into the workplace. While the height of the opioid epidemic has receded, media reports high levels of overdoses due to synthetic opioids (e.g. fentanyl). According to the Centers for Disease Control and Prevention (CDC) overdose deaths at work from non-medical use of drugs or alcohol increased by at least 25% annually between 2013 and 2017. The 272 workplace overdose deaths reported in 2017 accounted for 5.3% of occupational injury deaths.

Marijuana remains a Schedule I Controlled Substances under the federal Controlled Substances Act, meaning that its possession is unlawful under federal law. Yet on January 1, 2020, Illinois became eleventh state to legalize adult use of recreational cannabis. Twenty-eight states, the District of Columbia, Guam and Puerto Rico permit residents to use medical marijuana, while at least 17 other states allow the use of products of certain products with lower levels of tetrahydrocannabinol (THC), the psychoactive chemical in marijuana. Employment-based drug testing services have reported wide-spread increases in positivity rates for marijuana in those states that have legalized marijuana. Additional legalizations of recreational marijuana likely will create additional workplace impairments across the county.

CHALLENGES POSED BY DRUGS AND ALCOHOL IN THE WORKPLACE

Drug and alcohol impairments can hinder employee judgment and motor skills. These effects can result in near misses, accidents, injuries and property damage. Accidents may injure employees, coworkers, contractors and members of the public. In our practice, we



have seen significant employee injuries where impaired employees have errantly turned a powered industrial truck, removed a guard on an operational machine, detached a personal fall arrest system while working on a platform 80 feet in the air and walked in front of a piece of heavy machinery.

Safety hazards are just the tip of the iceberg. Drug and alcohol impairments can result in poor performance, workplace mistakes, reduced output and poor morale. Employees may be more likely to engage in theft or shift workloads to other employees. Impairment increases the likelihood of sexual harassments in the workplace, in all its forms, including sexual assault. Impairments are correlated with workplace violence incidents, including physical assaults on employees. Employers would be wise to recognize the risks posed by drugs and alcohol to the workplace and take action to address the hazard through a comprehensive program and testing regime.

PREVALENCE OF DRUG ADDICTION

As you know, many Americans use drugs and alcohol in a casual, recreational

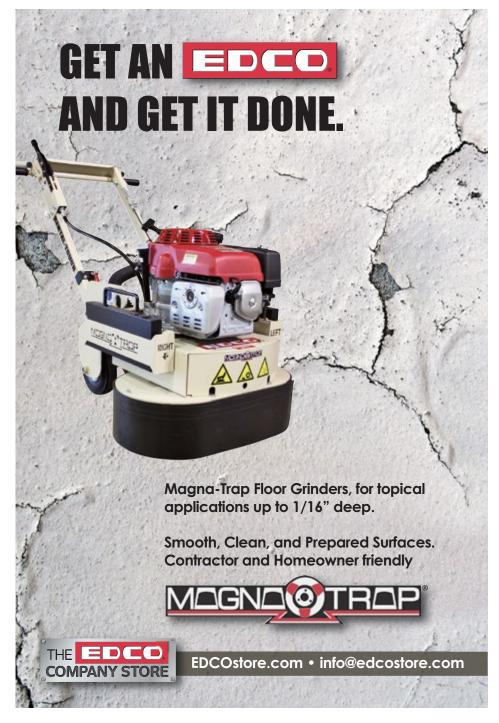
setting. However, it is well understood that individuals can form physical, chemical addictions to virtually all forms of drugs, legal and illegal. After nicotine, alcoholism is the most common chemical addiction among Americans. According to the National Safety Council, approximately one in 13 working adults has an alcohol use disorder. Among working adults, nearly 2% were addicted to marijuana. Workers in construction and extraction experience the highest rates of substance use disorders, with 15.6% of employees on average living with a substance use disorder. The highest rate of prescription pain medication disorders was among people in the services sector.

Under the Diagnostic and Statistical Manual of Mental Disorders (DSM–5), the criteria for drug addiction emphasizes continued use of the drug despite the user's knowledge of adverse consequences. Perhaps on account of this phenomena, physical addiction is the major driver of workplace drug use and impairment. Yet one of the least understood components of workplace drug and alcohol programs is how to deal with employee addiction.

CRAFTING DRUG AND ALCOHOL POLICIES

Safety sensitive employees are those individuals for whom a drug or alcohol impairment could significantly endanger their safety or the safety of others. Safety sensitive employees typically perform functions like driving trucks, operating heavy equipment or mixing caustic chemicals (this list is non-exhaustive). Safety professionals recommend zero tolerance policies for impairing drugs for those in safety sensitive positions. Zero tolerance means that employers would not tolerate drug use or impairment at any level for those employees. Employers may lawfully implement zero tolerance policies and prohibit possession, use, impairment or distribution in the workplace.

Zero tolerance policies will have numerous components. One of the most overlooked components of a policy is the definition of prohibited drugs - we recommend that clients proscribe controlled substances, synthetic drugs, analogs and popular non-psychoactive cannabinoids like CBD. Managers should be trained on how to spot someone impaired by drugs and alcohol. Impairment can be assessed or confirmed through drug testing. Drug testing can also be a helpful tool in a postincident context, to help determine the root cause of an incident. Alleged violations of a drug and alcohol policy should be subject to comprehensive investigation. We recommend appropriate disciplinary policies, to be applied consistently across the workforce. As explained above, safety professionals recommend that employers use zero tolerance policies to reduce the likelihood of accidents or injuries. However, zero tolerance does not mean that every employee who violates the policy must be immediately discharged. Rather, many employers may use Employee Assistance Programs (EAPs) and other resources to help employees with addiction issues take a break from the workplace, treat their addiction and return to work. Employees are valuable in terms of human capital, knowledge, experience and training; substance abuse can be a temporary condition overcome with treatment and/or psychological counseling. Accordingly, as mental health issues have been increasingly destigmatized, many employers are using EAP as a lawful and helpful solution to addiction and substance abuse.



DISABILITY PROTECTIONS

Title I of the Americans with Disabilities Act (ADA) specifically permits employers to ensure that the workplace is free from the illegal use of drugs and the use of alcohol. Generally speaking, the ADA does not prevent employers from prohibiting the use, impairment or possession of alcohol and drugs, as well as paraphernalia in the workplace under federal and state law. An employer may discharge or deny employment to persons who currently engaged in the illegal use of drugs or are under

the influence of alcohol.

However, the ADA protects employees with mental and physical disabilities
-- including mental health disabilities, depression, alcoholism and drug addiction.
Current users of illegal drugs are not protected under the ADA. Casual users of illegal drugs and alcohol are not protected under the ADA, as they are not "substantially limited" in a major life activity from drug use. The ADA creates a limited protection from discrimination for (1) employees who are recovering drug

WWW.CONCRETEOPENINGS.COM

Safety Counts

abusers and for alcoholics, (2) employees who have been successfully rehabilitated and who are no longer engaged in the illegal use of drugs or inappropriate use of legal drugs or alcohol, (3) employees who are currently participating in a rehabilitation program and are no longer engaging in the illegal use of drugs or the inappropriate use of legal drugs or alcohol and (4) employees who are erroneously regarded as illegally using drugs or abusing alcohol. These employees are protected from discrimination by their employer on the basis of a history of drug addiction, attendance at Alcoholics Anonymous or Narcotics Anonymous meetings, or similar. Employers may not hold drug addicts or alcoholics to a higher standard of performance or attendance. Employers cannot subject employees to medical inquiries (unless they are "job related and consistent with business necessity") such as inquiries about a personal history of mental illness or alcoholism. However, an employer does not violate the ADA when it engages in reasonable suspicion, post-accident or returnto-duty drug testing.

The ADA creates a duty to engage in an "interactive process" with employees who raise a disability and find a "reasonable accommodation" where possible, to accommodate their disability. If a recovering drug addict is not currently illegally using drugs (or abusing legal drugs or alcohol), then he or she may be entitled to reasonable accommodation. Reasonable accommodations may include a modified work schedule so the employee could attend Narcotics Anonymous meetings or a leave of absence so the employee could seek treatment. However, it goes without saying that there is no duty to accommodate an employee by permitting drug or alcohol impairment at work. Nor does the employer have to forgive misconduct because the misconduct resulted from alcoholism or drug addiction.

TAKEAWAYS

Drugs and alcohol create unique challenges in the work environment. In the post-COVID pandemic world with many employees working from home, it may be harder to ensure to that employees comply and do not engage in drug use or impairment while at work. To minimize liabilities, employers should develop robust drug and alcohol policies. Many employers work with outside counsel to create lawful policies and drug testing programs. If faced with drug-related accidents, employers should consider promptly contacting counsel to prepare a response and properly assert their defenses.

Mark A. Lies, II is a Labor and Employment Law attorney and Partner with Seyfarth Shaw LLP, 233 S. Wacker Drive, Suite 8000, Chicago, Illinois 60603; 312-460-5877; mlies@seyfarth.com. He specializes in Occupational Safety and Health law and related employment law and personal injury litigation.

Adam R. Young is an associate attorney in the Workplace Safety and Environmental Group in the Chicago office of Seyfarth Shaw LLP. Mr. Young focuses his practice in the areas of occupational safety and health, employment law, and associated commercial litigation. Mr. Young can be contacted at ayoung@seyfarth.com or at 312-460-5538.



YEARS OF EXCELLENCE 1970 * 2020

Celebrating 50 Years as the **Most Trusted Name in GPR**











Passing of the Torch: What to Expect from OSHA in a Biden Administration

By: Mark A. Lies, II and Adam R. Young

nother four years and we come to a new White House administration. Here, we predict OSHA's priorities in a Biden administration based on campaign talking points, the Democratic House's actions in the past two years and experience from the Obama administration.

COVID-19 EMERGENCY TEMPORARY STANDARD

Employers can expect OSHA under Biden to direct resources to issuing a COVID-19 Emergency Temporary Standard (ETS). Most OSHA jurisdictions do not have a specific COVID-19 standard. However, some states have promulgated COVID-19 specific standards. State-plan OSHA agencies in California, Michigan, Oregon and Virginia have each adopted COVID-19 standards that are likely to provide a good indication of what requirements a federal OSHA ETS might include:

- Developing and implementing a preparedness and response plan
- Social distancing
- Screening
- Practicing proper hygiene and other infection control measures
- Assessing exposure risks
- Masking
- Notifying public health departments about positive employee tests
- · Testing in the wake of an outbreak
- Recordkeeping
- Training

States that have implemented a COVID-19 ETS have mandated that employers provide training, signage and other types of employee communications in languages common to employee populations, and OSHA could follow suit. Biden appointed a COVID advisory commission on November 9, 2020 and a Biden administration OSHA will likely hit the ground running on January 20, 2021 working toward an ETS.



AGGRESSIVE USE OF CITATIONS AND ENFORCEMENT

We expect OSHA to push for more egregious cases (i.e., instance-by-instance willful citations resulting in \$500,000 or more in penalties), with support from DOL's Solicitor's Office in coordinating and pursuing these matters. Even with an enhanced focus on allegedly egregious, high-dollar cases, we anticipate a Biden administration to expand the term "bad actor." OSHA might be better served following data to pursue the most problematic employers, but the agency can sometimes lose focus in labeling all employers "bad." Aligned with this more aggressive enforcement approach, we expect to see:

- More inspections, more citations, more willful and repeat citations
- Increased use of the multi-employer citation doctrine
- Skepticism about employer safety incentive programs
- Reduced use of cooperative programs and partnerships with employers (like OSHA's Voluntary Protection Programs)

We anticipate expanded efforts to encourage whistleblowers to report perceived violations through a streamlined process,

supplemented with increased resources.
OSHA enforces more than 20 federal
whistleblower laws, so its reach in this area
goes beyond just the OSH Act.

A Biden administration may also look to wrestle federal control from the states that have been active in areas where federal OSHA either has not shown interest or has not gained traction. We expect that OSHA will continue to turn to the General Duty Clause as its enforcement catchall while these more specific standards wind their way through the rulemaking process. We expect aggressive enforcement in the areas of heat illness and infectious disease, for instance.

RECORDKEEPING AND PUBLIC SHAMING

More stringent recordkeeping requirements and increased use of employer records in enforcement are likely under a Biden OSHA. "Publicity as deterrence" is something Dr. Michaels, the head of OSHA under Obama, talked about often, and the Trump administration's efforts to limit publication of violations will likely disappear. Biden's OSHA may reverse course, publicizing citations to shame employers into compliance. Beyond recordkeeping

and an ETS, implementation of workplace violence and heat illness standards could be among the Biden administration's initial regulatory priorities.

FILLING LEADERSHIP ROLES

President Trump governed for his entire administration without a political head of OSHA (Assistant Secretary of Labor), as the Senate never voted on the nomination. Assuming President Biden is able to get an Assistant Secretary nominee confirmed by the Senate, the mere appointment of politically confirmed leadership in OSHA's Assistant Secretary role will differ from the Trump administration. OSHA's current Principal Deputy, Loren Sweatt, has been at the controls for years, but given her acting role. she has been circumscribed in implementing her agency vision. OSHA's Director of Enforcement role has also been filled on an acting basis for an extended period. Finding permanent personnel to execute these roles will likely provide more political heft behind OSHA's policy-making decisions. Appointing someone aligned with former Assistant Secretary Dr. David Michaels - like Dr. Michaels' former deputy Jordan Barabcould drastically change OSHA's enforcement approach. Unions will certainly have more and bigger seats at the table in a Biden OSHA, and with them Union priorities may be increasingly incorporated into OSHA policy.

BUDGET DEPENDENT?

The OSHA budget has been flat for the past three years. It is yet to be seen whether OSHA's budget will be increased. However, it is clear that many significant policy and enforcement decisions will be affected by the budget allotted to OSHA.

Mark A. Lies, II is a Labor and Employment Law attorney and Partner with Seyfarth Shaw LLP, 233 S. Wacker Drive, Suite 8000, Chicago, Illinois 60603; 312-460-5877; mlies@seyfarth.com. He specializes in Occupational Safety and Health law and related employment law and personal injury litigation.

Adam R. Young is an associate attorney in the Workplace Safety and Environmental Group in the Chicago office of Seyfarth Shaw LLP.
Mr. Young focuses his practice in the areas of occupational safety and health, employment law, and associated commercial litigation. Mr. Young can be contacted at ayoung@seyfarth.com or at 312-460-5538.





WWW.CONCRETEOPENINGS.COM CONCRETE OPENINGS | 31



Aggregate Technologies Earned the ABC Excellence in Construction Pyramid Award

Aggregate Technologies, Inc. (ATI) earned the ABC EIC Pyramid Award in the Specialty Construction category for the Harbor Island Existing Dock Demolition in Port Aransas, Texas. ATI was called in to remove the underwater part of an existing dock structure that was in the way of U.S. Army Corps of Engineers dredging.

ATI was contracted to provide underwater demolition services as the project kicks into high gear. Our team was called upon to assist with the removal of an existing dock structure within the footprint



of the proposed dredging in the waterway. Another contractor had already worked to remove the top section of the dock, but ATI's expertise in removing large sections of underwater concrete was required to complete the job. ATI used diamond wire sawing to remove the underwater piles and h-beams.

For More Information Contact: Mitch Riordan Tel: 800-752-2729

 ${\bf Email: sales@aggregatetechnologies.com} \\ {\bf www.aggregatetechnologies.com}$

Fine Cut is Expanding!

Recently, Fine Cut started a new division called Fine Cut Grinding and Polishing, LLC. Jamie Sisk has been added to the Fine Cut team and will be running the new division. Jamie brings over 13+ years of experience in the grinding and polishing field.

Please help us in welcoming Jamie to the team. You can contact him by email at jamie@finecutusa.com or by calling 816-865-1127.

For More Information Contact: Regina L. Ford Tel: 816-540-5787 Email: regina@finecutusa.com www.finecutusa.com



Jamie Sisk

Vacuworx Machine Shop Takes Root in Newly Renovated Facility

Heavy investment in skilled machinists, cutting edge technologies and robust quality management programs is driving new business opportunities for Vacuworx with a newly renovated machine shop inside its Tulsa headquarters.

Vacuworx is now extending its exacting standards used to machine and fabricate many of the parts for its own products into a new business opportunity. The global equipment manufacturer is turning excess capacity into a new revenue stream as the company takes on contract work for outside companies.

Vacuworx offers comprehensive design, CAM programming and machining services on an array of raw materials. The shop can accommodate short to large production runs and specializes in prototype development and finish treatments to suit individual needs. The new venture reflects the company's overall dedication to safety, focus on efficiency and investment in proven technologies with 10 CNC machines, fully simultaneous five-axis machining, and a dual-spindle, live-tooling, bar-fed, part-catching lathe.

Vacuworx Director of Manufacturing D.J. Gall oversaw construction of the space during a three-month build-out on the company's 60,000-square-foot campus at 10105 E. 55th Place. Renovations included durable epoxy floor coatings, four bridge cranes for safe and easy maneuvering of parts and equipment, and all new LED fixtures and bulbs for energy efficient illumination throughout the entire facility. A state-of-the-art inspection room was designed for the most precise measurements and an HVAC system with three 15-ton air conditioners was installed to allow for complete climate control and redundancy.

For More Information Contact: Paula Bell Tel: 918-591-3004 Email: paulab@vacuworx.com www.vacuworx.com



Hilti Concrete Sensors System Delivers an End-to-End Solution for Monitoring Concrete

Technology to Help Contractors Finish Construction Projects on Time with Faster, Accurate Data

Hilti, a global leader providing innovative tools, technology, software and services to the commercial construction industry, today released its end-to-end solution to help contractors more accurately measure and predict the performance of concrete, Hilti Concrete



Sensors. The single system includes a portfolio of connected (i.e., "smart") devices, an easy-to-use mobile app, internal lab testing for calibrating concrete mix designs and training and support services.

Hilti Concrete Sensors will help commercial contractors manage and simplify

concrete monitoring, potentially enabling schedule acceleration of construction projects. Using Hilti Concrete Sensors technology can help bring not only productivity, but also cost savings compared to traditional monitoring methods.

A sensor embedded into concrete works with the easy-to-use software to provide real-time data on the concrete as it cures and dries. The mobile app can quickly share the status of the concrete's estimated strength, temperature and relative humidity.

With a state-of-the-art in-house lab, the exact concrete mix can be more accurately tested enabling construction managers to make faster and more thorough decisions regardless of climates.

For More Information Contact: Danielle Wilson Tel: 972-202-6178 Email: Danielle.Wilson@hilti.com

www.hilti.com



Aquajet Trio Increases Efficiency for Bridge and Road Repair Applications

Aquajet, a global leader in Hydrodemolition machine manufacturing, offers a dynamic trio of machines ideally suited for road and bridge repair applications – the Aqua Cutter 710V Hydrodemolition robot, Ecosilence 3.0 high-pressure pump system, and EcoClear water treatment system. Together, the machines provide contractors the industry-leading safety and productivity of robotic Hydrodemolition with the added benefit of on-site, on-demand wastewater treatment — all in a compact footprint that meets strict environmental regulations while providing maximum versatility for congested jobsites.

With the 710V, operators can complete the work faster and with more precision than traditional methods. The 5,070-pound (2,300-kilogram) unit provides exceptional reach and unmatched productivity – up to 25 times faster compared to handheld pneumatic devices. It uses 14,500- to 40,000psi water jets to remove as much as 35 cubic feet (1 cubic meter) per hour of concrete. Unlike other methods, Hydrodemolition cleans and descales rebar without damaging it or producing microfracturing in the surrounding concrete. The method also provides a superior bonding surface, which can extend the longevity of repairs by as much as three times, making it an ideal method for time- and budget-sensitive road and bridge repair projects.

The 710V's innovative mast design also gives operators unrivaled reach for applications such as columns, piers, abutments and parapets. The front powerhead can reach as high as 23 feet (7 meters) without additional support. Combined with Aquajet's unique cutting head and multi-axis 3D positioning system, the unit provides versatile operation, easily removing concrete on horizontal, vertical and overhead surfaces that would be difficult to get at with other equipment.

For More Information **Contact: Roger Simonsson** Tel: 46-383-246612

Email: roger.simonsson@aquajet.se

www.aquajet.se



Achieve Ultra Stacking with the NEW NOGGIN(R) Ultra 100

The new NOGGIN® Ultra 100 can stack GPR traces up to 65,536 times to reduce the noise floor to see small, subtle, and real GPR signals more than 100 times smaller than before. This results in double or even triple the depth of penetration as compared to the standard Noggin 100.

The capabilities of the NOGGIN Ultra 100 are ideally suited for geotechnical and geological applications as well as deep utility-locating, environmental applications and archaeology.

The NOGGIN Ultra 100 is fully compatible with NOGGIN systems using the DVL-500. Packages are available to add a NOGGIN Ultra 100 to your SmartCart and SmartTow configurations.

For More Information Contact: Troy De Souza Tel: 816-540-5787 Email: tds@sensoft.ca www.sensoft.ca

WWW.CONCRETEOPENINGS.COM CONCRETE OPENINGS | 33

Industry Bits continued



Change Data Collection Modes – in a SNAP – With the New Multi-Position Survey Wheel Adapter for the Palm XT

GSSI released the Multi-Position Survey Wheel Adapter for the Palm XT antenna in the beginning of September. This adapter allows users to quickly and easily change between Normal, Cross Polarization and Side Car data collection modes on the Palm XT.

Palm XT antennas ordered after September 1, 2020 will have this adapter already installed when your order arrives. For existing customers, a Palm XT adapter kit is available.

Cross Polarization Mode: This data collection mode highlights non-metallic objects such as PVC while de-emphasizing metallic objects like rebar and wire mesh

Side Car Mode: The Side Car mode transitions the survey wheel to the side of the antenna and allows it to fit into smaller spaces or to begin collecting data at the edge of a column

For More Information Contact: The GSSI Marketing Team

Tel: 603-893-1109

Email: sales@geophysical.com www.geophysical.com



DiamaPro Systems' TVX Vac Available at Niagara Machine!

The new TVX Vac features automatic filter cleaning without stopping suction, no sock filter, distribution box on both units, durable casters and frame and plugs are included, all at a great price point!

For More Information Contact: Michael Trotta Tel: 800-622-2048

Email: Mike@niagaramachine.com www.niagaramachine.com

DDM Concut Announces Tom Collier and Nic Gross as Territory Sales Mangers

DDM Concut is pleased to announce that Tom Collier and Nic Gross have assumed new roles as Territory managers.

Tom will be responsible for the New York state and Western Pennsylvania markets. Tom brings a strong background in technical sales. His most recent position involved the design and sales of hydraulic and pneumatic systems. Prior to that, he worked for Makita tools as a territory manager. Tom's hobbies include bee keeping. Tom lives in Syracuse along with his wife and 2 year old son. Feel free to reach Tom at tcollier@ddmcongut.com

Nic will be responsible for the Colorado, Utah and Wyoming markets. Nic brings a strong background in the concrete cutting industry, having spent the last 5 years selling concrete cutting equipment and diamond consumables. Prior to that, he was in operations for a professional concrete cutting company located in Denver. Nic is an avid golfer. He lives in Denver along with his wife and 3 ½ year old son. Feel free to reach Nic at ngross@ddmconcut.com.

For More Information Contact: Garry Henderson Tel: 800-654-7224 Email: ghenderson@ddmconcut.com www.ddmconcut.com





Tom Collier

Nic Gross







Vacuworx Recognized as 2020 Manufacturer of the Year

The Oklahoma district of the U.S. Small Business Administration has named Vacuworx the 2020 Manufacturer of the Year as part of National Small Business Week.

For more than 50 years, the U.S. Small Business Administration has celebrated National Small Business Week (NSBW), recognizing the contributions and successes of America's entrepreneurs and small business owners.

Vacuworx, a global leader in vacuum lifting technology, has been engaged in manufacturing and exporting heavy-duty material handling systems since its establishment in 1999. The company, which celebrated 21 years of industry building accomplishments this year, was founded with the simple goal of engineering a better, safer way to handle pipe in the field for the oil and gas sector.

The current lineup of Vacuworx lifting systems consists of seven different product series, each with applications in various markets such as oil and gas, water and sewer, concrete demolition and highway and heavy construction. With standard lifting capacities ranging from 1,700 lb to 55,000 lb, Vacuworx systems can handle a wide variety of materials including pipe, precast and plate

After winning the Tulsa Regional Chamber's 2019 Manufacturer of the Year award, Vacuworx was eligible for consideration at the state level through the Oklahoma district of the U.S. Small Business Association. Nominees were evaluated based on several criteria including an increase in sales or profits, growth in employment and maintaining exportation to overseas markets. Businesses were also judged on effective solutions to overcoming market-entry and logistical challenges, and for their support of small businesses entering the export arena.

For More Information Contact: Paula Bell Tel: 918-591-3004 Email: paulab@vacuworx.com www.vacuworx.com

World of Concrete Launches the New WOC360.com Website

WOC360.COM has arrived, providing a year-round destination for industry professionals to keep up with the latest relevant news that drives the global concrete & masonry construction industries. Content curated and created with a focus on commercial and residential concrete & masonry sectors, from top-notch editors around the world.

Topics covered on WOC360.com include:

Industry News & Resources: Everything that is happening in the concrete and masonry industries from material suppliers, design professionals and contractors.

Products and Manufacturers: Highlighting the newest products and services that are advancing concrete and masonry design construction, production and repair.

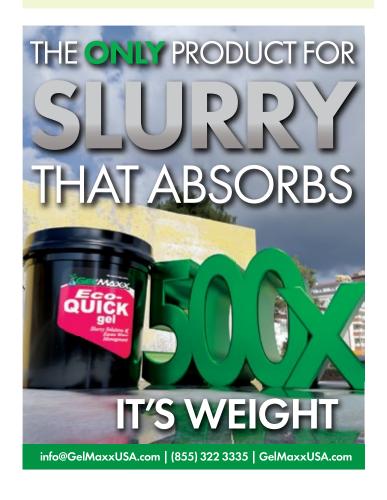
Concrete and Masonry Resources: Technical guidance on everything from the basics to the newest materials and techniques that are shaping the design and shaping the design, production, construction and repair of concrete and masonry structures.

Business and Markets: Industry suppliers, design professionals, and builders are businesspeople; this section has guidance on how to operate a small construction business and will feature people who are successful at it.

For More Information Contact: Steven Pomerantz Tel: 972-536-6379

Email: Steven.Pomerantz@informa.com

www.informaexhibitions.com



WWW.CONCRETEOPENINGS.COM CONCRETE OPENINGS | 35

Industry Bits continued

Hilti Launches Industry's First 12v 4-in-1 Installation Drill Driver with ½" Chuck for Hard-To-Access Applications

Hilti North America, leading provider of innovative tools, technology, software and services to the commercial construction industry today launched its new 4-in-1 cordless multi-head drill driver to help contractors tackle the most demanding and difficult to access applications. The SFE 2-A12 multi-head drill driver is designed to reach places that a common tool in its class cannot. Points considered difficult to access, where users usually spend a lot of time or are unable to reach, are not a problem for this tool. The versatility of this tool will help customers save time and increase productivity at the jobsite.

The innovation is ergonomically designed to provide maximum comfort for users. It has a great advantage over similar tools on the market, as its exclusive $\frac{1}{2}$ " chuck allows a larger variety of drills to be used. The four exchangeable chucks are: $\frac{1}{4}$ " offset, right-angle adapter, $\frac{1}{2}$ " keyless metal chuck and $\frac{1}{4}$ " hex chuck. This tool is an excellent source for many installation applications; for instance, driving in wood with hex chuck, offset chuck, driving in metal with right angle chuck, offset chuck, and drilling in metal with drill chuck mounted on right angle chuck.

The cordless tool is designed to help provide more accurate work, including two bright LEDs, magnetic bit holder chucks and 15-step clutch, geared to more efficiently driving screws while also better protecting the base materials. In addition, it is equipped with a brushless motor, which offers users 1600 RPMs for exceptionally high performance, superior system efficiency, and high run time per charge.

For More Information Contact: Danielle Wilson Tel: 972-202-6178

Email: Danielle.Wilson@hilti.com

www.hilti.com





Brokk Offers Customized Options for High Heat Environments

Brokk, the world's leading manufacturer of remote-controlled demolition machines, offers specialized, high-heat options, ideal for processing applications. These features are available as part of Brokk's customization during initial purchase or afterwards through the manufacturer's repair and refurbishment services. Equipment customization with heat-resistant options allows facilities and contractors to tailor equipment to fit their specific needs and the unique demands of cement, steel and foundry applications.

Brokk has developed a number of heat-resistant options, including cylinder protection, steel tracks and a forced draft cooling system. These features are available on most Brokk models, including the Brokk 800P, the manufacturer's 11-ton, specialized processing machine, and can also be added to smaller units, such as the versatile, 1-ton Brokk 110 for hot applications in tight spaces. When combined with remote operation, heat-resistant features allow facilities to begin maintenance operations, such as ladle cleaning and refractory removal, while temperatures are still too high for workers to approach, increasing productivity and safety for these vital tasks.

The optional cylinder protection feature employs a metal shield to limit impact and radiated heat from damaging vital components on Brokk's three-part arm. This allows operators to get closer and work longer in high-heat applications while avoiding heat-related equipment breakdowns.

A forced draft cooling option is also available for hydraulic systems and electrical cabinets to help increase the unit's cooling capacity and minimize heat-related breakdowns. The forced draft cooling system is recommended for jobs where the ambient temperature exceeds 113 degrees Fahrenheit (45 degrees Celsius), such as cement or lime kilns. An upgraded forced draft cooling option is available for the breaker, as well, allowing for use in red-hot applications with ambient temperatures in excess of 392 degrees Fahrenheit (200 degrees Celsius).

For More Information Contact: Mike Martin Tel: 800-621-7856 Email: mike@brokkinc.com www.brokk.com





REALACPOWER.COM | (877) 670.7325

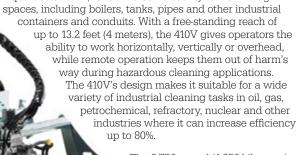
- **√** 60KW TO 180KW SYSTEMS
- **₹**80% LESS WEIGHT
- **√** 50% MORE HAULING CAPACITY
- CUSTOM POWER DISTRIBUTION
- VNEARLY ZERO ROUTINE MAINTENANCE
- **PTO RELIABILITY BUILT-IN**

REALPOWER

Industry Bits continued

Aquajet's 410V Hydrodemolition Robot Increases Efficiency in Industrial Cleaning Applications

Aquajet, a global leader in Hydrodemolition machine manufacturing, offers the Aqua Cutter 410V as a safer, more efficient alternative to manual industrial cleaning methods, such as hand lances. The model combines the compact size of the Aqua Cutter 410A and the innovative mast system of the Aqua Cutter 710V, for unrivaled versatility to work in tight



The 2,756-pound (1,250-kilogram)
Aqua Cutter 410V uses 15,000- to
40,000-psi water jets and a
range of attachments for
efficient concrete removal or
surface preparation. Contractors
can adjust the robot's stroke to control

removal depth and vary the water pressure to match the application, increasing precision and efficiency over hand lances and other manual methods. This can significantly increase efficiency for applications such as tank and large-diameter pipe cleaning, reducing the time and personnel required while still producing high-quality results.

The 410V also allows operation from a safe distance using the unit's radio remote control, either wirelessly or with a hard wire. Contractors can remove the power control module from the tracked portion to reduce the crawler to one-third of its original size and create an even more compact robot. This provides the ability to drive the crawler into tight and inhospitable environments, such as small tunnels and flooded pipes, while the module remains connected via a cord.

For More Information Contact: Roger Simonsson Tel: 46-383-246612

Email: roger.simonsson@aquajet.se

www.aquajet.se



Mitch Scott

Lissmac Announces New Sales Representative Mitch Scott

We are very pleased to announce that Mitch Scott is joining our sales team and will be serving your area.

Mitch has 23 years of experience in the Floor/ Concrete cutting business and we look forward to having him share his vast knowledge base with the team and our customers.

For More Information Contact: Maike Blazer Tel: 518-326-9094 Email: m.balzer@lissmac-corporation.com www.lissmac.com

DiamaPro Systems WVX-P Wet Vac Available at Niagara Machine

The New WVX-P Wet Vac features a curved squeegee to gather slurry, a hose and wand for pickup in hard to reach areas, a pump out motor and hose, so no need to tip and manually empty, a durable frame, an automatic float shut off to protect the motor once water levels get high.

For More Information Contact: Michael Trotta Tel: 800-622-2048 Email: Mike@niagaramachine.com www.niagaramachine.com



Enhance Your Curriculum with GPR Courses from SensoftU

As post-secondary education moves online, it becomes imperative to have engaging content that learners will remember. Supplement your course curriculum with dedicated GPR course content from SensoftU.

Instead of just watching videos or static PowerPoints, SensoftU features interactive courses where the user is engaged, learning, and answering questions throughout the course. This ensures quality learning and the retention of key concepts.

In these times of social distancing and online learning, SensoftU provides a convenient, cost-effective, and flexible platform to expand remote education for your students.

For More Information Contact: Troy De Souza Tel: 816.540.5787 Email: tds@sensoft.ca www.sensoft.ca





The Hilti Wall Saw Systems DST 10-CA and DST 20-CA deliver the power and precision to make clean-edged cuts through thick concrete walls. With quick setup and automated Cut Assist operation, productivity is boosted even in tight spaces. Combined with Equidist diamond blades, expect faster and smoother cuts and enhanced performance with the blade's high cutting speed and long life.





OPERATOR CERTIFICATION

CSDA's Operator Certification is a comprehensive six-day program that combines detailed classroom instruction with on-slab demonstration and evaluation of advanced concrete cutting techniques. Safety, proper equipment use and efficiency are emphasized. CSDA certified operators are recognized industry-wide for their proficiency in the full range of sawing and drilling applications.

MINIMUM REQUIREMENTS

- Successful completion of CSDA Cutting Edge, Slab Sawing & Drilling 101, Wall Sawing 101 or Wire Sawing 101
- Three years field experience (4,500 hours)
- · Successful completion of 10-hour OSHA Construction Safety course
- · No more than one lost-time injury within the last three years
- · Unrestricted driver's license
- · Negative drug test within 30 days of taking the course





A-1 CONCRETE CUTTING & CORING LTD.
Calgary, AB, Canada

ACCU-CUT CONCRETE SERVICES, INC. Clearwater, FL

ACE CONCRETE CUTTING
Cumberland, RI

AGGREGATE TECHNOLOGIES, INC.

Houston, TX

Orlando, FL

AMERICAN EAGLE CONCRETE SERVICES

AUSTIN ENTERPRISE Bakersfield, CA

BAY LINE CUTTING & CORING. INC.

San Francisco, CA

CENTRAL CONCRETE CUTTING INC.

Edgar, WI CHESCO Malvern, PA

COBRA CONCRETE CUTTING SERVICES

Arlington Heights, IL

CON-COR CO., INC.

Falls, WI

CONCRETE CUTTING & BREAKING

Jacksonville, FL

CONCRETE CUTTING SPECIALISTS

Freeland, MI

CONCRETE RENOVATION, INC.

San Antonio, TX

CONQUEST DEMOLITION

Buda, TX

CONSTRUCTION DEBRIS REMOVAL, INC.

St Augustine, FL

CR MEYER Oshkosh, WI

DELTA CONTRACTORS & ASSOCIATES, LLC

Owings Mills, MD

DIXIE CONCRETE CUTTING, INC.

College Park, GA

DIXIE CONCRETE CUTTING, INC.

Greenville, SC

E. LUKE GREENE COMPANY, INC.

Johnson City, TN

ECHO GPR SERVICES

Paola, KS

FINE CUT CONCRETE DRILLING AND SAWING LLC

Pleasant Hill, MO

FORRISTALL Bradenton, FL

HAFNER & SON, INC.Danielsville, PA

HARD ROCK CONCRETE CUTTERS

Wheeling, IL

HOLES INCORPORATED

Houston, TX

HOLES OF SAN ANTONIO, INC.

San Antonio, TX

INTERNATIONAL DRILLING & SAWING, INC.

Pensacola, FL

JACK DOHERTY CONTRACTING

Woburn, MA

JEM CONCRETE DRILLING & SAWING INC

Granger, IN

KRAUS-ANDERSON CONSTRUCTION CO.

Minneapolis, MN

M6 CONCRETE CUTTING & CORING

Wichita, KS

MIDWEST CONCRETE CUTTING, INC.

Peotone, IL

NEIL'S CONCRETE CUTTING, INC.

Taylorsville, UT

PG CUTTING SERVICES

Lake Elsinore, CA

TRUE LINE CORING AND CUTTING OF MARYLAND, INC.

Baltimore, MD



COMPANY CERTIFICATION

The CSDA Company Certification Program is the first of its kind in the industry. This program has been created for cutting contractors to provide owners, architects, engineers, general contractors and government officials with a valuable pre-qualification tool that acknowledges sound business practices. It is available to all sawing and drilling contractors.

A COMPANY MUST MEET THE FOLLOWING CRITERIA TO ACHIEVE CERTIFICATION:

- Meet the basic safety and insurance requirements of the industry
- · Undertake sound operational and financial best practices
- Provide evidence it has taken part in basic training or certification programs to better its employees and the company as a whole
- · Successfully pass a written application review

ADVANCED CONCRETE SAWING

St. Paul, MN

AMERICAN GPR SERVICES LLC

Avondale, AZ

AUSTIN ENTERPRISE

Bakersfield, CA

CENTRAL CONCRETE CUTTING, INC.

Edgar, WI

COBRA CONCRETE CUTTING SERVICES CO.

Arlington Heights, IL

CONCRETE CUTTING SYSTEMS, INC.

Philadelphia, PA

CONCRETE CUTTING SYSTEMS.

PITTSBURGH INC.

Pittsburgh, PA

DIACORE CONCRETE CUTTING

SPECIALISTS

Frenchs Forest, NSW, Australia

ECHO GPR SERVICES

Paola, IL

HARD ROCK CONCRETE CUTTERS, INC.

Wheeling, IL

HARD ROCK CONCRETE CUTTING

Raleigh, NC

HOLES INCORPORATED

Houston, TX

IN-PLACE MACHINING COMPANY, LLC

Batavia, OH

INTERNATIONAL DRILLING & SAWING, INC.

Pensacola, FL

ONLINE CONCRETE CUTTING SERVICES PTY. LTD.

Seven Hills, NSW, Australia
RECLAIM COMPANY, LLC

Fairmont, WV

WALKER CUTTING SERVICES

Hammonton, NJ



GPR CERTIFICATION

GPR Certification is for experienced GPR technicians who have expanded their knowledge of the methods, theory and practical application of GPR imaging. Certified technicians receive classroom and hands-on time with experienced instructors and representatives from leading GPR manufacturers.

A GPR CERTIFIED OPERATOR:

- Has shown proficiency in performing scans and reading and interpreting results
- Can select the appropriate GPR scanner for the job
- · Passed a written and practical test
- · Was issued a certification card upon completion of the class

ADVANCE CONCRETE SAWING

Saint Paul, MN

AMERICAN GPR SERVICES, LLC

Avondale, AZ

BREAK AWAY CONCRETE CUTTING INC.

Coyote, CA

CANADA CUTTING CORING & STABILIZATION LTD.

Regina, SK, Canada

CENTRAL CONCRETE CUTTING INC

Edgar, WI

COBRA CONCRETE CUTTING SERVICES CO

Arlington Heights, IL

CONCRETE CORING CO. OF CINCINNATI. INC.

Cincinnati, OH

CONQUEST DEMOLITION

Buda, TX

CSDT

Sandy Bay, TS, Australia

DALY CONCRETE CORING LIMITED

Courtice, ON, Canada

ECHO GPR SERVICES

Paola, KS

FINE LINE SAWING & DRILLING INC.

Newark, CA

HARD ROCK TECHNOLOGIES, INC.

Prospect Heights, IL

HOLES INCORPORATED

Houston, TX

IDS GEORADAR NORTH AMERICA

Golden, CO

INTERNATIONAL DRILLING & SAWING, INC.

Pensacola, FL

MAREK SAWING & DRILLING, LLC

Spring, TX

MAVERICK CUTTING AND BREAKING

Minneapolis, MN

SAUNDERS CONTRACTING SERVICES INC.

Hampton, VA
SCAN TEK GPR

Davie, FL

SKYLINE CONSTRUCTION AND RESTORATION CORP.

Miami, FL

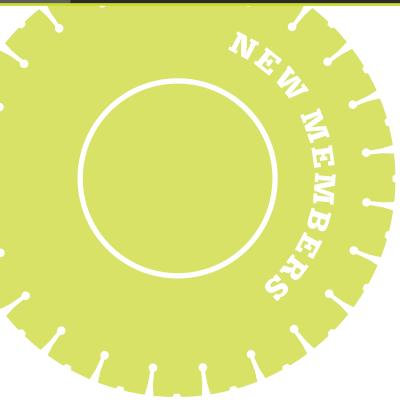
SOUTHEAST SCANNING & CORING

Norcross, GA

VERIFY LOCATING/SAF-CUT

Raleigh, NC





(Csda

(Csda

Csdo

CONTRACTOR:

BEDROCK CONCRETE CUTTINGPortland, OR

BULLDOG CONCRETE CUTTING & DRILLING, LLC.

Lake Worth, FL

DARKHORSE INDUSTRIES, LLC

Jackson, LA

KAZIMAR INDUSTRIAL SERVICE INC.

Englishtown, NJ

REACHABLE

Winnipeg, MB, CANADA

MANUFACTURER:

SOCAL UPFITTERS INC. Pomona, CA

OVERSEAS CONTRACTOR:

TECHNICAL CONCRETE CUTTING LTD Havant, Hampshire, United Kingdom

MEMBER BENEFITS



AND TOOLBOX SAFETY TIPS (TSTS)

- 230-page CSDA Safety Manual
- Safety Handbook in English/Spanish
- Safety Videos for concrete cutters
- Over 100 Toolbox Safety Tips (TSTs)



DISCOUNT PROGRAMS

PROGRAM
The Association negotiates
The Associati

IETWORKING

AT THE ANNUAL CONVENTION AND QUARTERLY MEETINGS

The number one benefit for members has always been the opportunity to network with cutting professionals at the annual convention and quarterly meetings. This networking provides opportunities to forge new relationships and learn from other experienced professionals.



NEXT GEN CSDA NEXT GENERATION GROUP

The group aims to continue the growth of the

association while serving the needs and wants of the younger generation, with the goal of continuing to set a standard of excellence.



THE CSDA WEBSITE AT WWW.CSDA.ORG **CONTAINS A WEALTH OF INFORMATION** AVAILABLE 24/7 IN THE "MEMBERS" SECTION. IN ADDITION, CSDA'S FACEBOOK PAGE AND **DISCUSSION FORUM GROUP PAGE ALSO** PROVIDE MEMBERS WITH A CHANCE TO DISCUSS TECHNICAL ISSUES, SELL EQUIPMENT, HIRE EMPLOYEES OR ANY OTHER RELEVANT TOPICS.

TRAINING

OVER 4,000 INDUSTRY PROFESSIONALS HAVE GRADUATED FROM MORE THAN 20 CLASSROOM, HANDS-ON AND ONLINE CSDA TRAINING AND CERTIFICATION PROGRAMS FOCUSED ON CUTTING DISCIPLINES, ESTIMATING, POLISHING AND SAFETY. ONLINE TRAINING AT WWW.CSDATRAINING.COM OFFERS A COST-EFFECTIVE ALTERNATIVE TO THOSE NOT ABLE TO AFFORD THE TIME OR THE MONEY TO SEND OPERATORS TO CLASSES.





REGISTER ONLINE AT WWW.CSDA.ORG

GROSS SALES	NORTH AMERICAN CONTRACTOR	POLISHING CONTRACTOR	GPR IMAGING CONTRACTOR	MANUFACTURER	DISTRIBUTOR	OVERSEAS CONTRACTOR	AFFILIATE
\$0 – 1M	\$715	\$715 \$715		\$1,505	\$1,095		
\$1 – 2M	\$1,135	Ψ110	Ψ110	\$1,860	\$1,395	\$450	\$875
\$2 – 3M	\$1,740	\$1,425 \$		\$2,765	\$2,070		
\$3 – 5M	\$2,335		\$1,425	\$4,425	\$3,330		
\$5 – 10M	\$2,955		\$1,420	\$5,985			
> \$10M	\$3,705			\$7,375			









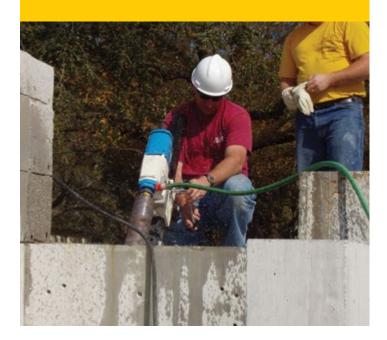




Concrete Sawing & Drilling Safety Week

January 18-22, 2021

Tel: 727-577-5004 Email: info@csda.org



Canadian Concrete Expo February 11-12, 2021

The International Centre Mississauga, ON

Tel: (226) 363-0550

Email: sue@exposition.com

CSDA Spring Board & Committee Meetings

March 2-3, 2021

Fairmont Hamilton Princess Resort Hamilton, Bermuda

Tel: 727-577-5004 Email: info@csda.org



CSDA Annual Convention & Tech Fair

March 4-6, 2021

Fairmont Hamilton Princess Resort Hamilton, Bermuda

Tel: 727-577-5004 Email: info@csda.org

BuildTech Asia 2021

March 10-12, 2021

Singapore Expo Singapore, Asia

Email: buildtechasia@sph.com.sg



World of Concrete

June 7-10, 2021

Las Vegas Convention Center Las Vegas, NV

Tel: 727-577-5004 Email: info@csda.org

Advertising and Readership

concrete openings



Target the Specialized Industry of Concrete Cutting, Polishing

and Imaging

Advertising in *Concrete Openings* magazine is the only way to reach the specialty market of cutting, polishing and imaging contractors who work with concrete, asphalt or masonry because it is specifically targeted to this segment of the industry.

How Do You Reach 19,000+ Concrete industry Professionals?

Each issue of *Concrete Openings* magazine is sent to more than 12,000 operators, equipment manufacturers and suppliers in the concrete cutting, polishing and imaging industry, and more than 7,000 specifiers of these services around the world.

Not a Subscriber?

Get your free subscription today!

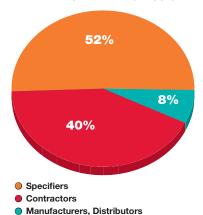
Visit www.concreteopenings.com and click "subscribe."

THE OFFICIAL MAGAZINE OF CSOC

Who Reads the Magazine?

Concrete Openings reaches cutting, polishing and imaging contractors as well as specifiers of these services, including engineers, architects, general contractors and governmental agencies. Why waste your message on unnecessary circulation? Advertising in Concrete Openings guarantees a targeted audience of industry professionals.

READERSHIP BY PROFESSION



CSDA Social Media

CSDA's social media pages are packed with all the latest news, updates, photos and videos from the association and Concrete Openings magazine. Look out for exclusive content and become "friends" with others who are looking to network and promote the sawing and drilling industry. Join our growing fan base and stay in touch with the association through your PC, laptop or mobile device. Find direct links to these pages at www.csda.org.











Circulation

19,000+ minimum, per issue

12,000+ member and prospective member companies made up of contractors, manufacturers, distributors and affiliates

7,000+ general contractors, engineers, architects and government officials who specify cutting, polishing and imaging



Readership Per Issue

A poll of *Concrete Openings* subscribers revealed that 66% pass on their copy of the magazine to at least one other person, with almost 25% stating that the magazine is passed on to four or more people each issue. This translates to an average of four people reading each issue of the magazine for a total readership per year of approximately 60,000.



Concrete Openings Website

Visitors to the Concrete Openings website can access our advertisers at the touch of a button!

As a compliment to your ad placement, we include a direct link to your website on our Advertisers page. *Concrete Openings* also offers banner advertising opportunities throughout the year and a full, pageturning copy of the magazine, including ads, available for visitors on the website.

Visit **www.concreteopenings.com** for more information.

Advertisers

To receive additional information about products advertised in this issue, contact the vendors below.

PAGE	ADVERTISER	PHONE E	MAIL
23	AquaJet	701-373-0062	keith.armishaw@brokkinc.com
22	Brokk, Inc.	701-373-0062	mike@brokkinc.com
5	DDM Concut Diamond Tools	404-312-0770	ghenderson@ddmconcut.com
Inside Front Cover, Inside Back Cover	Diamond Products	800-321-5336	jpalmer@diamondproducts.com
31	Diamond Vantage	866-322-4078	sunny@gtdiamond.com
11, 17	DITEQ Corporation	816-246-5515	enelson@diteq.com
27	EDCO- Equipment Development Co., Inc.	800-638-3326	swain@edcoinc.com
35	GelMaxx	855-322-3335	info@gelmaxxusa.com
29	GSSI Geophysical Survey Systems, Inc. (GSS	SI) 603-893-1109	harmonj@geophysical.com
39	Hilti Inc.	609-781-2865	valdis.sustko@hilti.com
24-25, Back Cover	Husqvarna Construction Products	913-928-1442	cate.stratemeier@husqvarnagroup.com
47	ICS, Blount, Inc.	503-653-4687	jessica.gowdy@blount.com
28	Lissmac	518-326-9094	m.balzer@lissmac-corporation.com
2	Proceq USA, Inc.	724-512-0330	sonia.giro@screeningeage.com
37	Real Power	317-443-0805	dsmith@realacpower.com
34	Wolverine Equipment	561-843-3585	sara@wolverineequipment.com





Director's Dialogue

See Ya 2020



ERIN O'BRIEN
Executive Director

ell. I certainly wasn't expecting that.

When I became the newest CSDA
Executive Director on January 1, 2020, and
the first female Director, I did not expect that
less than three months into my new role we would be dealing
with the cancellation of our Annual Convention (for the first
time ever), the swap to a new meetings platform (virtual),
cancelled trips to CSDA meetings in Charlotte, Seattle and
Nashville, cancellation of our in-person training classes and the
postponement of the largest domestic concrete trade show of
the year. So, we threw the proposed budget and plans out the
window and started re-thinking everything.

It's been a challenging year for us all—professionally and personally. I had COVID back in June, and while my symptoms were mild, it wasn't a fun couple of weeks. Many of you have lost family members and friends to the virus or had to downsize your company because of it. We've stayed at home, changed our daily lives, cancelled vacations and birthdays and weddings, seen our frequent flier miles plummet, learned how to work from home while homeschooling our kids and taking the dog on 12 walks a day. The new vaccine offers hope. So what do we do now?

Think positive and plan for an uncertain future. The construction market did not get hit nearly as hard as many other industries, and that's something we should be thankful for. It's a long road back to where we were, and we need to look at all contingencies. How can you work smarter? What resources can you take advantage of? CSDA offers many resources that large and small contractors alike can use now. Our specifier outreach program sends vital communications and resources to general contractors, engineers and government agencies who are looking for the right subcontractor to hire. We pass leads from those specifiers along to members in the area. Our library of over 50 Best Practices, Specifications, Standards and Tolerances can help you and your company in your day-to-day operations, and our 100+ Toolbox Safety Tips help train your workers to be safe on any type of jobsite or in any situation. New online training options allows your employees to learn at your office or at home so they can avoid traveling and you can save time and money.

It won't be an easy road back, but 2021 has to be better. Questions about how we can help? Call (727-577-5004) or email us (info@csda.org) and our staff will be happy to answer your questions or point you in the right direction. We really are all in this together.

M-5 PRO

QUICK-DISCONNECT CORE RIG



Up to 16" Bit Capacity

CORE BORE and Weka Motor Compatibility

3 to 1 Gear Reduction with 2 Gear Ratios for Easy Carriage Feed

Light-Weight Aluminum with Reinforced Track and Steel Rollers and Guide

Anchor Stand

Combo Vacuum/Anchor Stand

> Easy Quick-Disconnect Allows For Faster Coring and Job Cost Efficiency

800.321.5336 diamondproducts.com











HUSQVARNA
FLEET SERVICES



BUILT TO EXCEED YOUR EXPECTATIONS

Husqvarna's new DM 400 and DM 430 drill motors are built to handle the toughest conditions, with reliability, and enough power and performance to complete the job – day in, day out.

In addition to the motors, Husqvarna bits, the DS 500 drill stand, W 70 P vacuum, slurry rings and more offer a complete drilling solution for your job.

To learn more or see what a Husqvarna drilling solution looks like for your job, contact your local Husqvarna representative. **800.288.5040**

WWW.HUSOVARNACP.COM



