

JUNE 2022

concrete openings

THE OFFICIAL MAGAZINE OF  CSDA™

Historic Smokestack Removed with Expert Precision

THE
SAFETY
ISSUE



DIAMOND PRODUCTS LIMITED
333 Prospect Street - Elyria, OH 44035 U.S.A.
800-321-5336 - diamondproducts.com

**CORE
CUT**

MIKE ORZECOWSKI, P.E.
CSDA President



The leadership of CSDA recently designated Safety as its focus for the June issue of *Concrete Openings* magazine. Safety has always been and will continue to be a big part of CSDA, as it is woven into everything we do. Safety is integral to every aspect of our association: training, the development of safety materials, Standards and Specifications and a new focus on Certifications for operators and companies. Safety is so engrained in the very foundation of CSDA that we felt it was important to set aside one of the quarterly issues of *Concrete Openings* to showcase Safety.

CSDA is a contractor association in full partnership with manufacturers to represent this specialty trade of cutting and coring concrete for 50 years now, and we continue to expand and grow to include many complimentary trades such as wire sawing, precision robotic demolition, imaging concrete using state of the art GPR technologies, concrete debris removal and slurry control. CSDA has Standards and Best Practice documents for the safe and current practical application defined by the industry. The middle of the CSDA mission statement states "...the CSDA Code

of Ethics demands that members pursue the highest standards of safety, quality and integrity..."


When reading the job site stories in current and past issues of *Concrete Openings*, it is easy to be impressed with the current state of the technology in our industry, including highly specialized equipment and impressive solutions and techniques by the operators. Every story paints a picture of just how far we've come in the past 50 years. Our specialty construction and demolition niche continues to grow and expand, and CSDA continues to lead the charge.

CSDA represents a highly skilled and highly specialized trade. The sophistication of the equipment and the proficiency of the trained operators clearly delineates professional CSDA operators and companies from the other trades that occasionally cut or core concrete. There is a T-Shirt slogan and a meme that circulates social media from time to time that states, "Everybody is a concrete cutter until the real concrete cutter shows up."

Please enjoy this issue of *Concrete Openings* with the special emphasis on Safety.

THE ALL NEW

Pentrunder[®] RS2



EASY SET UP
LIGHTWEIGHT (54lbs)
INTEGRATED TORQUE MOTOR (24 hp)
COMPATIBLE WITH EXISTING PENTRUDER TRACK

YOU KNOW YOU WANT ONE.

CALL US TODAY 800.321.1240

©2022 ICS, OREGON TOOL, INC. ALL RIGHTS RESERVED

DISTRIBUTED EXCLUSIVELY BY

ICS[®]
Diamond Tools and Equipment

concrete openings

THE OFFICIAL MAGAZINE OF 

CSDA OFFICERS

President, Mike Orzechowski
DITEQ Corporation
mikeo@diteq.com

Vice President, Kellie Kimball
Holes, Incorporated
kellie@holesinc.com

Secretary/Treasurer, Mark DeSchepper
Echo GPR Services
mark@echogpr.com

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

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

CSDA BOARD OF DIRECTORS

(Terms expiring 2023)

Brandon Bailey
A-Core Concrete Specialists
brandon@a-core.com

Tyrone Conner
Austin Enterprise
tconner@austin-enterprise.com

Greg Lipscomb
Diamond Products Limited
glipscomb@diamondproducts.com

Bruno Silla
GSSI
sillab@geophysical.com

Kristen Waters
Greene Concrete Cutting, Inc.
kristenw@greenesinc.com

Ronnie Wilhite
Texas Cutting & Coring, LP
ronnie@texascurbcut.com

CSDA BOARD OF DIRECTORS

(Terms expiring 2024)

Bob Crowther
Husqvarna Construction Products
bob.crowther@husqvarnagroup.com

Donna Harris
Concrete Renovation
accounting@concreterenovation.com

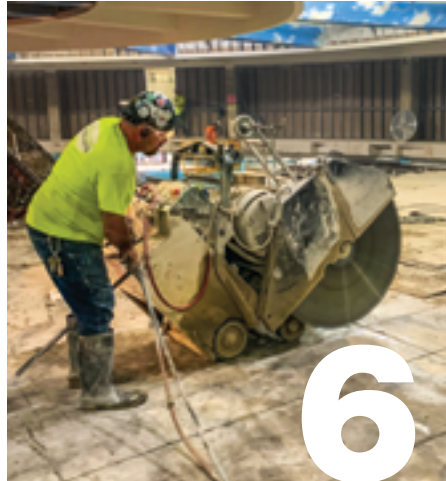
Duke Long
Interstate Sawing & Demolition
duke@interstatesawing.com

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

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

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

CONCRETE CASES



6

**New Life Brought to
High School Commons Area**



12

**Historic Smokestack
Removed with
Expert Precision**



28

**Friday Night Lights:
Renovating a Texas
High School Stadium**

CONCRETE OPENINGS MAGAZINE

Official Magazine of the Concrete
Sawing & Drilling Association
Volume 31, Issue 2 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
PO Box 324
St. Petersburg, FL 33731
Tel: 727-577-5004
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

ASSOCIATE EDITOR

Kelsey Carriere

CONCRETE CASE CONTRIBUTORS

Kellie Kimball
Haley Long
Ted Stanaszek

EDITORIAL REVIEW COMMITTEE

Patrick Harris
Joe Shebesta
Pat Stepanski

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**
How Fighting Inflammation Makes You Younger
- 16** **The Business of Business**
A "Different" Way to Lead Safety
- 19** **2022 Convention & Tech Fair Wrap Up**
CSDA Reunites in Arizona
- 22** **Tech Talk**
Slurry Management
- 32** **Safety Counts**
Heating Up: OSHA Plans to Target Enforcements at Heat Illness Hazards
- 34** **6 Safety Tips**
Advice for Working on a Construction Site
- 36** **Industry Bits**
- 44** **Certification**
- 46** **Membership**
- 48** **Calendar**
- 52** **Director's Dialogue**





HILTI

CORDLESS WITHOUT COMPROMISE

Light to heavy-duty jobs, all-on-one platform.

Introducing Nuron, the new, all-on-one cordless platform delivering more runtime, flexibility, and up to 2x the power than like platforms, helping your teams work faster with more productivity and less interruptions. Visit Hilti.com/moreruntime-co to see the Nuron difference.

NURON

YOUR ALL-NEW

22 VOLT CORDLESS PLATFORM

Hilti.com/moreruntime-co



New Life Brought to High School Commons Area

Maine West High School (MWHS) is situated in Des Plaines, Illinois, a suburb of Chicago, located just north of O'Hare International Airport. Named after the scenic Des Plaines River that runs south through the city from Wisconsin, Des Plaines is a cozy town with a population of about 60,000 and offers residents a mix of the suburban and urban feel, boasting a wide array of parks and outdoor activities, complemented by a variety of coffee shops, restaurants and nightlife selections.

Maine Township High Schools have embarked on a thorough revamp of all three high schools in their district: Maine East High School, Maine South High School and Maine West High School, with a whopping \$240.7 million budget for the proposed upgrades. As part of their long-term improvement plan, Maine West High School hired Pepper Construction to renovate The Main West student union and dining area. To create a more open and inviting space, Pepper was tasked with removing the existing ceiling and floor to create a two-story atrium for the cafeteria. The layout of the school is an "X" formation, with the dining area and student



union in an “O” shape at the very center of the four diagonal corridors. With these upgrades, the two-story area would have large open ceilings with natural light and a comfortable flow from floor-to-floor. However, time was of the essence because this project began over the summer and needed to be completed before school reassembled in the fall.

For safety reasons, the floor of the commons was scanned using Ground Penetrating Radar (GPR) in advance to make sure there were no utilities. Hard Rock Concrete Cutters scanned 13,000’ of flooring using a GSSI SIR 4000 with a 1600 MHz antenna before deciding to proceed with the cutting. Concrete cutting was specified because breaking the floor





with something like jackhammers would have created an enormous amount of dust and debris. The falling pieces would have also created a safety hazard and would most likely have damaged the existing floor below, and vibration was a concern due to the suspended slab.

The demolition contractor onsite, Break Thru Demolition, hired CSDA member Hard Rock Concrete Cutters to cut and remove the existing 5" thick concrete floor and 18" thick concrete beams. The atrium is a 360° circle, so removing half of the floor required Hard Rock to cut a perfect half circle. This was going to be no small feat using a Core Cut CC3701 electric saw fitted with a 42" diamond blade with no overcuts. After the floor was scanned and the 180° semicircle was marked, operators then mapped out a 3' x 3' grid for extraction of the slabs.

Traditionally, Hard Rock would have had to drill 6" holes every 3' around the perimeter to relieve pressure from the blade. However, Hard Rock operator Eric Chorowicki was able to make a radius cut without this step. The floor was shored up tightly from below

with scaffolding and a catch deck, as well as with three steel I-Beams within the opening to support the second story while operators cut. Hard Rock cut the radius of the semicircle up to 18" through the concrete beams and joist. Straight line cuts and cuts through I-beams were left until the end of each section to keep the floor supported while working on the slab.

Hard Rock worked in three sections between the three I-beams; The opening was cut into 3' x 3' pieces working away from the radius cut so that the saw was always on stable flooring. As pieces were cut free, Break Thru removed pieces with the skid steer to avoid overloading shoring. Once a section was removed, Hard Rock cut the concrete encased I-beam into pieces to be removed by Break Thru. Lastly, they cut a straight line cut to finish the opening. Aside from the 180' perimeter cut; Hard Rock operators performed 4,580' of linear sawing and the entirety of the 13,000 square feet of floor removal.

Hard Rock had a few safety concerns at the start of the job. Cutting on a suspended slab risked damage to surrounding structures as well as the possibility of debris falling on operators, not to mention the possibility of utilities that cannot be cut inside the slab. The inevitable dust while breaking the floor into pieces to be removed also posed a concern. Hard Rock fixed each issue by following *The Hierarchy of Safety Controls* (Chart 1).



Chart 1

Hard Rock implemented *Elimination* of the hazard by shoring the suspended flooring. Similarly for dust, cutting the floor into 3' x 3' squares to be removed by a skid steer instead of breaking or crushing it eliminated unnecessary silica

dust in the air. The last major concern was the possibility of utilities running throughout the floor to be cut, which was solved by doing a preliminary scan of the floors. These techniques eliminated a lot of dust, noise and vibration safety hazards. By following the hierarchy of safety, Hard Rock was able to eliminate all specialized PPE but respirators.

The job began June 9, 2021, and was completed less than a month later on July 3, 2021, with plenty of time for additional renovations to be completed before students arrived for their first day of school in August. All contractors involved with the job were satisfied with the quality and length of the project. Roger Lisy, President of Break Thru Enterprises, Inc., said about this project, "It was a fine job by all, the school is absolutely blown away by the work!" Hard Rock Concrete Cutters say, "Building a 'Safety First' culture is the most important thing we do every day. Safety is First, Last and Always." CSDA members like Hard Rock demonstrate just how important it is to prioritize the safety of everyone involved on the jobsite, especially in high-risk and complex settings.

COMPANY PROFILE

With more than 35 years of experience, Hard Rock Concrete Cutters has steadily grown into one of the most trusted names in Midwest construction because they have the experience and systems in place to address complicated situations in real time. Hard Rock has 78 employees and a fleet of 39 trucks. Their Field Superintendents, Safety Directors and Project Managers, as well as highly trained field personnel, all work together with their logistics team to keep the job on track. Whether they're coring in tight spaces or salvaging historic architectural façades, they can be trusted to do the job exactly the way it is supposed to be done – safely, professionally, on time, and on budget. They have been a CSDA member since 1989.

RESOURCES

General Contractor

Pepper Construction, Break Thru Enterprises, Inc.

CSDA Contractor

Hard Rock Concrete Cutters

Contact for Story: Ted Stanaszek

Email: ted@hrcinc.com

Tel: 312-607-5853

Website: www.hardrockconcretecutters.com

Methods Used

Slab Sawing, GPR Scanning, Selective Demolition

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



How Fighting Inflammation Makes You Younger

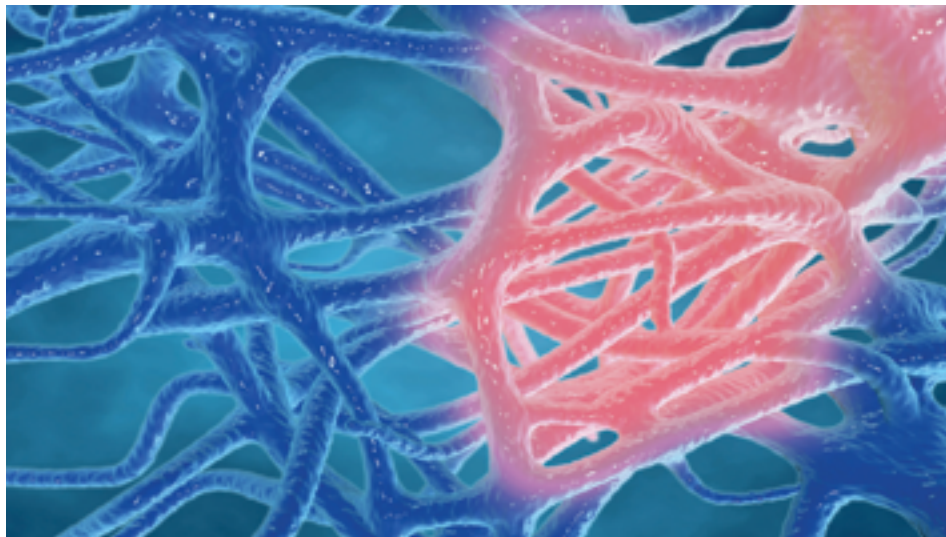
By: Erin O'Brien

Not getting enough sleep. Eating processed foods. Not exercising. Stress. All of these things can dramatically increase the amount of inflammation in your body – we're not just talking about a swollen knee here – this is systemic, chronic inflammation in every cell in your body. And it's aging you, fast.

Sometimes inflammation is good – it's a way for your body to trigger healing or protect an injured area. But chronic, localized inflammation is bad, and so is whole-body inflammation. Scientists are still learning about how inflammation can cause other health problems, but the connection is proven. Nine of the 10 diseases via the CDC's Leading Causes of Death data in the U.S. for 2022 are inflammation related. Scientists and doctors have long known that inflammation plays a role in heart disease and cancer growth, as well as contributing to more than half of all deaths worldwide – a number that has only increased since the pandemic. But now, research is strongly suggesting it also plays a role in mental health conditions like anxiety, depression and post-traumatic stress disorder. It also could be driving cognitive aging and neurodegenerative disorders like Alzheimer's (7th leading cause of death in the U.S.) and dementia.

Inflammation is so dangerous because often a person doesn't know how bad it is until it's too late. Heart disease, Type-2 diabetes or cancer don't always present early warnings. Adding to this problem is that as we age, our bodies are less able to fight inflammation. This is called "inflammaging," and it leads to the development of chronic diseases, difficulty fighting off pathogens and an exaggerated immune response to infection. For example, the cytokine storms some people have experienced as a result of COVID-19, which have led to widespread tissue damage, organ failure and sometimes, death.

In 1899, aspirin, the first anti-inflammatory drug, was introduced to the market. In the middle of the 20th century, corticosteroids – anti-inflammatory medicines that are similar to



the body's hormone cortisol – and nonsteroidal anti-inflammatory drugs like ibuprofen (also known collectively as NSAIDs) were added to the medical arsenal to fight inflammation. But recently, more light has been shed on the power of more simple treatments, like eating right, sleeping well, exercising and managing stress. The problem is that most of these treatments would require us to break some bad habits – and habits are hard to break.

So how do you know if you have systemic inflammation? You can ask your doctor for a c-reactive protein (CRP) blood test, which measures inflammation in the body. A CRP level above 3 means you're at risk and should start to make lifestyle changes.

If your doctor determines you have chronic inflammation – or you have heart disease, diabetes, cancer or just want to lead a healthier lifestyle and stay young longer – there are several things you can do. Your diet is the best place to start. A Mediterranean-style diet, which includes whole grains, healthy fats like olive oil, fish and plenty of fruits and

vegetables, is one of the best for managing inflammation. Fruits and vegetables have a lot of anti-inflammatory compounds, so they should be included in your diet always. Try cooking with herbs and spices, which add flavor and make healthy foods taste better, many of which also have anti-inflammatory compounds. Limit sugar, processed foods, saturated fats and red meat.

Move! Getting more exercise will also bring down your inflammation levels, and as a bonus, bolsters your immune system. The fat tissue in your stomach area is a huge storehouse for immune cells, so belly fat is pro-inflammatory. Working out leads to weight loss, so losing belly fat will reduce your inflammation and make your body less predisposed to it. Any type of exercise is better than none, but try mixing it up with some low-intensity yoga or walking, high-intensity interval training (HIIT), endurance activities like running or cycling and strength training. Follow the recommended guidelines for 150 to 300 minutes of moderate-intensity exercise, or 75 to 150 minutes of vigorous-intensity exercise each week—but don't over-train, or it can have the opposite effect.

Managing stress is another method for reducing systemic inflammation. Many of us live in a culture that demands full-time attention to our jobs, families and many other responsibilities. But it is important to remember that self-care should not, and cannot, be overlooked. Something as simple as

How to Fight Inflammation:

1. Eat Healthy
2. Exercise
3. Manage Stress
4. Sleep 7-9 Hours
5. Hit the Sauna

a breathing exercise, meditation, a nap or even relaxing to read a good book will help reduce stress and inflammation. Be sure to schedule time for yourself each day, even if it's only 15 minutes.

Tying into stress management, getting enough sleep not only helps with stress management, but reduces inflammation. Our bodies repair themselves while we're sleeping, so getting at least seven hours a night will promote healing and repair. When we don't get enough sleep, the genes associated with chronic inflammation are upregulated, or increased. If you want to reduce inflammation and risk for disease, it's vital that you get at least seven hours of sleep per night regularly.

New research is pointing to the benefits of regular visits to a sauna to prevent both acute and chronic disease through a variety of biological mechanisms, one of which is reducing inflammation. Regular sweat sessions have been associated with a reduction in circulating levels of inflammatory markers, including fibrinogen and leukocytes (white blood cells). Many gym facilities offer access to a dry sauna, making it a convenient way to squeeze in a session post-workout (you can even use your time inside to stretch sore muscles or meditate).

If you are a regular reader of Concrete Openings and Core Health, you have probably noticed a theme running through many of my articles – eat right, exercise, get enough sleep and manage your stress. I cannot stress enough how important these factors are in staying healthy. As we all age, we have to work harder to keep our bodies in good working order to prevent disease, maintain a healthy weight and feel our best. Inflammation is a common side effect of a chaotic, unhealthy lifestyle, but with proper health choices, we can continue to feel our best and live long, healthy and productive lives.

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.

SAWING CONCRETE DOESN'T HAVE TO BREAK YOUR BACK.

STAND UP

KL-14 (6.5HP) 14" Concrete & Asphalt Saw
COMPACT, LIGHT WEIGHT, EASY STORAGE
Optional Water Tank Available



THE **EDCO**
 COMPANY STORE

edcoinc.com • 800-638-3326 • sales@edcoinc.com • edcoed.com



LISSMAC

CONSTRUCTION TECHNOLOGY



LISSMAC Corporation
 17 Route 146, Mechanicville, NY
 Phone +1 518 326 9094
 sales@lissmac-corporation.com
www.lissmac-usa.com



Historic Smokestack Removed with Expert Precision

For nearly 70 years, the Burnham & Morrill Baked Beans factory brick smokestack was a staple of the Casco Bay skyline in Portland, Maine. Built in 1956 and visible from the Casco Bay Bridge, the smokestack that released sweet, molasses-scented steam for decades had seriously deteriorated after years of exposure to the salty sea air and nearly 20 years of non-use. With the brick structure becoming a potential hazard to the employees of the still-active factory, as well as the community, B&M decided to remove the iconic, yet deteriorated, structure.

The B&M factory and smokestack is surrounded by the ocean on three sides, complicating this procedure. Traditional demolition that would involve tipping the smokestack over was not an option because of the risk of bricks falling into the water or crashing through windows of the active factory. CSDA contractor Interstate Sawing and Demolition was contracted by General Contractor Industrial Access, to help solve this issue. Interstate, no stranger to robotic demolition, knew that the use of robots to take down the structure carefully and precisely was the best and safest way to complete the project. So, with the help of their Brokk 200 and 170 robots and a crane, Interstate crews began the grueling process of taking the smokestack down – brick by brick.



Interstate operators quickly realized that the brick was rotted out, making the smokestack extremely unstable. To support the demolition process, a temporary steel structure was installed to avoid unwanted tipping or crumbling. The reinforcement frame was installed to prevent premature failure of the structure as the bricks fell to the bottom of the opening of the smokestack during demolition. Interstate's crew used a Hilti DSW 3018-E wire saw to saw the openings required to install the steel reinforcement frame. This partial steel reinforcement frame had an inner opening of approximately 8' x 4' and was installed around the existing smaller opening to the smokestack. Industrial Access operators completed the installation of the frame by welding 1/4" steel at the top of intel and along the vertical columns.

Once the support frame was installed, Interstate crews used a Brokk 200 and 170 with crusher and breaker attachments to begin the demolition. With two enormous cranes, one supporting the robot and the other supporting

the operators, Interstate crews were flown up 150' into the air two at a time to begin the enormous undertaking. At the peak of the smokestack, one operator ran the robot, while the other operator in the lift was communicating with the crane operator from a two-person crane basket, until they had demolished enough of the smokestack to safely work from the boom lift. The 150' smokestack was dismantled from top to bottom, scraping the cut and broken brick into the smokestack opening, and at points where the structure was very weak, only one brick could be removed at a time. Each night following the demolition, the debris was cleaned out using a backhoe through the 8' x 4' opening at bottom of smokestack. The Interstate crews moved at an impressive pace, removing an average of 25' of the smokestack per day, completing the job without incident in just 6 days.

The B&M factory remained and still remains an active building, with people working inside near the smokestack during the entire removal process. Interstate crews had





to be sure that no bricks or debris landed on the roof or broke any windows. They were happy to say that absolutely no damage was done to the building during the demolition, and the job was completed on time. Interstate, Industrial Access and the B&M factory owners were all very satisfied with how this job was completed. Sam Long, an Interstate operator onsite, said about this job, “This smokestack removal was both thrilling and nerve-racking. Each movement of the robot, crane and man basket had to be made strategically. We came in with a plan and safely removed the structure in less than a week without any interruptions!”

Interested readers can visit interstatesawing.com or youtube.com/interstatesawing to see a fascinating video detailing the process from the beginning to end, helping to understand just how perilous a job this could have been without an experienced and professional crew. CSDA members like Interstate demonstrate an unprecedented commitment to technology and efficiency, and their expert crews always bring us incredible stories to read and watch.

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

COMPANY PROFILE

Interstate Sawing & Demolition has been a leader in concrete cutting, confined space 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 their customers save time and money on their projects. Owner Duke Long is a working owner who has over 37+ years of on-the-job experience. Interstate Sawing & Demolition has 42 employees and a fully enclosed fleet of 25 service trucks, all of which are self-contained and mobile-ready. Interstate Sawing & Demolition specializes in robotic demolition, electric interior excavation, curb cutting, wire sawing, concrete grinding, hydraulic splitting, concrete removal, confined space lifting and GPR scanning. They have been a CSDA member since 1999.

RESOURCES

General Contractor

Industrial Access

CSDA Contractor

Interstate Sawing & Demolition

Contact for Story: Haley Long

Email: Haley@InterstateSawing.com

Tel: 262-334-7522

Website: Interstatesawing.com

Methods Used

Selective Demolition, Wire Sawing



A “Different” Way to Lead Safety

By: Pam Walaski, CSP



Professional occupations continually focus on improving and evolving what they do. Consider the recent advances made by transplant surgeons who are now able to utilize lab grown cells to clone new organs rather than relying on human organ donations, which never meet the demand. Those of us who practice occupational safety and health (OSH) are no different, often modifying methods and approaches in order to stay abreast of new developments or best practices that come about through the publication of research results or successful case studies, along with organizations that promote the advancement of the profession. A good example of an OSH technological advance is personal protective equipment that now features built in sensors that can warn

a worker who might be getting too close to a hazard. In recent years a number of approaches to developing and implementing OSH programs shift the view of worker behavior as simply a matter of complying with policies and procedures (or not complying), to how it may reflect a system that creates a number of impediments including production pressure, and conflicting goals. These approaches also support improving worker engagement to help develop solutions to OSH hazards and stress the importance of creating a work environment that respects the value of workers and their participation. Many organizations learned an important lesson about providing environments that support safe and healthy workers during the current pandemic.

These emerging approaches go by various names, often coined by the person(s)

first associated with promoting them and include Human and Organizational Performance (HOP) whose fiercest advocate is Todd Conklin; Safety Differently, a term coined by Sidney Dekker; and Psychological Safety, advanced by Amy Edmondson. While they go by different names, they have in common the concept that organizations need to change their view of workers as deliberately non-compliant or careless and that OSH professionals need to stop playing “safety cop,” walking around the production floor looking to catch violations. The flip side that these approaches advocate empower and engage workers by seeing them as solutions to be harnessed rather than problems to be solved. It also involves creating a psychologically safe workplace

where workers feel they are able to speak up about mistakes or voice suggestions and ideas without the risk of being humiliated or punished.

In my view, organizations need to evolve by embracing these changes in order to create working environments that respect the dignity of workers and celebrate their contributions. But more importantly, OSH professionals need to educate themselves on the key concepts behind these emerging methods and be willing to consider whether their beliefs and attitudes about workers may be creating environments that are counter to them. In the past 5 years, I've immersed myself in reading and understanding how to practice "safety differently" and it has led me on a transformative journey that has improved my OSH practice.

For 25 years, Todd Conklin, was a Senior Advisor at the Los Alamos National Laboratory and is now a consultant, author and host of the popular podcast Pre-Accident Investigations. His books on HOP and its application include *Do Safety Differently* (written jointly with Sidney Dekker, 2022); *The 5 Principles of Human Performance: A Contemporary Update of the Building Blocks of Human Performance for the New View of Safety and Workplace Fatalities – Failure to Predict*. Conklin and others describe the five key principles of HOP as:

- **Error is normal.** In other words, people make mistakes and mistakes do not equal violations.
- **Blame fixes nothing.** An organization can blame and punish, or it can learn and improve.
- **Systems and content drive worker behavior, not the other way around.** Viewing worker behavior outside of the system is not relevant to understanding it and perpetuates the view that the worker, not the system, is the problem.
- **Learning is vital to organizations who want to improve.** Focusing on learning (rather than blaming and punishing as noted above) creates resiliency and sets the organization up for future successes.
- **How an organization reacts matters.** Organizations with a learning mindset understand that their reaction to events and incidents needs to be proactive and nonantagonistic rather than adversarial and suspicious.

Sidney Dekker, a professor at Griffith University in Australia first coined the term Safety Differently. In addition to his

HYCON Hydraulic Hand-held Core Drills

Power Beyond Compare





The C-52 is DITEQ's Proven Go To Work Horse Core Bit

Pair Hycon's core drills with DITEQ's C-52 wet core bit for powerful results. For drilling various ranges of material; from heavily reinforced concrete to asphalt, C-52 wet core bits will ensure maximum performance and satisfaction for each and every customer



HYCON Hydraulic Hand-Held Core Drills

HYCON hand-held core drills offer **TOP SAFETY** with the built-in ASCO System (Automatic Safety Cut-off). The hydraulic ASCO System maintains constant torque when core bit jams. NO clutch windup. NO clutch slip. NO wrist snap!

- Small and compact/low weight – weighs only 17 lbs!
- Outperforms most electric hand drills more than 2 to 1
- Ergonomic design for operator comfort
- Swiveling front handle for right or left-handed use
- Variable rotary speed in lever – slow and easy drill start
- Drill safely up to 14" in diameter
- Use in wet locations and underwater. NO shock hazard.

 @diteqcorporation
 DITEQ Channel
www.DITEQ.com

9876 Pflumm Rd ▪ Lenexa, KS 66215 ▪ Toll Free Tel: 866-688-1032 ▪ Tel: 816-246-5515

work in education, his books and articles that focus on its concepts include *Just Culture; Restoring Trust and Accountability in Your Organization; The Field Guide to Understanding 'Human Error';* and *Drift into Failure*. Much like HOP, promoters of Safety Differently challenge organizations who view workers as problems to think of them "differently". The fundamental premise is that workers bring unique and often untapped

expertise and insights to their organizations and that the basic dignity of work needs to be respected. (As noted above, the pandemic has taught us to respect our workers for showing up every day despite many obstacles and concerns for their personal safety.) Safety Differently also focuses on the presence of positives in an organization. In practice, this means that incident investigations don't look for who to blame but consider how often

work is done safely and without any incidents versus the few times when an incident occurs. By reframing to focus on the successes of day to day work, an organization can use that knowledge to build capacity, further decreasing the chance that more incidents will occur.

As noted above, both of these approaches look at organizations from the systems lens. A slightly different twist to HOP and Safety Differently is seen in Edmondson's concepts of Psychological Safety. A Professor of Leadership and Management at the Harvard Business School, the publication of *The Fearless Organization*, was considered by many to be a game changer for organizations looking to optimize performance and create effective work teams. Psychological Safety is defined as an organizational climate where people are comfortable expressing and being their authentic selves and are willing to share concerns and mistakes without fear of being embarrassed, disciplined or other reprisals. This book and other writings by Edmondson are based upon many years of research into organizational performance and they easily apply to OSH professionals trying to create an environment where ideas are encouraged and where acknowledging mistakes is seen as a positive. In workplaces where Psychological Safety is not present, hazards often go unreported, thus limiting the ability to use them for learning and improving. Workers are not willing to be engaged because of historical patterns of punishment or failure to appreciate ideas and contributions. Edmondson suggests that when the focus is on the successful work of the team, not self-protection, organizations can thrive, but when the focus is on finding fault and suppressing innovation, they do not.

As I became more educated on these emerging approaches, I also become more aware of how my behaviors and attitudes, particularly about workers and my role in leading the OSH program in an organization, might be hindering my success, and then to appreciate that I needed to change and modify in order to help lead systemic change. While still a work in progress, here's what I am doing "differently":

Teddy Roosevelt is quoted as saying "People don't care how much you know until they know how much you care." For me, it means being willing to see workers as products of the system in which they work, rather than people who deliberately violate procedures and deserve punishment along with conveying an appreciation for them in



my behavior and words. As I considered the way in which I interacted with workers, I found places where I could change what I said and how I said it in addition to modifying my non-verbal behaviors that conveyed the opposite of what I thought I was communicating. I learned to ask questions that demonstrated my willingness to listen, not to blame and to give workers the simple benefit of the doubt when I observed things I didn't understand.

Along the same lines, I have developed a deeper understanding for how worker behavior is an adaptation to the system under which they operate, leading me to look at systemic problems and solutions first, rather than trying to "change" the worker and expect 100% compliance, 100% of the time. Rather than assuming the worst about workers when procedures are not followed, I have seen how systemic problems such as a failure to seek worker input, lack of understanding and poorly written or outdated documents that don't reflect actual conditions under which the task is performed are most often the culprit.

Edmondson places the responsibility to create an environment where workers are willing to speak up on leaders and, by default, I believe that means OSH professionals, therefore; I view it as my responsibility to ensure workers feel psychologically safe to speak. If that's not happening, rather than first looking at workers as the source of the problem, I look to identify problems in the environment and take the lead in repairing them so that the environment becomes one

where worker contributions are sought after and valued, worker ideas are recognized without judgement or "losing face," and credit for them is not withheld.

In the past few years, I am happy to the beginnings of see a fundamental shift in how organizations view OSH programs as these emerging approaches become more mainstream. I have also come to believe that part of this transformation requires that individual professionals also challenge their views about how to "get workers to behave safely" and understand how they may be inadvertently hindering the success of the OSH programs for the organizations they lead. For me, this introspection has led to changes that not only have improved the way I do "safety differently" but also renewed my passion for the work that I do.

Pam Walaski, CSP is Senior Program Director for Specialty Technical Consultants, Inc. a specialized management consulting firm that focuses on management systems development and risk management. She also serves as an adjunct faculty member at the Indiana University of Pennsylvania Safety Sciences Program. Pam is a Professional Member of the American Society of Safety Professionals (ASSP) and recently completed a 3-year term as a Director At Large. She has a national reputation as a seminar leader, and conference/webinar presenter covering multiple occupational safety and health topics including risk management, occupational safety and health management systems, serious injury prevention. You can reach her at pwalaski@stcenv.com or by going to STC's website www.specialtytechnicalconsultants.com

2022 Convention & Tech Fair Wrap-Up CSDA Reunites in Arizona



After three long years of postponing most in-person industry events, CSDA members and friends met in Scottsdale, Arizona, for the association's much anticipated Convention & Tech Fair, March 30 – April 1, 2022. Over 150 contractors, manufacturers and affiliates from the concrete renovation industry convened at The Scott Resort in Scottsdale for three days of education, networking and reconnection.

Preceding the Convention agenda were two days of Board and committee meetings, where Board and committee members met to continue various association projects and develop member resources, including the 2022 Training schedule, Safety Video updates, revisions and creation of new Standards, Specifications and Best Practices, member benefit programs and multiple marketing initiatives.

The Convention program kicked off on March 30 with an energetic Keynote presentation by NASCAR champion driver and Forbes 30 Under 30 honoree Julia Landauer. Ms. Landauer shared her story of finding success as a NASCAR driver, participating as a contestant on the TV show *Survivor*, graduating from Stanford University and how these

experiences have shaped her outlook on teamwork, cooperation and communication. Other presentations included legal considerations in construction, an update on the state of the supply chain and how concrete cutting contractors and manufacturers can take advantage of a materials recycling program, how to add GPR imaging services to your concrete cutting company, digital and social media marketing strategies, business and financial succession planning and an update from OSHA on current health and safety initiatives.

Regardless of the reason for attendance, all attendees were thrilled to be meeting in person again. David Perkins, Director of Trade Marketing for Heavy Diamond, Hilti North America said, "It was fantastic to finally come together again in person as an association. The location and event were great and the Keynote Speaker, Julia Landauer, was phenomenal. High praise to the association for putting this new location together in such a short amount of time. The high turnout of members showed a lot of support to keep moving the association forward. Great event!"

2022 Convention & Tech Fair Wrap-Up continued

The popular Tech Fair returned to the program, where concrete cutting, demolition and GPR imaging contractors met one-on-one with manufacturer members who showcased their new products and technologies. With many contractors not attending World of Concrete for the past few years, this was a fantastic opportunity to see many new products and equipment in person.

While many attendees are long-time CSDA members, there were also several new members in attendance. Josh Sherman, Project Manager for Mavo Concrete Sawing Services stated, “As a contractor attendee taking part in my first CSDA Convention, I was extremely impressed with how smooth everything ran and was put together. The guest speakers, vendors and all other CSDA members were all a wealth of knowledge (almost too much to take in at just one event!). I am looking forward to becoming more involved with the committees, Board and CSDA as a whole, going forward.”

In addition to the presentations, roundtables and Tech Fair, there were also plenty of opportunities for networking and a chance to catch up with friends, old and new. The CSDA President’s Reception began the festivities with cocktails and hors d’oeuvres on opening night. Hosted by the CSDA President, Mike Orzechowski, with the support of contractor

and manufacturer members, this event presented the perfect opportunity to reconnect and reenergize. The next evening, the Manufacturers’ Night dinner was held offsite at a beautiful location with a perfect view of the desert sunset. Attendees also had the opportunity to enjoy a round of golf, an e-bike tour of Scottsdale and a guided desert hike. Finally, the Convention closed with the Gala Reception and Awards Dinner, where multiple members were honored. The association was finally able to honor its outgoing Officers and Board of Directors from the past several years. Past President Matthew Finnigan presented the awards to the outgoing Officers whose terms ended in 2021: President Matthew Finnigan (whose award was presented by current President Mike Orzechowski), Vice President Mike Orzechowski, Secretary/Treasurer Kellie Kimball and Past President Jack Sondergard. Also during the Gala Dinner, Past President Kevin Baron of Western Saw was awarded the prestigious Lifetime Achievement award, honoring outstanding service to both the association and the industry.

CSDA also held its first in-person Annual Meeting since 2019 to conduct association business and elect a new slate of Board of Directors. The six new elected Board members, whose terms will expire in 2024, are: Bob Crowther, Husqvarna Construction Products; Donna Harris, Concrete





Renovation; Jeff Keeling, Brokk, Inc.; Duke Long, Interstate Sawing & Demolition; David Perkins, Hilti, Inc.; and Kevin Warnecke, ICS. They join returning Officers: President Mike Orzechowski, Diteq Corp.; Vice President Kellie Kimball, Holes Incorporated; Secretary/Treasurer Mark DeSchepper, Echo GPR Services; Past President Matthew Finnigan, National Concrete Cutting, Inc.; Executive Director Erin O'Brien, and Board members: Brandon Bailey, A-Core; Ty Conner, Austin Enterprise; Greg Lipscomb, Diamond Products; Bruno Silla, GSSI; Kristin Waters, Greene Concrete Cutting; and Ronnie Wilhite, Texas Cutting & Coring.

CSDA Executive Director Erin O'Brien felt a renewed energy at this event. "It was wonderful to see everyone's faces in person again, rather than on a screen. You could feel an undercurrent of anticipation and excitement from the attendees, and what a relief it was to be able to meet live and move forward with the many new ideas and projects our members have created over the past couple of years. I'm looking forward to what the rest of 2022 and beyond brings for our association and our industry."

Board member and GPR Imaging Committee Chair Bruno Silla had this to say about the event: "The CSDA Annual Convention and Tech Fair in Scottsdale, AZ was an amazing time and a welcome return the

important business of in-person meetings and discussions. It was also so much fun! The camaraderie of the association and the business relationships that are cultivated are why people keep signing up and stay on so long. From the roundtable discussions with business experts to the insightful keynote speakers, this organization knows how to bring the industry together. For over 50 years, CSDA has been the benchmark organization where contractors and manufacturers come together to create and discuss the specifications, training and best practices the industry depends on to do its work safely and efficiently. It's always productive and such a pleasure to get together with these members that I look forward to each and every single meeting. Thanks, CSDA!"

The association is already preparing for its next Convention, which will be held March 29 – 31, 2023 at the Hamilton Princess Hotel in Bermuda, where the 50th Anniversary will be officially celebrated. CSDA is encouraging retired and former members to attend, as well as other industry professionals and members of the press. For more information on the 2022 Convention in Scottsdale or the 2023 Convention in Bermuda, please contact CSDA at 727-577-5004 or info@csda.org.



Tech Talk is a regular feature of *Concrete Openings* magazine, focusing on equipment, maintenance and technical issues of interest to concrete cutting, polishing and imaging contractors. Readers wishing to have a particular subject addressed can call or email CSDA with their suggestions at 727-577-5004 or editor@concreteopenings.com.

Slurry Management

By: Mark Critchfield

Slurry Management has become a hot topic over the last few years. Although the problem has been with us since the beginning, recently equipment and technology are starting to catch up and offer professional cutters cost and labor-saving solutions.

Some will say, "It's the GC's responsibility." Others will say, "The sawing company creating the waste is responsible." And some will just walk away and ignore the situation. As sawing and drilling professionals, this can be easily resolved by addressing it at the time of bidding or pre-construction meeting. In the discussions, the GC and Owner must know it's a necessary cost of doing business. Slurry Management is a risk avoidance investment. Slip and fall and personal injury lawsuits and illicit wastewater discharge fines are just some of the reasons to address the issue prior to construction.

Slurry processing is becoming a quick and economical process in the sawing and drilling industry. It provides a safe, clean and professional work site for the owner and the other subs onsite. It is always advisable to process and leave the waste in a jobsite dumpster instead of hauling the liquids back to the yard or dumpsite. This eliminates spill risks and operator loading injuries.

Slurry solidification is the quick and easy solution for disposal. Pump the slurry into a lined trash bin, add a drying agent and mix and seal bag for landfill compliant disposal. If there is a large volume of wastewater produced, it is more cost effective to use a slurry floc separator to first draw the clear water off the thickened sludge. This makes solidification much more economical. Mix the flocculant in the wet vac drum, allow it to settle, then pump into the lined trash cans. Let stand for a few more minutes to allow it to settle again, then pump clear water off the top into tank for water reuse or proper disposal. Add the drying agent and seal the bag. Tip the trash bin over on its side to break the bag seal and slide out for disposal.



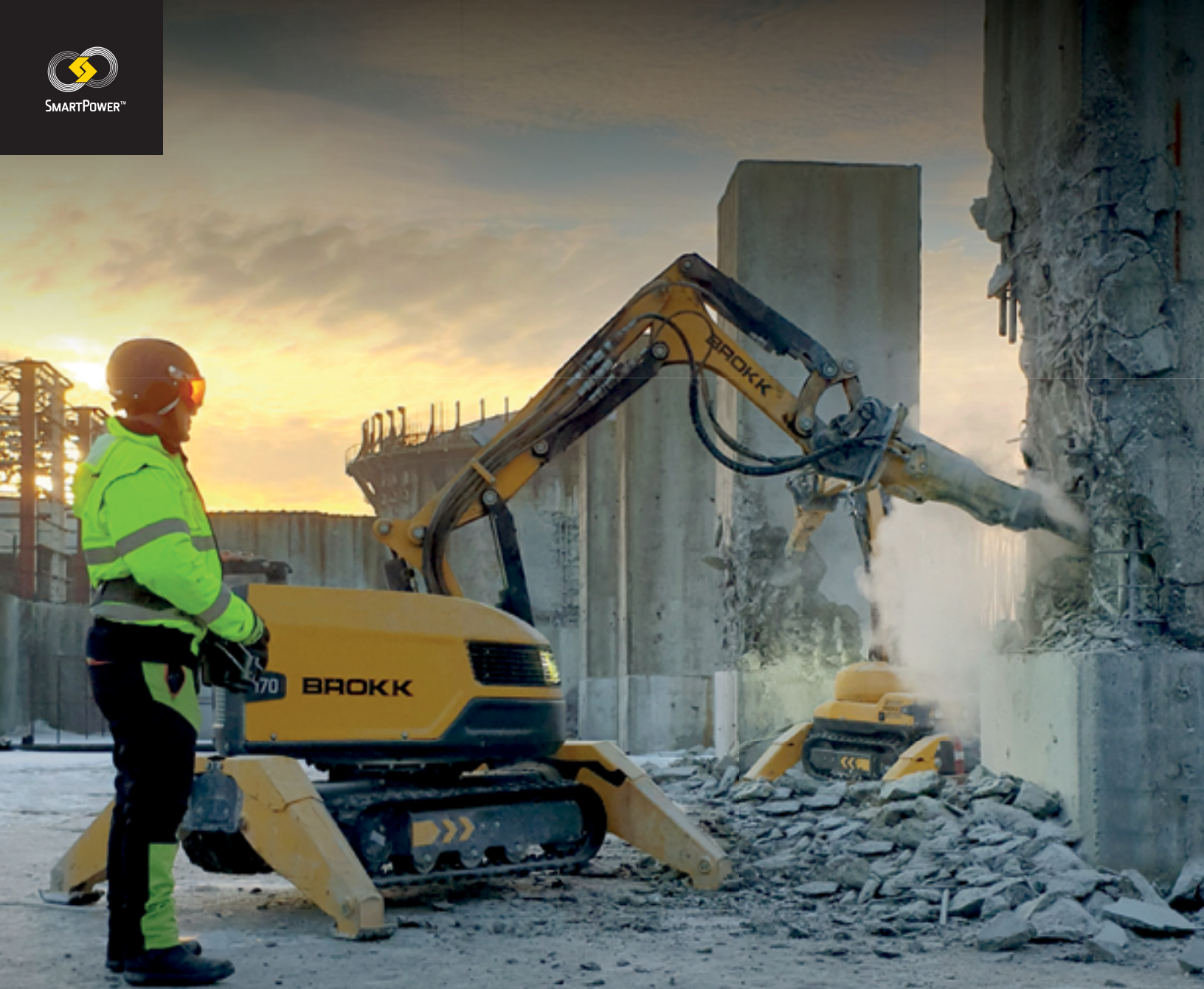
As described, this can be quickly processed at the jobsite and billed to the project as slurry management disposal fees. We pay these disposal fees for tire and battery replacement without even a thought. This can be a secondary income stream with very little added labor. Leaving a mess for your GC should not be an option.



When disposing slurry, know the local landfills will not accept wet sludge, so the slurry must be converted into a non-flowing solid that resists leaching. The landfill rules are requiring waste to pass the paint filter test prior to acceptance. Dumping wet slurry into dumpsters can also cause pickup refusal by the hauling companies and may require manual clean out. Also, leaking slurry out of the back of the dumpster or saw truck leads authorities right to your jobsite.

To review, we as professional contractors should represent our trade as environmental and safety minded companies. Clean equipment and work area gives your company positive image and respect. Extra income can be generated during the time spent at the jobsite. Also, the owners and GC's will want to work with your company in the future and will be happy to pay for this slurry management service.

Mark Critchfield is Owner of CSDA member Slurry Solutions, a Master Distributor for Cetco Energy Services supplying solutions to EPA compliant disposal and recycling of concrete slurry wastewater produced during grinding, polishing, cutting and core drilling.



OUR KIND OF PLAYGROUND

This is the natural habitat for Brokk's compact giants. With the perfect combination of power, operability and accessibility our demolition robots provide efficient solutions to increase profits.



THE PROFESSIONAL'S CHOICE

FOR CONCRETE SCANNING



WORLD-CLASS TRAINING | 2-YEAR WARRANTY | UNMATCHED TECHNICAL SUPPORT

GSSI's industry-leading concrete inspection tools have been field-proven for more than three decades. The StructureScan™ Mini XT is the system designed for today's concrete scanning professional.

Reduce safety risks, financial exposure, and costly delays and provide the full-range of services to your customers by adding this robust concrete scanner to your toolbox.



www.geophysical.com • sales@geophysical.com

MICHAEL FINDEIS
IACDS President



When the editors of Concrete Openings told me the topic of this issue, I knew exactly what I wanted to write about.

At the beginning of the year, we had a serious accident on a construction site. The employees had opened the scaffolding just enough to set up the supports that secured the ceiling parts to be cut. On the last piece, the chunk that was hanging on the crane and was briefly worked on by the employee came loose. It only gave the employee a short impulse. This was enough to throw him off balance and take a step to the side... into space. He fell 12 feet and severely injured his knee. The employee has been ill for months since, cannot work and is in great pain.

One thing is clear- the most valuable thing next to our beloved families are the lives and health of our employees. They are the ones who achieve incredible things every day with their expertise, their strength and their physical commitment. The work that is required of them is exhausting and strenuous.

It's clear that the health and performance of our employees is our greatest asset. They must be protected and preserved, and every investment in their education and their health is a good investment in our future.

We have done a lot in recent years to make this dangerous work safer. Much has been achieved and much still lies ahead of us, but together we can do it.



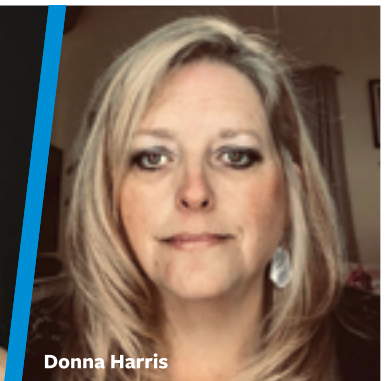
Kristin Waters



Erin O'Brien



Kellie Kimball



Donna Harris

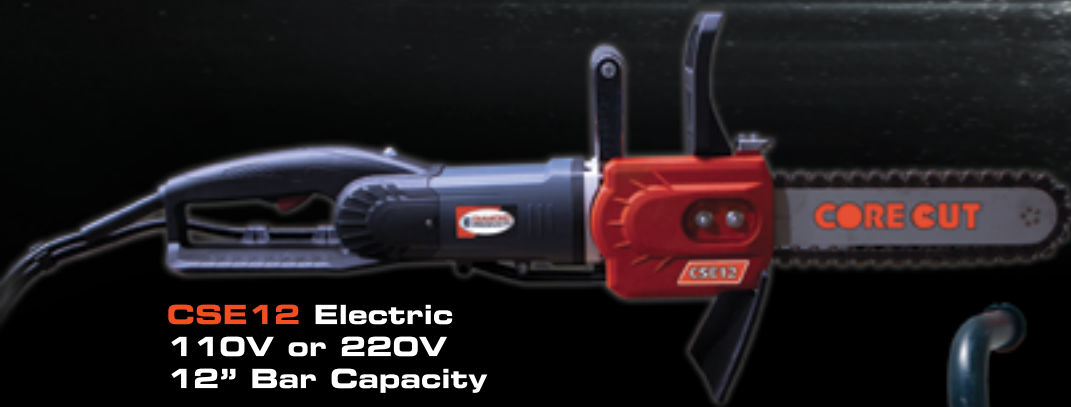
Women In Concrete

In September 2022, *Concrete Openings* will be running a special issue dedicated to Women in Concrete! Spotlight the women in your company or submit your company's job story today at concreteopenings.com or email editor@concreteopenings.com.

PROFESSIONAL



CSH24 Hydraulic
10 to 12 GPM
24" Bar Capacity



CSE12 Electric
110V or 220V
12" Bar Capacity



CSE16HF
High Cycle Electric
230V or 460V
16" Bar Capacity



THE CHOICE

PERFORMANCE

LARGE SELECTION OF
QUALITY DIAMOND
CHAIN SAWS PRODUCT

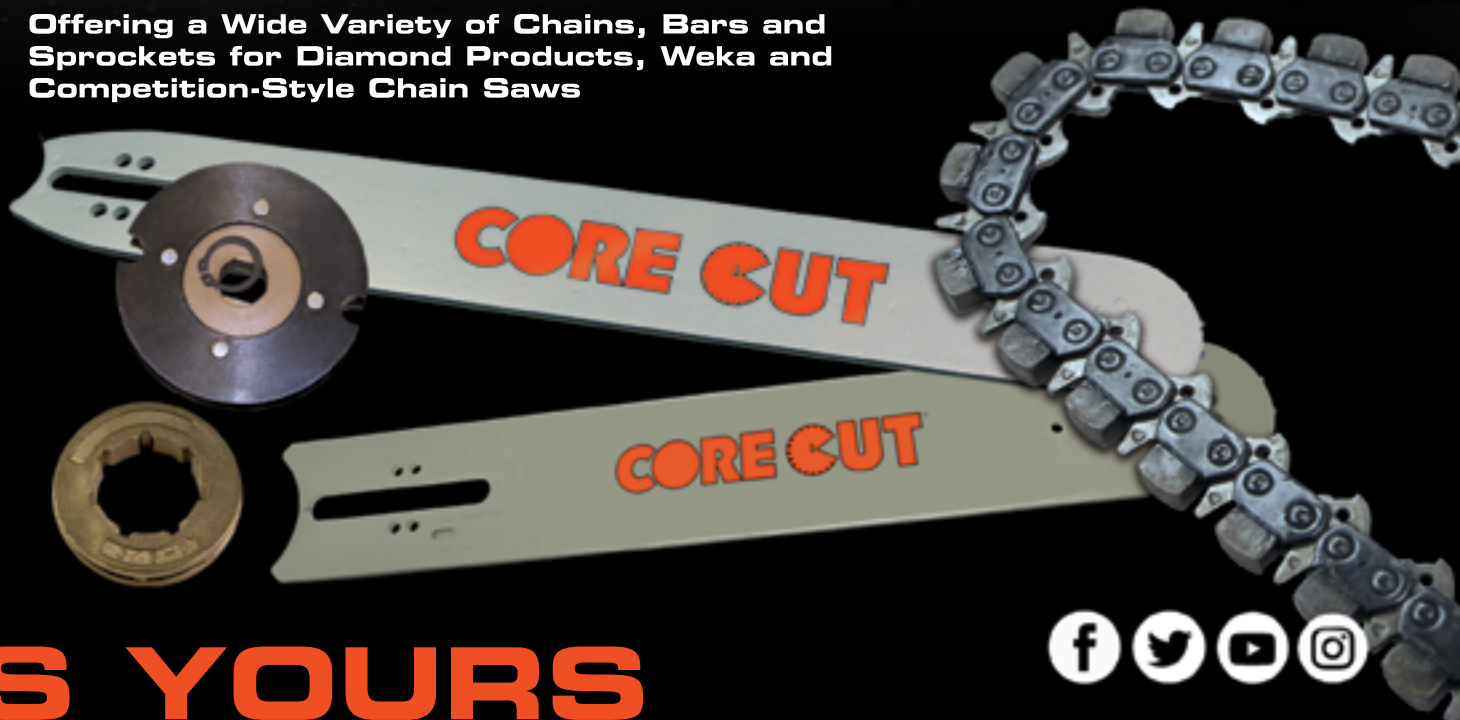


CORE CUT

Introducing the New **Heavy-Duty Direct Fit Chain**



Offering a Wide Variety of Chains, Bars and
Sprockets for Diamond Products, Weka and
Competition-Style Chain Saws



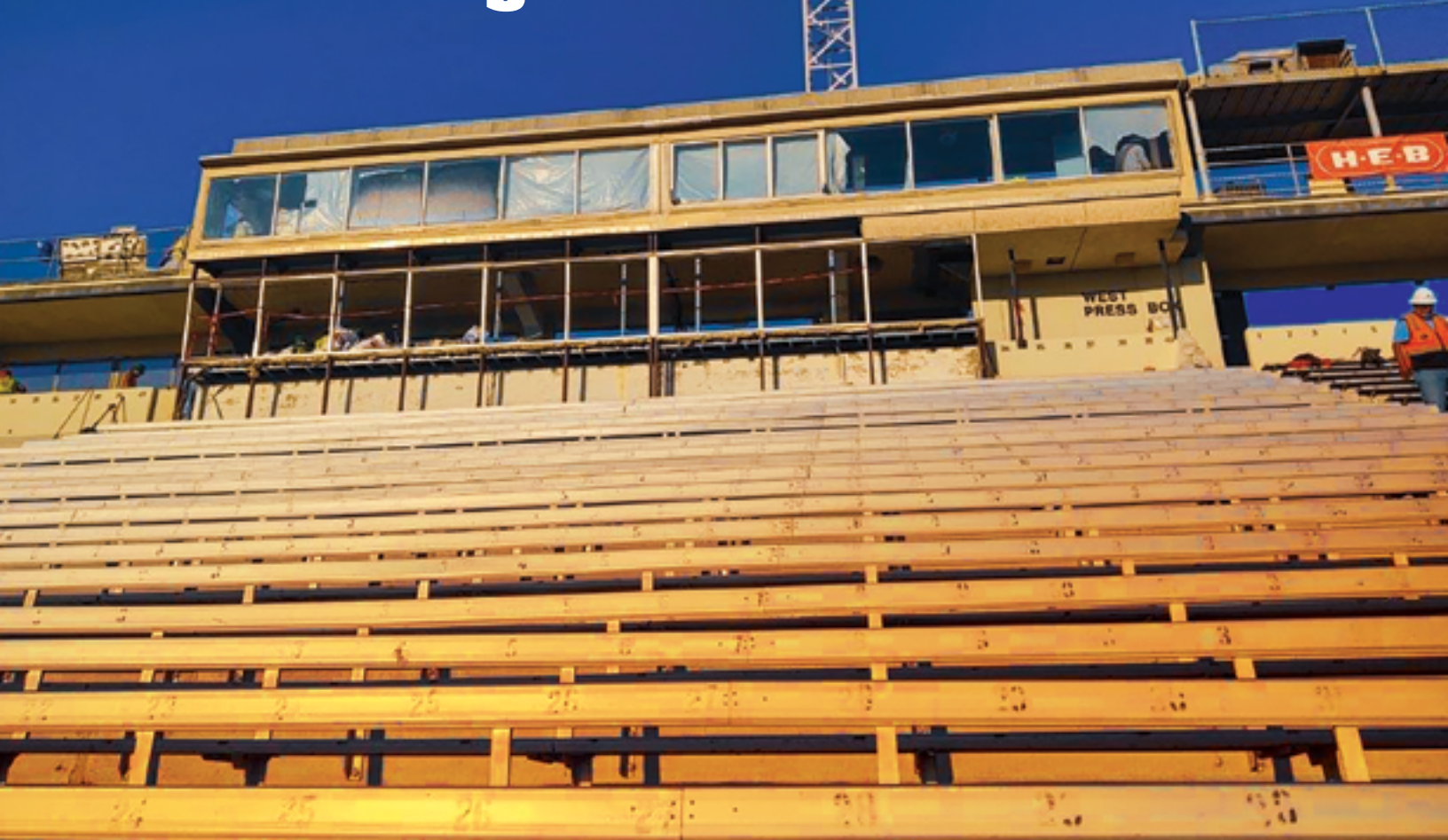
IS YOURS



Diamond Products Limited
333 Prospect St., Elyria, OH 44035
800-321-5336 - diamondproducts.com



Friday Night Lights: Renovating a Texas High School Stadium



Friday night football games are a part of American high school culture, and especially notable in Southern states like Texas, where high school football could be seen as a type of religion. There's a communal sense of pride when your school beats the rival team, and it can boost student morale and get friends and families together for a fun night. These high school football games, played in stadiums like Buccaneer Stadium in Corpus Christi, Texas, have the potential to draw enormous crowds on Friday nights. Buccaneer Stadium has notably drawn crowds up to 23,000 in attendance since its development in 1939. That being said, the stadium was antiquated, and as well-loved as this stadium was as it stood, it was time to prepare it for some major upgrades.

CSDA contractor Holes South Texas, LLC was contracted by Camacho Demolition to work on the Weaver & Jacobs Constructors, Inc.'s Buccaneers Stadium Press Box project. The original 81-year-old press box needed to be demolished to make way for a new two-story press box that will feature amenities such as two large VIP rooms, updated technology and an elevator for accessibility. At the top of the stadium on the visitors' side, Holes was tasked with the removal of the complete press box, including 100' of the covered seating area and 80' of knee wall.

The Holes team began each day with a morning safety meeting. The meeting included a daily job scope discussion to figure out which pieces needed to be cut first, what size pieces could be lifted by the crane and how much of the job could be pre-cut if the weather became an issue. Spring in Corpus Christi can bring unpredictable weather,

and this spring was no exception, with storms and wind gusts in excess of 25-30mph. These winds would certainly complicate and delay the crane work. Operators began the project by rigging their equipment to the crane with taglines to stabilize the attached equipment and flying the equipment to the press box, approximately 60' off the ground. Once established and the necessary cuts and core holes were measured and laid out, operators began the project by core drilling 8" rigging holes with Cardi 6 speed core drills.

Two Husqvarna wire saws were set up on the top of the stadium to begin cutting the covered seating area. The wire

saws were utilized to cut the roof into four 20' sections. As the sections were cut, the operators reconfigured the wire saws to cut the 32" beams that connected the canopy roof to the stadium itself. The wire saws were installed horizontally to ensure that once removed, the beams would be cut flush with the bottom deck to allow Weaver and Jacobs to tie back into the stadium. Next, the wire saws were again reconfigured to remove each section of the back wall of the press box. Five 18' cuts were made to remove the back wall of the stadium.

Pieces were lifted off by the crane operated by Camacho Demolition. In order to successfully remove the pieces, a lift plan was created for each section of the stadium. The



lift plan consisted of calculating the weight of each lift, identifying how each piece would be rigged onto the crane and supported during the removal and clearing the area to ensure no one nor any equipment was within the lift area. Complicating the removal was a light tower obstruction at the back of the stadium. Weaver & Jacobs had stated that the light tower would remain in place and could not be damaged, hit or bumped. Therefore, carefully rigging the pieces to mitigate swing during removal was complex and required special attention.

The plan started with how to position the crane to lift an L-shaped beam that was located underneath the stadium lights right next to the lattice mast tower. Once positioned in place and the concrete cut, Holes operators used chain falls, chokers, shackles and steel wedges to walk the piece out so it could be lifted evenly and wouldn't swing and damage the tower. Each piece was strapped and supported to promote balance and mitigate any potential swinging during removal. The next portion of the project consisted of wall sawing 80' of knee wall free from the stadium. Holes utilized two operators and both the Hilti and Pentrunder wall saws to cut the wall in one day. The pieces, once prepared for removal, were flown off by Camacho the following day.

It was highly important to keep the concrete from breaking and falling to the ground, as it would cause

additional damage to the remaining part of the stadium that was being preserved. Falling concrete could also cause injury to individuals or damage equipment below; therefore, having and following a plan was vital to the success of the project. Each cut was made precisely to leave a finished appearance ready for the new press box installation.

There was potential for being crushed or struck by while the crane was rigged to the pieces as they were cut free. Operators measured equidistance on each piece, calculated the weight and used the full length of the remote cord and hydraulic hoses while attaching pieces to the crane. This ensured operators were a safe distance away from the large pieces of concrete being flown away by the crane. The potential for falls from heights once the wall was removed was another concern, and to mitigate this risk, each anchor point was set so that operators were tied off 100% of the time. Holes operators also worked from the edge of the stadium to the middle so that they could avoid back tracking and unnecessary leading edges. Barricades were also put into place as the walls were removed.

Electrocution and shock were additional hazards on the job; therefore, lockout/tagout (LOTO) was performed on the press box before demo, and Holes operators routed all 480 power cords clear of crush zones, performing inspection before and during each shift. Holes believes they were chosen





due to their commitment to safety on the jobsite. Kellie Kimball, Vice President of Holes said, “Holes was hired due to our safety-first mentality. Our team comes prepared to work safely on any project no matter how big or small the project is.”

True to Holes’ reputation, the job was completed on time and on budget. The General Contractor, Weaver & Jacobs Constructors, Inc., specifically requested through the demolition contractor, Camacho Demolition, that Holes South Texas LLC be hired for this project due to their reputation and safety performance on previous jobs. The new press box is expected to be completed in August 2022 – just in time for the first high school football game of the season! Congratulations to the Corpus Christi Buccaneers and to Holes South Texas, LLC on a job well done!

COMPANY PROFILE

The Holes Companies are service companies specializing in concrete slab sawing, core drilling, wall sawing, wire sawing, anchor bolt installation, concrete breaking, lifting, demolition, GPR scanning, load and haul and Concrete Pour Back. The Holes Companies primarily work for commercial and industrial contractors, state highway departments and municipalities. Holes Incorporated, Holes Golden Triangle, LLC, Holes South Texas, LLC and Holes Technology, LP have built a solid track record through 50 years of experience, reliability and reputation. They have 50 employees and 28 operators and have been CSDA members since 1976.

RESOURCES

General Contractor

Weaver & Jacobs Constructors, Inc.

CSDA Contractor

Holes Incorporated

Contact for Story: Kellie Kimball

Email: Kellie@HolesInc.com

Tel: 281-469-7070

Methods Used

Wire Sawing, Wall Sawing, Core Drilling

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



Heating Up: OSHA Plans to Target Enforcements at Heat Illness Hazards

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

INTRODUCTION TO HEAT ILLNESS

As we approach the heat of the spring and summer season, workers may be out of shape, out of practice on workplace safety procedures, and may still have to rebreathe hot air through face coverings. In addition, forecasters are calling for above-average heat in some parts of the country. Employers should remain aware of risks of safety rule violations, injuries, and heat illness issues. New employees entering the tight labor market face particularized hazards of working in the heat, handling the physical stresses of the job, and understanding when they need to access water, rest, and shade.

The National Institute for Occupational Safety and Health (NIOSH) has a webpage dedicated to heat stress. NIOSH indicates that “workers who are exposed to extreme heat or work in hot environments may be at risk of heat stress. Exposure to extreme heat can result in occupational illnesses and injuries.” Further, NIOSH indicates that “[h]eat stress can result in heatstroke, heat exhaustion, heat cramps, or heat rashes. Heat can also increase the risk of injuries in workers as it may result in sweaty palms, fogged-up safety glasses, and dizziness.” Workers are especially susceptible to heat illness when they have not had a chance to acclimatize to a hot environment. As workers come out of quarantine, they may be used to being in air-conditioned environments and may need re-acclimatization to hot environments.

NIOSH also recognizes that certain workers are at greater risk of heat stress. “Workers at risk of heat stress include outdoor workers and workers in hot environments such as firefighters, bakery workers, farmers, construction workers, miners, boiler room workers, factory workers, and others. Workers at greater risk of heat stress include those who are 65 years of age or older, are overweight, have heart disease or high blood pressure, or take medications that may be affected by extreme heat.” These higher-risk employees were among the first to quarantine due to risks



associated with COVID-19 and may need the longest time to re-acclimatize in the workplace.

According to the federal Occupational Safety and Health Administration, heat is the leading cause of death for all weather-related phenomena. Excessive heat exacerbates existing health problems like asthma, kidney failure, and heart disease, and can cause heatstroke and death if not treated. OSHA's recent rulemaking on heat cites the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries, declaring that exposure to excessive environmental heat, has killed 907 U.S. workers from 1992 to 2019, with an average of 32 fatalities per year during that period. In 2019, there were 43 work-related deaths due to environmental heat exposure. The BLS Annual Survey of Occupational Injuries and Illnesses estimates that 31,560 work-related heat injuries and illnesses involving days away from work have occurred from 2011–to 2019, with an average of 3,507 injuries and illnesses of this severity occurring

per year during this period. Finally, OSHA sees additional heat illness hazards developing as an adverse consequence of climate change.

OSHA ENFORCEMENT OF HEAT HAZARDS

Top officials from the federal Occupational Safety and Health Administration announced last week that heat illness is a top-two priority for the agency's enforcement efforts. OSHA's enforcement efforts are twofold -- through (1) the Occupational Safety and Health Act's General Duty Clause, and (2) the development of a new standard. Where no specific regulation applies, the General Duty Clause is a liability catch-all that allows OSHA to cite employers who fail to keep their places of employment free of any other recognized hazards to employees that are likely to cause serious injury or death. Compliance with the General Duty Clause is challenging because employers are typically unaware of what recognized hazards they may be required to address in their workplaces. In recent

years, OSHA has expanded and used the General Duty Clause aggressively to utilize general information in non-binding OSHA publications, Safety and Health Information Bulletins, equipment manufacturer's manuals, and industry consensus standards (e.g., ANSI, ASME, ASTM) to find a "safety" or "hazard" recognition where none previously existed. Where OSHA uses these sources of safety guidance as new rules binding employers, the employer is confronted with a regulatory liability that it did not reasonably anticipate. The liability is compounded when OSHA seeks to use its "multi-employer" workplace liability policy to cite one employer for the exposure of another employer's employees to the hazard. For decades, federal OSHA has enforced occupational heat illness hazards through the Occupational Safety and Health Act's General Duty Clause. OSHA has updated its Heat Illness Prevention Campaign materials to recognize both indoor and outdoor heat hazards, as well as the importance of protecting new and returning workers from hazardous heat. These materials, agency materials such as Centers for Disease Control and Prevention materials on heat illness hazards, address recognized hazards of heat illness that OSHA may pursue under the General Duty Clause.

On the other hand, as OSHA continues to shift its enforcement focus to heat, it has begun the process to issue a heat illness standard. On October 27, 2021, OSHA issued an advance notice of proposed rulemaking (ANPRM) for the proposed standard. The ANPRM provides OSHA's overview of the issues concerning heat stress in the workplace and of measures that have been taken to prevent it, and seeks input from stakeholders on a number of questions during a designated notice-and-comment period. The ANPRM examines the four-state plans with heat illness regulations (California, Minnesota, Oregon, and Washington), clearly showing an intent to model federal regulations on those deemed to be successful. Notably, none of the four pre-existing heat regulations agree on the appropriate threshold for determining what constitutes "hazardous" levels of heat. The ANPRM uniquely targets (1) the effects of climate change on occupational health, and (2) the inequitable effects of heat illness on disadvantaged demographic groups. OSHA provides data addressing disproportionate heat illness affecting minority employees, foreign-born employees, low-wage-earners, and pregnant employees. The heat illness standard is under development

and is expected to include a range of requirements for employers to develop and implement a written heat program, tracking potential heat hazards, training employees, providing water, rest, and shade where appropriate, as well as allowing employees breaks and time to acclimatize.

STATE REGULATIONS

Twenty-two states also have OSHA state plans, which may release their own heat illness standards. Four states have done so. California has promulgated a regulation for Heat Illness Prevention (T8 CCR §3395), which contains extensive requirements to protect employees who may be exposed to the hazard of heat illness. The regulation was initially intended to apply to agricultural employment but has been enforced in most areas of outdoor employment, or workplaces with malfunctioning air conditioners.

Oregon has issued a Heat Illness Prevention Standard (OAR 437-002-0155), requiring employers to implement measures to prevent heat-related illnesses when the heat index equals or exceeds 80°F in all places of employment. Washington State's Outdoor Heat Exposure rule, WAC-296-095, applies May 1 through September 30 every year. Uniquely, Minnesota's standard (Minn. Adm. Code 5205.0110) only applies to indoor places of employment.

RECOMMENDATIONS

To prevent heat illnesses, an employer whose employees face heat hazards should develop a program that includes the following elements:

- Hazard Identification—Identify potential heat hazards (job functions, equipment, etc.) Employees should be consulted in this process.
- Hazard Correction—Correct or reduce the heat hazards identified.
- Employee Training to encompass description of various types of heat illness information on how heat illness occurs, including:
 - environmental conditions
 - working conditions
 - individual employees' health conditions or work practices (e.g. failure to consume adequate water or to acclimatize to heat)
 - how to recognize the common signs and symptoms of heat illness
 - duty to promptly report to a supervisor if the employee or

co-employee is experiencing the signs and symptoms of heat illness and to obtain assistance

- Documentation of the training
- Training in the language the employees understand
- In indoor environments (where feasible), an acclimatization program that gradually increases employee exposure to heat over time.
- Supervisor Training
 - Train supervisors to recognize the signs and symptoms and how to respond
 - Explain the employer's program and how to implement it
 - First Aid - Adequately train and provide readily available first aid services, using either in-house or outside providers.
- In outdoor environments, consider where and how fresh cool water and shade or air conditioning is available in the event an employee exhibits signs of heat stress illness.
- Though they are not standards that are strictly enforceable by OSHA, the National Institute of Occupational Safety and Health (NIOSH) and the U.S. Environmental Protection Agency, (EPA) provide additional guidance regarding heat stress hazards. Available at: <http://www.cdc.gov/niosh/topics/heatstress/> and <http://www.epa.gov/oecaagct/thel.html>. OSHA also plans to introduce a Heat Illness Lesson Plan, along with a Smartphone application. Employers should evaluate the tools provided by OSHA as well as those provided by their industry/trade associations in formulating a heat stress program that best suits their workplaces.

Mark A. Lies, II is an attorney in the Workplace Safety and Environmental Group in the Chicago office of Seyfarth Shaw LLP. Mr. Lies is a partner who focuses his practice in the areas of products liability, occupational safety and health, workplace violence, construction litigation and related employment litigation. Mr. Lies can be contacted at mlies@seyfarth.com.

Adam R. Young is a partner 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.

6 SAFETY TIPS

and Advice for
Working on a
Construction Site



As contractors in the booming real estate and home improvement industry can attest, there is big money to be made in construction. However, as with most matters in life, with great reward comes heightened risk, and construction has the potential to be a dangerous profession. In fact, statistics by OSHA reveal that of the 5,333 workers who died in private industry in 2019, 20% of them (1,061) worked in the construction industry.

The good news is that there are countless ways to mitigate this risk and perform construction tasks safely and with confidence. The following breakdown looks at 6 easy-to-follow safety tips that can benefit those working on a construction site.

1

UTILIZE THE NECESSARY PERSONAL PROTECTIVE EQUIPMENT (PPE)

The number one step workers can take to stay safe on the construction site is to utilize PPE, as a 2020 study published by the National Institute of Health noted the role that PPE

can have in reducing workplace accidents. The same study also found that less than 60% of construction workers use PPE, citing factors such as discomfort, lack of availability, inadequate PPE training and no job site requirements as some of the reasons why workers choose to forego PPE.

However, of the most common construction injuries (head bumps, crushing falls from heavy objects, and overuse injuries), many can be readily avoided by simply using

PPE. As a result, every construction worker should, at a minimum, have access to, and training in the use, of the following PPE:

- Hard hats
- Steel-toe boots
- Gloves
- Work pants and sleeved shirts
- Masks and safety glasses
- Hearing protection
- High-visibility vests



2

CHECK THE CONDITION OF EVERYTHING

Another important step in maintaining the safety of a construction site is to ensure that everything, such as materials, machinery and tools, are in good working condition. Materials, such as wood and below grade insulation boards, should be free of knots, rot or visible defects. Check the electrical connections in machinery so that it does not stall out in the middle of a dangerous task. Make sure that all power tools, such as saws and nail guns, are properly assembled and in good working order to help avoid accidents.



3

LIFT PROPERLY

Construction workers are likely to be a little sore at the end of the day no matter how many precautions they take. However, major injuries can be avoided if workers lift with the proper technique and do not get too overzealous in their efforts.

When lifting objects, it is important to bend at the knees, keep the lower back locked and avoid any twisting motions. If machinery is not available to move heavy pieces, such as the iron I-beam frames for steel buildings, wait for a partner(s) to come and assist.

4

TAKE QUALITY INSPECTIONS VERY SERIOUSLY

A quality inspection is a regular check-up by project leaders, such as project managers, architects, and lead contractors, to ensure that the quality standards laid out in the plans are being met as construction unfolds. A quality inspection will include an assessment of the quality of work as well as the materials. For example, before industrial radiant heating systems can be installed, a quality inspection will likely be conducted on the foundation to make sure that there are no threats of erosion and that the materials used were of the exact specifications laid out in the plans.

When recommendations are made following a quality inspection, it is critical that they be acted upon. While it can be frustrating

to have to go back and redo parts of the project, proceeding to build on a low-quality antecedent not only compromises the building but puts worker safety in jeopardy.

5

KEEP THE WORK AREA CLEAN

A clean construction site is a safe construction site. Errant garbage, stray nails and fluid spills are not only an eyesore, but they present an immediate threat to safety if encountered unobserved by workers, so clean-up should be an ongoing process during the construction project.

6

CHECK FOR FIRE HAZARDS

Finally, a construction site, with mass quantities of discarded packaging and pallets of dry lumber, is at heightened risk of a fire. Whether it be from faulty electrical wiring in a building, an improperly discarded cigarette butt by a worker, or simply sparks and friction from power tools, there are a number of ways an unplanned fire can ignite during a build.

In addition to securing any hazardous materials and smoking in designated areas, workers should also check the availability and functionality of both active and passive fire protection systems, such as fire hydrants, smoke alarms, fire curtains and smoke baffles.



REDUCE CONSTRUCTION SITE INJURIES

Construction is typically one of the more dangerous professions in terms of injuries and accidental deaths each year. However, it does not have to be this way. By utilizing the safety tips and advice listed above, workers can ensure a safe and injury-free construction site.

Todd Gillman is the Content Director for the Innovative Building Materials blog and a content writer for the building materials industry. He is focused on helping fellow homeowners, contractors, and architects discover materials and methods of construction that save money, improve energy efficiency, and increase property value.



Solidify. Encapsulate. Dispose.

One of the best ways to prepare your waste for disposal is solidification, that's why we've formulated Dehydrator – a chemical that works faster, smarter, and more efficiently for you than any other product on the market. Dehydrator is designed to solidify your slurry wastewater within minutes. It prepares your slurry waste for landfill disposal, removing the free water and encapsulating toxic metals.

- Passes Paint Filter Test (PFLT)
- Passes Toxicity Characteristics Leaching Procedure Test (TCLP) for heavy metals
- Solidifies up to 200/300x its weight
- Protects from environmental fines
- Reduces processing time
- Non-leaching

For More Information

Contact: Ryan Klacking

Tel: 313-334-7595

Email: rklacking@slurrymonster.com

www.slurrymonster.com

DITEQ Corporation Hires National Sales Manager for Canada, David Soric



David Soric

DITEQ announces David Soric as its new National Sales Manager for Canada. David brings over 15 years of experience in the diamond tooling industry and 20 years in sales management. At DITEQ, David will be responsible for CSDA/ professional

accounts and distribution accounts across Canada.

His 15 years of experience at Cyclone Diamond Products and Lackmond Diamond make him the perfect salesperson for the professional concrete industry and distribution accounts. Before that, David worked for 5 years as Western Canadian Sales Manager for Heavy Equipment Financing, where he managed a small sales staff.

David is a Business graduate of St. Francis University in Chicago, Illinois. David is married to Kate, and they have two sons, Matias and Leo, and currently live in Burnaby B.C.

For More Information

Contact: Mike Orzechowski

Tel: 816-447-6161

Email: mikeo@diteq.com

www.diteq.com

GSSI Annual Photo Contest

Last year we had incredible participation in the Photo Contest and had so many amazing images submitted from your jobs and surveys all around the world.

We thought you might like to get a jump start on planning for the pictures you will enter this year. And to give you a little incentive, we are happy to share the prizes for this year's Photo Contest:

- Grand Prize: Canon EOS Rebel T7 DSLR Camera with Accessory Bundle (estimated retail value \$800 USD)
- 2nd Place Prize: DJI Mini 2 Drone (estimated retail value: \$450 USD)
- 3rd Place Prize: Oculus Quest 2 – Advanced All-In-One Virtual Reality Headset – 128 GB (estimated retail value: \$300 USD)

The 2022 Photo Contest will run August 3, 2022 - September 14, 2022.

For More Information

Contact: Jennifer Lighthall

Tel: 603-893-1109

Email: lighthallj@geophysical.com

www.geophysical.com



Aquajet Rotolance Lineup Excels at Surface Preparation for Most Concrete Surface Profiles

Aquajet, a global leader in hydrodemolition machine manufacturing, offers a lineup of hydrodemolition robots and attachments for improved surface preparation. Aquajet's series of Rotolance attachments effectively clean, remove and roughen concrete, leaving a better bonding surface that meets international guidelines for the majority of concrete surface profiles (CSP). Rotolance attachments pair with the company's Aqua Cutter 410 and 710 series robots, the new Aqua Cutter 750V, Ergo System and Aqua Spine, providing increased productivity and enhanced worker safety for surface preparation applications over manual methods such as sandblasting, hand lancing or pneumatic breaking.

Contractors with a lightweight Ergo System can choose from two Rotolance attachments – the Rotolance 130 and Rotolance 130S – for maintenance and removal applications at bridges, harbors, water treatment facilities, reservoirs and tanks. The attachments offer new versatility for the Ergo System and are compatible with the Ergo Climber and Ergo Spine to provide access in confined or hard-to-reach places. The 130S is also equipped with a suspension system, allowing it to follow uneven or curved surfaces such as ship hulls and storage tanks.

The Rotolance 1000 and Rotolance 2500 pair with Aquajet's Aqua Cutter robots and cover a surface diameter as wide as 14 inches (360 mm). A vacuum port allows contractors to connect a vacuum system for water recovery, ensuring safe, environmentally

friendly operation. Additionally, both Rotolance attachments can replace the regular cutting heads on the Aqua Spine, allowing operators to remove concrete that would be difficult or impossible to reach with a robot alone. The Rotolance 1000 is rated for a maximum pressure of 1000 bar or 14,500 PSI, while the Rotolance 2500 is rated for 2500 bar or 36,250 PSI. Depending on pump flow, pressure and desired profile, Rotolance attachments can achieve production rates in excess of 500 square feet (46.5 square meters) per hour.

For More Information

Contact: Keith Armishaw

Tel: 1-800-621-7856

Email: keith.armishaw@brokkinc.com

www.aquajet.se



ASCC to Hold 18th Annual Conference in Chicago

The American Society of Concrete Contractors (ASCC), St. Louis, MO, will hold its 21st Annual Conference September 29-October 2, 2022, at the Hilton Cleveland Downtown, Cleveland, OH. Concrete contractors, manufacturers, designers and other industry professionals will gather for three days of educational events and networking.

Seminar tracks include Tech, Business Management, Decorative/Polished Concrete and Safety. Topics include "Techniques to Reduce Carbon Footprint," "Transitioning Your Company to the Next Generation," "Intro to 3D Printing," "Lessons in Leadership," and a panel discussion on constructability: "What's My Role and What do I Want it to be?"

Attendees can take advantage of the ACI Flatwork Finisher Certification and the ACI Decorative Concrete Flatwork Finisher Certification classes and exams. Additional opportunities include golf at Sleepy Hollow Golf Course and a cruise on Lake Erie.

For More Information

Contact: Beverly A. Garnant

Tel: 314-962-0210

Email: bgarnant@asconline.org

www.asconline.org

Vacuworx SL2 Vacuum Attachment

The Vacuworx SL2 Subcompact Vacuum Lifting System has revolutionized the way saw cut concrete can be handled on jobsites, saving man hours, promoting safety and reducing debris.

Concrete construction and demolition contractors have been quick to recognize the advantages of using the SL 2 to overcome common jobsite restrictions such as loud noise, debris and vibration. While the original integrated pad was designed to work for most common applications, contractors continue to identify more opportunities to put the system to work and have requested additional pad sizes for even greater versatility.

The SL2 features include:

- Lightweight – weighs 125 lbs. but can handle up to 4,400 lbs.
- Operated by wireless remote from the safety of the cab of the host machine.
- Can be utilized on skid steers, excavators and backhoes.

Can handle concrete slabs, flat steel plate and composite construction mats just to name a few applications. Simply saw cut and remove with no drilling, anchors or hydraulic hammers, this attachment requires less equipment and less personnel, reduces debris clean up as well as most silica dust.

Featuring all-aluminum construction, the patent pending design runs off the host machine's hydraulic system and can be easily attached in minutes to lift steel plate, saw-cut concrete, granite and marble slabs, landscape pavers and more! In addition, quick-connect hydraulic



hoses make switching between attachments fast and easy so you can maximize productivity on the job. This product can safely be utilized for indoor or outdoor applications and perfect for floor, sidewalk, driveway, road and landscaping projects.

For More Information

Contact: Danielle Solomon

Tel: 918-259-3050

Email: danielles@vacuworx.com

www.vacuworx.com



SPIDAR® SDK GPR Under Your Control

Whether you are building a new product or improving an existing product, consider adding ground penetrating radar (GPR) technology.

SPIDAR® SDK (Software Development Kit) is designed for innovators building hardware solutions that would benefit from GPR's ability to image what is under the surface, be it soil, rock, concrete, pavement, wood or practically any non-metallic material.

The SPIDAR® SDK includes the hardware and software to control a Noggin or pulseEKKO® GPR system, opening opportunities for the development of new equipment.

Add the value that GPR brings to your robot, construction equipment, mining machine, non-destructive inspections tool, and much more!

For More Information

Contact: Troy De Souza

Tel: 800-267-6013

Email: tds@sensoft.ca

www.sensoft.ca

The Guide about Slurry Management is ready for you!

The guide Slurry Management in Concrete Cutting is already available to clarify and bring together the knowledge of specialized companies.

It has been produced by the International Association of Concrete Drillers and Sawers, IACDS.

These guidelines aim to be a technical reference document on slurry management

in concrete sawing and drilling activities. This document has been prepared by the IACDS working group, which is formed by contractors, manufacturers and national associations with experience in this area.

This publication will help identifying the different terminology, methods, procedures and products available for sludge management, treatment and disposal. In addition, IACDS has published a video to clarify perfectly all the doubts about Slurry management.

The guide can be found at iacds.org/library/

For More Information
Tel: (+34) 911 294 440
Email: info@iacds.org
www.iacds.org



DDM Concut and LISSMAC Corporation Announce Partnership

We are excited to announce DDM Concut, a United States based manufacturer and leader of diamond tooling for the construction market, and LISSMAC Corporation, a global leader of saw cutting equipment, have entered into an exclusive partnership in North America. DDM Concut's sales organization will represent LISSMAC saws, expanding LISSMAC's presence throughout North America. The partnership leverages the combined strengths of LISSMAC's user friendly, reliable saw cutting technology and DDM Concut's innovative engineered solutions for the professional concrete cutting market. Together, they offer complete saw cutting solutions from two market leaders. DDM Concut's manufacturing and warehouse facilities are based in Lilburn, Georgia. LISSMAC's (United States operations) are based in Mechanicville, New York.

For More Information
Contact: Greg Gundrum
Tel: 678-325-8250
Email: GGundrum@ddmconcut.com
www.ddmconcut.com

Contact: Mitch Scott
Tel: 936-444-3481
Email: m.scott@lissmac-corporation.com
www.lissmac.com/en-us



ZENESIS™ V2 SERIES

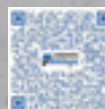
ZENESIS™ Patterned Technology is our most advanced diamond pattern. Hybrid layering exposes the ideal number of diamonds for faster, cleaner cuts.



- Fast speed and long life
- Large selection of bond hardness
- Available sizes 12"-60"



866.322.4078
diamondvantage.com



Follow Us!



Concrete Sawing & Drilling Association



@csdaconcrete



Concrete Sawing & Drilling Association (CSDA)



CSDA Concrete Sawing & Drilling Association



Prep Your Surface with Dissolve

Introducing the newest, and most anticipated chemical in our product line, Dissolve SP™.

Dissolve SP (Surface Preparation) is an acid replacement that safely, but aggressively, etches your concrete surface for dry grinding, opening the surface up and creating a slight profile that allows your tooling something to "bite into." With this product, you won't need to flood the floor to achieve results, and you won't need to neutralize since there's no acid base involved.

Some of the great features of Dissolve SP include:

- No neutralization
- Doesn't weaken the concrete
- Mild yet aggressive etchant
- Won't compromise the structure of the concrete
- Environmentally friendly
- One gallon of Dissolve SP will yield 600-800 sq. ft.

For More Information
Contact: Ryan Klacking
Tel: 313-334-7595
Email: rklacking@slurrymonster.com
www.slurrymonster.com

CSDA Announces NEW Online Training Courses

Visit csda.thinkific.com to access
our new courses:

- Cutting Edge
- Intro to Sawing & Drilling
- Silica Safety

Each course can be taken on
the operator's own schedule and
timeline. Perfect for new hires or
experienced operators who want
to learn more!

DITEQ Proudly Introduces HYCON's New HPP18E-Remote Flex

The HYCON HPP18E-Flex hydraulic powerpack has a Variable Frequency Drive (VFD) that controls the motor speed to change the flow GPM. The new HPP18E-Remote Flex is the same powerpack with modified controls after the pack's electric box is removed and replaced with a 60ft long cable with handheld control. With the handheld control, you can emergency stop, start/stop and regulate flow from 2-12 GPM stepless. The remote allows the operator to move around the job site more freely. When working on scaffolding and lifts, the HPP18E-Remote Flex can be left on the ground while the operator moves from level to level, spot to spot. Experience greater freedom and safety with the HPP18E-Remote Flex.



For More Information
Contact: Mike Orzechowski
Tel: 816-447-6161
Email: mikeo@diteq.com
www.diteq.com

GSSI Fusion™, an Innovative Cloud Platform

The most trusted name in GPR brings you GSSI Fusion™, an innovative cloud platform that is the most flexible, scalable and cost-effective solution in the industry.

Powerful Productivity: Our mission at GSSI is to make products that help increase your productivity. We understand that every job is different. That's why GSSI Fusion® was designed to be a flexible tool that can make every part of your daily workflow easier. Whether it's building customizable reports for your customers, sharing scans between co-workers or storing data, GSSI Fusion has you covered.

Scalable to your Business: For over 50 years, GSSI has been committed to providing solutions that fit your needs, on your terms. This is why we have designed GSSI Fusion with multiple levels of service that can scale as your business grows. With GSSI Fusion there are no long-term commitments, no paid subscription obligations and no requirements linked to using your GPR systems.

Comprehensive Account Management: Your customers, employees and equipment are the backbone of your business. GSSI Fusion was designed to help you manage your assets, connect your employees and add value for your customers through permission-based user, group, equipment and data portals. Your level of configuration is completely up to the needs of you and your business.

For More Information
Contact: Jennifer Lighthall
Tel: 603-893-1109
Email: lighthallj@geophysical.com
www.geophysical.com



ACI Releases 2022 Collection of Concrete Codes, Specifications and Practices

The American Concrete Institute has released the 2022 ACI Collection of Concrete Codes, Specifications and Practices.

The ACI Collection is the most comprehensive and largest single source of information on concrete design, construction, materials and repair, with over 50 codes and specifications and more than 200 practices – including all guides and reports.

The ACI Collection features ACI 318 "Building Code Requirements for Structural Concrete," ACI 301 "Specifications for Structural Concrete," and ACI 562 "Code Requirements for Assessment, Repair and Rehabilitation of Existing Concrete Structures and Commentary."

The 2022 ACI Collection now includes more than 10 newly published documents ranging from codes on thermal bridge mitigation to specifications for polished concrete slab finishes, crack repair and much more. Additional categories in the ACI Collection include concrete materials, properties, design, construction, reinforcement, specialized application, repair, structural analysis and innovation, plus popular topics such as slabs, formwork and masonry.

The 2022 ACI Collection is available as a convenient online subscription, a USB drive (coming soon) and a nine-volume set of books. Specifically developed for individual users, the online subscription to the ACI Collection is the most convenient format, is always up-to-date and includes access to every new ACI document as soon as it is published. Additionally, the online subscription includes access to current and historical versions of ACI's codes and specifications, along with versions in both inch-pound and S.I. units.

For More Information
Contact: Jose Carrasco
Tel: 248-848-3160
Email: Jose.Carrasco@concrete.org
www.concrete.org

SHIBUYA 70th Year Anniversary!

The TS-165PRO Core Drill with Case Your Core Drill for Service Work!



DR0052

TS-165PRO with Angle Base in Case
Weighs less than 50lbs fully loaded

TS-165PRO Core Drill Case Kit Features:

- Compact 15 Amp two-speed low noise motor with high cooling capacity
- Lightweight, rigid steel/aluminum hybrid column
- Two piece column – a 23.5" column with an 8" extension. The 23.5" column is used for "short" 10" long bits in tight spaces. Add the 8" extension and the TS-165Pro can use "standard" 16" long bits
- Built-in on/off switch with low voltage drop-out and motor overload protection
- Multi-position water swivel inlet for convenience
- Right and left hand feed handle positions. No tools necessary.
- Carrying handle for easy lifting



DR0052

angle base
with case
(shown with
23.5" column plus
8" extension)



Core bits pictured:
C-41AX (blue) Wet/Dry
C-50AXP BRUTE (red) Wet Only
 Core bits NOT included



@diteqcorporation



DITEQ Channel

www.DITEQ.com

9876 Pflumm Rd ▪ Lenexa, KS 66215 ▪ Toll Free Tel: 866-688-1032 ▪ Tel: 816-246-5515

Join us for our upcoming meetings!

- Kansas City, MO September 8-9
- Park City, UT Dec 1-2

Visit csda.org/board-and-committee-meetings for more information.

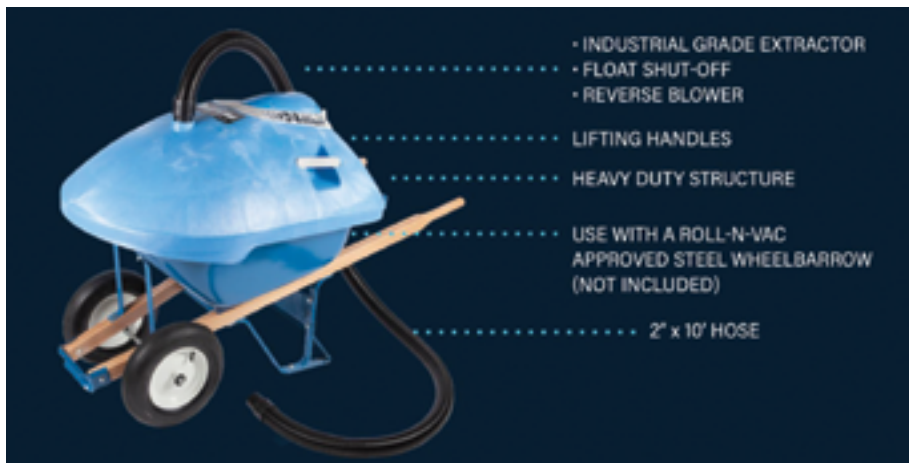
Meetings are free to attend and open to all!

The Roll-n-Vac HD2 Hydro Extractor

The Roll-n-Vac DH2 Hydro Extractor aims to reshape the industry by saving time doing the everyday tasks that you hate the most. Some of the things the Roll-n-Vac is capable of include:

- Vacuuming sludge to a depth of 12 feet directly into a wheelbarrow for disposal
- Cleaning out clogged lines
- Surgically excavating buried broken plumbing and electrical line when used with a pressure washer or air spade
- Cleaning out 300 pounds from a sand filter in less than five minutes
- Running on a standard 120-volt A/C 15-amp line
- Increasing your bottom line and saving your back

The Roll-n-Vac is made in the United States and has powerful performance, as



- INDUSTRIAL GRADE EXTRACTOR
- FLOAT SHUT-OFF
- REVERSE BLOWER
- LIFTING HANDLES
- HEAVY DUTY STRUCTURE
- USE WITH A ROLL-N-VAC APPROVED STEEL WHEELBARROW (NOT INCLUDED)
- 2" x 10' HOSE

it is built with an industrial-grade vacuum motor. It collects large volumes of material quickly and easily navigates rough ground. Other features of the Roll-n-Vac include an industrial-grade extractor, float shut-off, reverse blower, lifting handles, heavy-duty structure and a 2.5" x 10" hose.

The company is always seeking ways to improve the Roll-n-Vac, and in the last year it has made the unit blue using specially

formulated plastic for longer life and UV protection, as well as changed its base plate gasket/seal for better sealing and longer life.

For More Information

Contact: Ed Calafut

Tel: 800-356-8059

Email: ed@truebite.com

www.roll-n-vac.com

MEET THE NEW AQUA CUTTER 750V

Aqua Cutter 750V is our new "Mean Machine" with breakthrough technology in performance and efficiency. The new patented Infinity system together with the next generation Evolution control system brings out the best possible results from the machine, making you and your new robot an unbeatable team.



AQUAJET









WATCH VIDEO >> 

Distributed by: **Brokk Inc.** | Monroe, WA | 1-360-794-1277 | info@brokkinc.com | www.brokk.com

Aquajet Offers Innovative Solutions for Hydropower Applications

Aquajet, a global leader in Hydrodemolition machine manufacturing, offers a lineup of cutting-edge Hydrodemolition equipment for concrete repair and restoration in hydropower applications. Paired with the highly versatile Aqua Spine, Aquajet's Aqua Cutter 710V Hydrodemolition robot increases productivity and safety for challenging concrete removal and surface preparation tasks on spillways, dam faces, intake structures, tunnels, gates, draft tubes, tailraces and locks. Robots can also be used for penstock cleaning and coating removal. Additionally, the company's innovative Ecosilence 3.0 high-pressure pump and EcoClear water treatment system round out the system in a compact footprint that meets environmental regulations.

Using high-pressure water jets as powerful as 40,000 psi, the Aqua Cutter 710V Hydrodemolition robot blasts away layers of concrete, cleaning and descaling rebar in the process. The model, one of Aquajet's largest, offers exceptional horizontal, vertical and overhead reach — as high as 23 feet (7 meters). Aquajet's unique cutting head and multi-axis 3D positioning systems allow for efficient removal on even the most challenging areas including corners and spaces that would be difficult to access with hand tools. An optional extension kit system further increases versatility and area of operation. The kit extends reach for vertical and side-to-side applications about 5 to 8 feet (1.5 to 2.5 meters), depending on the model, to help operators access hard-to-reach areas.

Additionally, contractors can use an Aqua Spine for concrete removal in areas that are inaccessible to Hydrodemolition robots.



Photo courtesy of Walco Industries

THE **ONLY** PRODUCT FOR SLURRY THAT ABSORBS



IT'S WEIGHT

info@GelMaxxUSA.com | (855) 322 3335 | GelMaxxUSA.com

This multi-modular system features a single feed beam to ensure adaptability to different applications. It adjusts from 3-19 feet (1-6 meters) and is ideally suited for hard-to-reach corners and curved surfaces where it can replace the use of manual labor. The modular system can be anchored to the concrete surface — such as floors, walls or ceilings — and can also be held in position with hydraulic platforms, cranes and scaffolding for increased versatility. Adding or removing spine beam sections results in an infinitely adaptable support system.

To further improve operating efficiency, contractors can use the 710V and Aqua Spine with the company's innovative EcoClear water treatment system. The compact, fully automated system treats the Hydrodemolition wastewater on-site and on-demand. It moves as much as 88 gpm, or about 5,283 gallons (20 cubic meters) per hour, through a series of treatment chambers that reduces pH to between 7.5 and 8.5 and suspended solids to between 20 and 40 mg/l. This allows for safe recycling and reuse during the process as well as safe release into sanitary sewers, storm drains or directly into the environment. The system can be set up in less than 4 hours and requires minimal oversight during operation for optimal crew utilization. It also allows for the reuse of blast water in the high-pressure pump as part of a closed-loop system. In this way, contractors can recycle the water, resulting in significant time and resource savings on remote or environmentally sensitive jobsites.

For More Information
Contact: Keith Armishaw
Tel: 1-800-621-7856
Email: keith.armishaw@brokkinc.com
www.aquajet.se



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



ACCU-CUT CONCRETE SERVICES, INC.
Clearwater, FL

ACE CONCRETE CUTTING
Cumberland, RI

AGGREGATE TECHNOLOGIES, INC.
Houston, TX

AUSTIN ENTERPRISE
Bakersfield, CA

BAY LINE CUTTING & CORING, INC.
San Francisco, CA

CHESCO
Malvern, PA

COBRA CONCRETE CUTTING SERVICES
Arlington Heights, IL

CON-COR CO., INC.
Menomonee Falls, WI

CONCRETE CUTTING & BREAKING
Jacksonville, FL

CONCRETE CUTTING SPECIALISTS
Freeland, MI

CONCRETE RENOVATION, INC.
San Antonio, TX

CONSTRUCTION DEBRIS REMOVAL, INC.
St Augustine, FL

CR MEYER
Oshkosh, WI

**D.M. CONLON/DAN-KEL CONCRETE CORING,
SAWING & SCANNING**
Longs, SC

DELTA CONTRACTORS & ASSOCIATES, LLC
Owings Mills, MD

DIXIE CONCRETE CUTTING, INC.
College Park, GA

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

KRAUS-ANDERSON CONSTRUCTION CO.
Minneapolis, MN

M6 CONCRETE CUTTING & CORING
Wichita, KS

MAVO CONCRETE SAWING SERVICES INC.
Edgar, WI

NEIL'S CONCRETE CUTTING, INC.
Taylorsville, UT

**TRUE LINE CORING AND CUTTING
OF MARYLAND, INC.**
Baltimore, MD

WALKER CUTTING SERVICES
Hammonton, NJ



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

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

INTERSTATE SAWING & DEMOLITION
West Bend, WI

MAVO CONCRETE SAWING SERVICES, INC.
Superior, WI

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 operators who have expanded their knowledge of the methods, theory and practical application of GPR imaging. Certified operators 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

BROOKBANK CORE DRILLING & SAWING, INC
Waldorf, MD

CITY SCAN CORP
Bronx, NY

COBRA CONCRETE CUTTING SERVICES CO
Arlington Heights, IL

CONCRETE CORING CO. OF CINCINNATI, INC.
Cincinnati, OH

CONQUEST DEMOLITION
Buda, TX

DALY CONCRETE CORING LIMITED
Courtice, ON, Canada

DIXIE CONCRETE CUTTING CO., INC
College Park, GA

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

INTERSTATE SAWING CO.
West Bend, IL

**LOMBARDO DIAMOND CORE DRILLING
COMPANY, INC.**
Santa Clara, CA

MAVERICK CUTTING AND BREAKING
Minneapolis, MN

MAVO CONCRETE SAWING SERVICES, INC.
Edgar, WI

MOORE CONCRETE CUTTING LLC
Brentwood, NH

TASMANIAN ASSET PROTECTION
Sandy Bay, TS AUSTRALIA

TEXAS CUTTING & CORING, LP
Round Rock, TX

SCAN TEK GPR
Davie, FL

VERIFY LOCATING/SAF-CUT
Raleigh, NC



Membership

NEW MEMBERS

CONTRACTOR:

A-1 CORING, INC.
Hutto, TX

DYNAMIC CONCRETE CUTTING, LLC
Garner, NC

KINGZCRETE CONCRETE LLC
Sarasota, FL

RELIABLE CONCRETE CUTTING, LLC
Pompano Beach, FL

DISTRIBUTOR:

WORLD DIAMOND SOURCE, INC.
Pompano Beach, FL

MANUFACTURER:

ROLL-N-VAC BY TRUEBITE INC.
Vestal, NY

OVERSEAS CONTRACTOR:

J&J CONCRETE CUTTING PTY LTD
Windsor Downs, NSW-AUSTRALIA

MEMBER BENEFITS

SAFETY RESOURCES 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

The Association negotiates member benefit programs with national vendors like Staples, UPS and V-beltsupply.com in order to provide cost-savings opportunities for CSDA Members.

NETWORKING

AT THE ANNUAL CONVENTION AND QUARTERLY MEETINGS

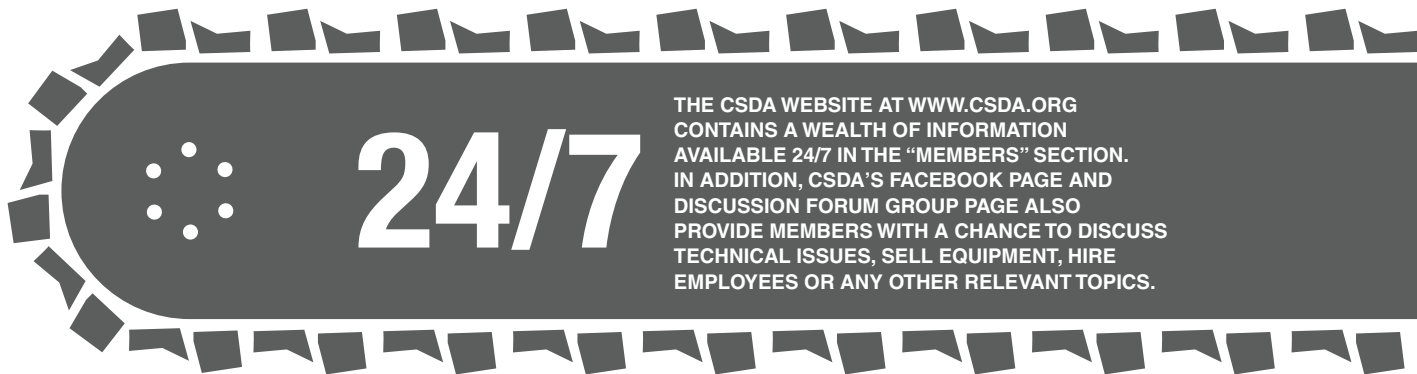
The number one benefit for members has always been the opportunity to network with cutting professionals at the annual convention and quarterly meetings. This networking provides opportunities to forge new relationships and learn from other experienced professionals.



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.

"My company, Diamond Vantage, has been a member of the CSDA for years. I have recently become the Co-Chair of the Marketing Committee and am happy to be part of this amazing association myself. I have immediately seen the value the CSDA brings to not only our company but the industry as a whole. From the networking opportunities with the leaders in our trade to the safety training for our team, the CSDA has become the cornerstone in the concrete industry. Attending the committee meetings quarterly allows manufacturers, business owners, and contractors to come together for the common goal of making the concrete industry safer, and more connected as a whole. I recommend anyone in the industry to come to these meetings and get involved, you won't regret it!"



Dani Planto

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.



DUES_{SCHEDULE}

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	\$450	\$875	
\$1 – 2M	\$1,135			\$1,860	\$1,395			
\$2 – 3M	\$1,740	\$1,425	\$1,425	\$2,765	\$2,070			
\$3 – 5M	\$2,335			\$4,425	\$3,330			
\$5 – 10M	\$2,955			\$5,985				
> \$10M	\$3,705			\$7,375				



For more information about CSDA membership, visit www.csda.org, call 727-577-5004 or email info@csda.org.



OSHA's Safe & Sound Week **August 15-21, 2022**

Email: safeandsoundcampaign@dol.gov

Fall Board & Committee Meetings **September 8-9, 2022**

Kansas City, MO
Tel: 727-577-5004
Email: info@csda.org

Sawing & Drilling **101 Course** **October 3-7, 2022** **Diamond Products Facility** Elyria, OH Tel: 727-577-5004 Email: info@csda.org

GPR Certification Course **October 7, 2022** **Diamond Products Facility** Elyria, OH Tel: 727-577-5004 Email: info@csda.org

Chicago Build **2022 Expo** **October 13-14, 2022** **McCormick Place** Chicago, IL Tel: 312-924-9772 Email: marketing@chicagobuildexpo.com

Bauma **Oct 24-30, 2022** Messe München Tel: + 49 89 949-11348 Email: info@bauma.de

Sawing & Drilling 201/ **Operator Certification Course** **November 7-11, 2022**

St. Petersburg College
Clearwater, FL
Tel: 727-577-5004
Email: info@csda.org

GPR Certification Course **November 11, 2022** **St. Petersburg College** Clearwater, FL Tel: 727-577-5004 Email: info@csda.org

Winter Board & Committee Meetings **Dec 1-2, 2022** **The Chateaux Deer Valley** Park City, UT Tel: 727-577-5004 Email: info@csda.org

World of Concrete **January 17-19, 2023** **Las Vegas Convention Center** Las Vegas, NV Tel: 727-577-5004 Email: info@csda.org

Canadian Concrete Expo **Feb 16-17, 2023** **The International Centre** Toronto, ON CANADA Tel: 226-363-0550 Email: sue@exposition.com

CONEXPO-CON/AGG 2023 **March 14-18, 2023** Las Vegas, NV Tel: 414-298-4116 Email: pkauermann@aem.org

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!

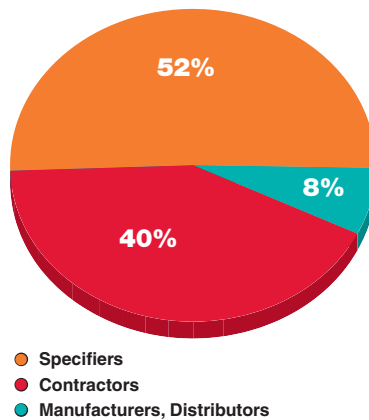
Visit www.concreteopenings.com and click "subscribe."

THE OFFICIAL MAGAZINE OF 

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, page-turning 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	EMAIL
42	Aquajet Systems	800-621-7856	keith.armishaw@brokkinc.com
23	Brokk Inc.	800-621-7856	mike@brokkinc.com
Inside Front Cover, 26-27, Inside Back Cover	Diamond Products Limited	800-321-5336	jpalmer@diamondproducts.com
51	DDM Concut Diamond Tools	770-921-2464	ggundrum@ddmconcut.com
39	Diamond Vantage	866-322-4078	tlaidlaw@diamondvantage.com
17, 41	DITEQ Corp.	816-246-5515	enelson@diteq.com
11	EDCO- Equipment Development Co., Inc.	301-663-1600	moran@edcoinc.com
43	GelMaxx	855-322-3335	info@gelmaxxusa.com
24	GSSI-Geophysical Survey Systems, Inc.	603-893-1109	lighthallj@geophysical.com
5	Hilti, Inc.	800-879-4000	diamondpro@hilti.com
Back Cover	Husqvarna Construction Products	913-928-1000	hpcustomer.service@husqvarnagroup.com
2	ICS, Blount, Inc.	800-321-1240	jessica.gowdy@blount.com
11	Lissmac	518-326-9096	a.jung@lissmac-corporation.com

CSDA Launches NEW Online Training Site!

Check out our updated Cutting Edge course—perfect for your new hires, operators with less than two years of experience or anyone who needs to learn more about diamond tools. The course is completely online and can be taken at the student's own pace.

This course covers:

- Intro to Concrete Sawing & Drilling
- Cutting Edge
- Toolbox Safety Tips
- Jobsite Safety

Contact info@csda.org for bulk pricing packages.

Visit csda.thinkific.com to learn more and sign up!



EXCLUSIVE PARTNERSHIP

Contact your DDM Concut Sales Representative for Equipment information

**DDM
CONCUT**
DIAMOND TOOLS

LISSMAC

Delivering **ENGINEERED SOLUTIONS**

Saw Equipment
Cured Concrete
Bridge Deck
Green Pro
Asphalt & Overlay
Electric Flat Saw
Wall Saw
Joint Widening
Ring Saw
Core Bits
Diamond Wire
Grinding & Grooving

MADE IN THE USA

205 Buxton Court | Lilburn, GA 30047
(800) 654-7224 | (800) 256-3304 fax

www.ddmconcut.com



ERIN O'BRIEN
Executive Director

CSDA Helps Your Company Put Safety First!

For so many years, CSDA and its members have promoted our number one member benefit – NETWORKING. I firmly believe that in-person networking is something that cannot be replaced, and networking is absolutely one of the many benefits of CSDA membership. However, in this digital age, it is easier to connect with other colleagues, customers and companies than it used to be. Which leaves our association in the perfect position to promote one of our other valuable member benefits – SAFETY!

The safety resources provided by CSDA to its members can be invaluable to your large or small contracting company. CSDA has spent hundreds of hours and tens of thousands of dollars developing safety resources that are free or significantly discounted to all our members. The people responsible for the development of these documents and resources are experienced, industry veterans from both contractor companies and manufacturers. These resources include our Safety Manual (which has saved many a contractor company during a surprise OSHA audit!), Safety Handbooks (perfect to keep stashed in your truck or toolbox), Toolbox Safety Tips (great for your monthly safety meetings), Safety Videos (a perfect way to introduce your new operators to various concrete cutting techniques and safe jobsite practices), numerous Standards, Specifications and Best Practices (a valuable

resource covering almost any topic you'll find on a jobsite or in the shop) and of course our one-of-a-kind hands-on and online Training Programs, which teach operators safe operation of concrete cutting and demolition equipment. Your company might have to pay thousands of dollars to have these documents created for you or spend hours trying to do it yourself. If you're a CSDA member, we've already done the work for you! This saves you time and money so you can focus on running your business and keeping your operators safe.

Additionally, safety and training materials and classes developed by a trade association adds a level of credibility and professionalism not achievable on your own. You can use CSDA's resources to demonstrate to general contractors your commitment to jobsite safety, which can help you win jobs. In many cases, these types of safety materials and training are required.

With OSHA ramping up its enforcement of heat illness prevention soon, CSDA offers many resources specifically addressing heat illness, measuring temperatures on the jobsite and resources to help you keep your operators safe. I encourage you to take a look at what we have to offer at csda.org under the "Safety" dropdown and in our Store. And while you're there, sign up for your CSDA membership today to start taking advantage of our safety resources!

M-6 POWER

Up to
10 ft. Tall
Masts
Available



Optional
Quick
Disconnect
Autofeed
Carriage



Heavy Duty Roller
Carriage Also Available

Up to 72"
Diameters Bit
Capacity with
Spacers



Optional Steel
Base for
Increased Rigidity

14 Different Hydraulic Motors To Match
Your Power Unit and Job Specifications

Pillow
Block

Flow Control
Valves

**CORE
BORE**

Diamond Products Ltd.
333 Prospect Street - Elyria, OH 44035 U.S.A.



800-321-5336
diamondproducts.com



4 NEW REMOTE
DEMOLITION MODELS



Husqvarna®

REDEFINE YOUR POTENTIAL WITH THE

NEW DXR RANGE



MORE CONTROL. MORE POWER. MORE YOU.

Your potential is our driving force. It inspires us to design technology that develops your professional skills. You know exactly how to get the job done – and our solutions let you to do it smarter, safer and with new levels of power. We're proud to present a whole new range of Husqvarna DXR robots that give you much more than power. Get ready to experience control like never before.

VISIT [HUSQVARNACP.COM](https://husqvarnacp.com) TO LEARN ALL ABOUT OUR NEW DXR UNITS