

DECEMBER 2021

# concrete openings

THE OFFICIAL MAGAZINE OF  CSDA™

## Trinity Bay: Cutting & Removal of a Decommissioned Gas Platform



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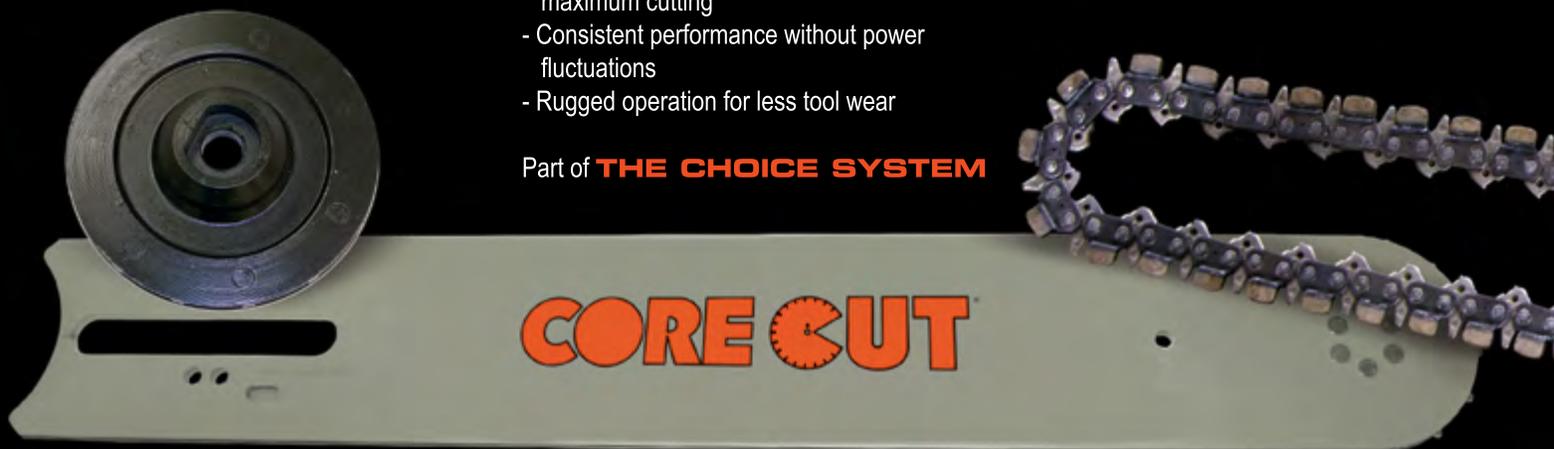
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**A**s the seasons change, we can take a moment to pause and reflect where we are on our current path in life and perhaps make some intentional changes. Some of us use the 'New Year' to set goals and resolutions to redirect our path. There is so much going on in the world around us right now, a lot of unknowns fueling uncertainty for the near- and long-term future in areas such as COVID, the economy, fuel prices, supply chain issues and the new OSHA Vax Mandate, just to name a few. During these times it is a blessing to be integrally involved in a strong association like CSDA to help keep us connected, provide us with valuable resources, online and hands-on training, to keep us informed on the direction of the industry and provide valuable networking opportunities.

CSDA will be celebrating 50 years next year as the association for our specialty trade niche market. Over the years, we have seen remarkable innovations in the industry. We have left our fingerprint on some of the biggest and most impressive construction projects around the world. We have been instrumental in making very impactful changes to refine our specialty trade. Our people have

the knowledge and skill sets that continue to expand our trade. We really do have a lot to celebrate together.

This year, the CSDA Annual Convention & Tech Fair will be held at The Scott Resort in Scottsdale, Arizona, March 28–April 1. The CSDA Convention Committee and staff are planning some exciting events for your enjoyment.

If you plan on attending the World of Concrete 2022 (January 18–20, 2022) in Las Vegas, Nevada, you will need to register online (we were informed that WOC2022 will have no onsite registration). The CSDA booth will be in the new West Hall (booth W1105). We will be holding four training classes at WOC including Job Estimation & Bid Preparation, Concrete Polishing 101, GPR Methods & Theory and GPR Certification. Information and registration can be found at [csda.org](https://www.csda.org). CSDA will also be hosting several networking events as well.

Enjoy the holiday season. Take time to pump the brakes and reflect where you are, where you have been and where you want to go. Set some very intentional goals to help guide you and join us at some of the upcoming CSDA events so we can continue to grow our specialty niche trade.



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## CONCRETE CASES



**Trinity Bay: Cutting  
& Removal of a  
Decommissioned  
Gas Platform**



**Small Machines  
with Big Power Help  
Preserve Historic Mural**



**Medical Vault at  
Stanford Removed  
Using Diamond Cutting**



**Grand Hotel  
Redevelopment**

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# Trinity Bay:

## Cutting & Removal of a Decommissioned Gas Platform



**T**rinity Bay is about 25 nautical miles east of Houston and 30 nautical miles north of Galveston, located on the southeastern coast of Texas. The 20-mile-wide bay is part of the expansive and vital Houston Ship Channel and its various ports, collectively known as the Port of Houston. It is one of the busiest seaports in the world facilitating the movement of more than 247 million tons of cargo a year and was named the number one port in the United States in 2020 by volume of foreign waterborne tonnage moved and vessel traffic. As the port grows in need, Houston works on continuously improving the channel, expanding it, and making sure it is deep and wide enough to accommodate the traffic.

A decommissioned concrete barge oil platform decaying in Trinity Bay posed a potential issue for the traffic of the Houston Ship Channel. Laredo Construction, Inc., a construction and maintenance company that primarily provides offshore services in the Gulf of Mexico, contacted CSDA member Holes Incorporated for some assistance with the removal of this barge. Laredo Construction did not want to risk blocking the Houston Ship Channel by trying to move the barge in one whole piece or have it become an obstacle, so they asked for Holes' help with cutting the barge into manageable pieces prior to its journey through the channel for deconstruction, demolition and final removal.





Holes Incorporated was hired to cut the second story platform off the barge, as well as the 40 concrete piles that held the second story in place. This would reduce the overall weight and height of the decommissioned barge to ensure it arrived at the Houston Ship Channel in one piece without potentially breaking or crumbling due to its deteriorated condition. The job was called in on a Friday afternoon with the hiring contractor needing the Holes team on the Offshore Support Vessel (OSV) Dularge Lift Boat by Monday. The job

also required Maritime insurance coverage, which Holes had to bind prior to mobilization. Working diligently over the weekend, insurance was bound and a contract was signed Monday morning. At that time, Laredo notified the Holes team that prior to mobilization, operators were required to have a negative COVID-19 test. COVID-19 protocols were strict as the operators would be living on the 32-bunk bed OSV Dularge for the next five days with the Laredo Contracting Crew.



Holes mobilized as quickly as possible. Monday evening, Holes sent the wire saw equipment and the 480 Generator needed to power the wire saw on the 4-hour ride to the job site in the middle of Trinity Bay. The equipment had to be transported to the OSV Dularge via the Vessel Triton prior to the operators' arrival.

As the Holes operators were completing their COVID testing and awaiting their results, the Vessel Triton had to leave the dock and make its journey. Thankfully for the team

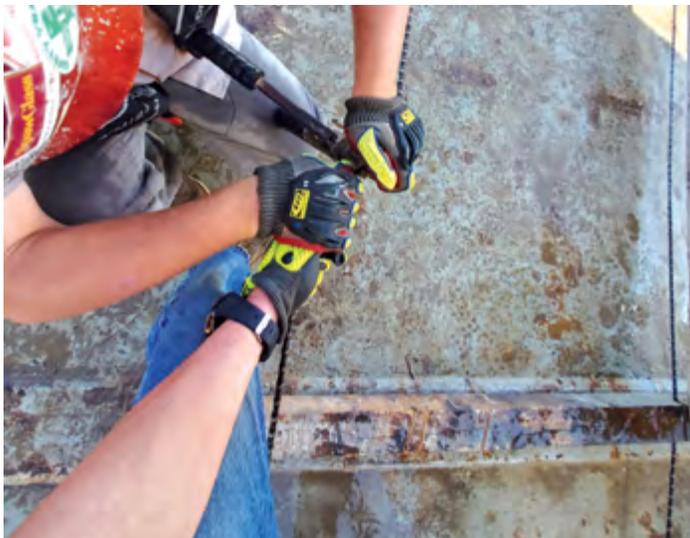
and project, Holes Vice President of Operations Patrick Stepanski was able to save the day by personally delivering Holes operators to the OSV Dularge early Tuesday morning, negative tests in hand, by Pat's center console fishing boat – this was the first time in Holes Inc. history that Pat had to shuttle employees to a job on his personal fishing boat.

Once all the equipment and operators had arrived on the OSV Dularge, the careful deconstruction could begin. For safety reasons, a single Holes operator accessed the

concrete barge by crane basket while the lead operator managed operations from the OSV Dularge. A Hilti WS-15 wire saw with DDM Concut 10MM wire was used to perform the cutting. The upper deck of the barge platform was cut into four equal sections that weighed approximately 75,000 pounds each. Since this work was performed over the water in Trinity Bay, Holes operators could not allow any concrete debris to fall into the water. Therefore, the pieces were removed using an API 100-ton crane which was securely attached to each piece prior to cutting and removal. After the upper deck was cut and removed, Holes operators then cut the columns one by one, using the crane to lift them off the platform and place them on another barge that would be brought to shore and unloaded.

In total, 30' x 50' of the upper deck platform was wire sawed into equal sections, with each piece ranging from 12" to 18" thick. The weight of the upper deck of concrete alone was 300,000 pounds. Once the upper deck was cut and removed, the Holes operators moved to sawing and removing the 16' long, 2,800-pound piles, so that the concrete deck could sit flat on the support barge. Upon completion, Holes cut and removed a total of 412,000-pounds of concrete.

Extensive safety measures were taken to ensure everyone's protection on-site. Bryan Cheek, Holes, Inc.'s 28-year CSDA certified veteran manned the project with a wire saw operator apprentice, Luke Buchanan. Holes operators conducted Toolbox Safety Tip (TST) talks each morning with the crew. The TSTs reviewed hazards such as working over water, slip, trips and falls and the hazards of working alongside a crane. Along with the TSTs, each morning a Job Safety Analysis (JSA) was completed with the crew, hazards were mitigated and daily tasks were performed safely. The OSV Dularge lift legs were tested prior to wire sawing





the platform to ensure the legs could tolerate the load and wouldn't sink into the mud of the bay. Having the correct pressure of each section being cut free on the 100-ton crane was also crucial to prevent the concrete from moving and pinching the wire. While the limited access to the platform was challenging, being a 4-hour boat delivery away from any needed spare parts made everything even more complicated. The platform was slippery and covered in marine debris which could cause an injury if safety precautions were not taken. Additional PPE such as ANSI Cut Level A5 gloves and Coast Guard-rated life jackets were worn 100 percent of the time on the barge.

Despite the almost impossibly fast turnaround and the rigid prerequisites, the job was not only finished on time, but much earlier than expected and within budget. This was Holes Incorporated's first time working with Laredo Construction, and despite not knowing what to expect or anything about them, it was an incredibly successful venture. Darlene East, President of Holes Incorporated states, "Holes is called when the job is difficult, when there is a time crunch and when safety cannot be compromised."

## COMPANY PROFILES

The Holes Companies are service companies specializing in concrete slab sawing, core drilling, wall sawing, wire sawing, pile cutting, concrete breaking, lifting, demolition, GPR scanning, load and haul and anchor bolt installation. 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 49 years of experience, reliability and reputation. They have 52 employees and 28 operators and have been CSDA members since 1976.

### General Contractor

Laredo Construction, Inc.

### CSDA Contractor

Holes Incorporated

### Contact for Story

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### Methods Used

Wire Sawing

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## Healthy for the Holidays

By Erin O'Brien



**'T** is the season – for parties! It's December, which means a month-long celebration with friends, family, co-workers and more. Christmas rolls into New Year's Eve, with football bowl games and the Superbowl mixed in and, for many of us, World of Concrete is right in the middle. Ironically the time of year many of us often vow to be healthier, lose weight or give up something with a New Year Resolution is also the time it's hardest to do so. While there is no "one size fits all" answer, there are some easy things you can do to make your holiday season just a little healthier.

### MAKE A PLAN

Decide ahead of time where you want to splurge and where you will hold back. Maybe your host is known for their amazing cocktails and wine selection? So, in a trade off, skip the dessert table. Cookie exchange? Great! Grab a small plate and that's it. Dinner and dessert? You can still enjoy yourself – but maybe make it ok to try the amazing cheesy potatoes and skip the chocolate ganache cake.

### EAT BEFORE YOU GO

If a meal is not being served, plan to eat before you go so you are less tempted to fill up on snacks and finger foods. Little bites here and there can add up quickly. You're not

supposed to go grocery shopping hungry, and the same rule applies here – don't show up starving when you have an unlimited buffet of delicious food at your disposal.

### DON'T LINGER OR GRAZE

Again, make a plan here. Make your plate and then move away from the buffet. Don't linger near anything you could grab easily. Sit down somewhere, strike up a conversation and try to avoid the temptation of going back for multiple trips.

### FILL YOUR PLATE WITH VEGGIES FIRST

When making your plate, don't start with the carbs – grab veggies first, followed by protein and then finally carbs. Don't take a

dinner roll – they’re not usually worth it. Eat any salads and veggies first, and then proteins. See if you are still hungry. A small portion of carbs (potatoes, pasta, bread, etc.) can come next if you’re still hungry or craving. Even better, bring a veggie dish that you know you enjoy, making sure you get as many veggies in as you can.

**BWARE OF CASSEROLES AND SWEETENED CARBS**

While delicious, these items are usually swimming in sugar, cream or butter. Enjoy them, but in small amounts. Things like green bean casserole (cream/butter), sweet potato casserole (sugar, butter and marshmallows on top – why?), Swedish meatballs or any meatball in a sweet sauce (cream/sugar) are all calorie bombs you should avoid as much as possible.

**HOLD A DRINK**

This doesn’t have to be an alcoholic drink, it could be a glass of sparkling water or iced tea, but having something to do with your hands other than eat or graze will help curb your temptation to snack. I like using a larger glass so it takes longer to drink and is harder to set down somewhere.

**SPEAKING OF DRINKS...**

Easy calories here, so just be careful. Avoid any pre-made punches, cocktails, etc. as they are probably full of sugary mixes. Wine is a good choice, or a cocktail with a non-sugary mixer like club soda, tonic or diet soda. Vodka, cranberry juice and club soda is a festive, light cocktail you can enjoy as long as you go for the low-sugar cranberry juice. Lighter spirits like vodka and tequila are lower in calories than darker spirits like rum, bourbon and cognac. And stay away from the Eggnog – honestly, I don’t know what anyone sees in that drink. It can be up to 450 calories per drink and a waste of perfectly good bourbon.

**SPLURGE ON YOUR FAVORITE**

I LOVE POTATOES. So that’s my splurge – mashed, cheesy, au gratin, roasted, baked, fried – I will be loading those on my plate. And then skipping dessert. Choose your favorite, indulge (because it’s the holidays!) and hold back on the rest. (If you also LOVE POTATOES and want the absolute best mashed potato recipe, let me know. It has like two sticks of butter, heavy cream and roasted melty garlic and it’s amazing.)

**TAILGATING TIPS**

Not every party will be holiday themed. Football parties for bowl games, college football national championship, playoffs and the Super Bowl also dominate the winter party scene. A few things to try here – fill up on

grilled chicken wings and burgers, go light on the chips and dip and keep your hands busy by playing games – cornhole, tossing a football or whatever keeps you away from the buffet table. Being active also helps burn calories, so win-win!

**WATER**

One last tip – drink lots of water! Not only will this keep you hydrated and less likely to feel any hangover effects from all of those drinks, but it will also help fill you up so you eat less. To make it more festive, try sparkling water, add fruit or even a splash of juice.

I hope these tips help you enjoy a healthier holiday season! Check out the sidebar for a list of common holiday dishes and their calorie count so you are better informed and can make the best choices for you. Merry Christmas, Happy Hanukkah, Happy Kwanzaa, Feliz Navidad, Joyeux Noel and Happy Festivus!

**FOOD ITEM**

Calories per typical serving size

Cheeseball	246
Onion Dip	60
Roasted Turkey	190
Baked Ham	345
Rib Roast	336
Crescent Roll	100
Cornbread	152
Bread Stuffing	355
Turkey Gravy	178
Sweet Potato Casserole	276
Mashed Potatoes	238
Green Bean Casserole	143
Glazed Carrots	217
Apple Pie	356
Pumpkin Pie	323
Pecan Pie	456
Eggnog	439
Wine	142
Cranberry Juice Cocktail	140

*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.*



**CSDA 2022**

**CONVENTION & TECH FAIR**

**March 28–April 1, 2022  
The Scott Resort & Spa  
Scottsdale, AZ**





# SMALL MACHINES WITH BIG POWER HELP PRESERVE HISTORIC MURAL

**T**ake a walk around Tysons Corner, Virginia, and you'll discover art near every Metro station. These outdoor art installations range from sculptures to murals, and are touted as being not only walkable, but Instagram-worthy. Folks hopping on or off the WMATA Greensboro Metro and/or heading to the Tysons Biergarten have surely seen the massive mural, Tysons Luxury Lilies, featuring abstract black and white dots covered in colorful water lilies. The 100' x 200' mural was created by Lawrence Atoigue, an artist professionally known as Naturel. It debuted in 2016. According to Tysons Partnership, the mural was inspired by Claude Monet's iconic and expansive "Water Lily" series.

Concrete Technology Services Mid-Atlantic Inc. (CTS) was contracted by GC Total Civil Construction to make various improvements to the WMATA Greensboro train station in Tysons Corner, Virginia, including the modification of an existing concrete retention area. CTS needed to remove a portion of the retention pond wall adjacent to the neighboring building foundation, which featured the aforementioned mural that needed to be preserved. The project had two phases, one in July of 2021 and one in August of 2021, and it lasted a total of three days between the two phases.

Most of the retention pond could be removed with traditional excavators and breakers without the concern of damaging the mural or any other surrounding features.





However, a portion of the retention area was poured so closely against the neighboring building's foundation that CTS knew extra care needed to be taken to inspect and carefully demolish the retention wall.

CTS operators decided that using a Brokk 500 was the best option to carefully demolish the wall, because of its power to size ratio. An underpowered and less precise mini excavator would have been the only alternative option other than men on scaffolding with handheld jackhammers, both of which would have caused major schedule and cost overruns.

Since the wall needed to be exposed to facilitate the sub-grade demolition, all the work was performed in a

relatively small excavation area supported by sheet piles. The risk of damage to the neighboring historic mural wall and tight workspace made the job more delicate. CTS and the GC reviewed the details of the existing conditions with all contractors involved. Precise holes were drilled to inspect the interface between the retention wall and the neighboring building foundation. Once approval was received from the owner and GC, a Pentrunder 30 HP wall saw was used to saw the end points and the demolition began.

The work was completed with no issues thanks to the talented operators Flavio Reyes and Francisco Mora with the Brokk 500 remote controlled demolition machine.



The wall that was removed measured 250' x 10' x 20". All standard safety protocols were observed including operators wearing proper PPE, extensive machine operation training and safety training.

The project was finished ahead of schedule and under budget. CTS said that they are very satisfied with the results of their team's efforts on this job. Ron Salera, General Manager of CTS, had this to say about the project, "It was a small, delicate project, but solving a problem in a sensitive situation is part of what we love about this business. We believe CTS was a perfect fit for the project based on our core competencies and experience on other WMATA train station projects."

CSDA is proud to represent companies like CTS that are constantly innovating new solutions to modern problems and staying on the cutting edge of technology. With highly trained operators, reliable service and an unwavering commitment to safety, customers of CSDA contractors can have peace of mind knowing the project will be completed safely and worry-free.

#### COMPANY PROFILE

Concrete Technology Services Mid-Atlantic Inc. has been in business since 1990. They service the entire East Coast of the United States from their headquarters in Glen Dale, Maryland, and office in Raleigh, North Carolina. Their services include complete and selective structural demolition, engineered shoring, flat sawing, wire sawing, track sawing and core drilling. Their specialties are government buildings, civil and heavy construction, industrial facilities and wastewater treatment plants. They have been a CSDA member since 1999.

#### RESOURCES

**General Contractor**

Total Civil Construction

**CSDA Contractor**

Concrete Technology Services Mid-Atlantic

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**Methods Used**

Selective Demolition, Wall Sawing

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## OSHA Issues ETS for Public Inspection with January 4, 2022 Vaccination Deadline

by Scott Hecker, Adam Young, Noah Finkel, David Baffa, Joshua Seidman, Laura Maechtlen, Camille Olson, Kristin McGurn, Lawrence Lorber, Brent Clark, Jim Curtis, and Ben Briggs

**T**he much-anticipated OSHA Occupational Safety and Health Administration’s (“OSHA”) COVID-19 Vaccination and Testing Emergency Temporary Standard (“ETS”) posted November 4, 2021, for Public inspection. The ETS was published in the Federal Register on November 5, at which point it became effective, with new obligations for employers beginning December 5, 2021, and an ultimate “vaccination or testing” deadline of January 4, 2022. On November 4, the White House announced that it would also change the December vaccination deadline for covered federal contractors to align with the January 4 ETS deadline.

Now that we can review the text of the ETS, we finally have some answers to questions that have been percolating since at least September 9, 2021, when President Biden Announced his Administration’s COVID-19 Action Plan. OSHA also released Frequently Asked Questions to guide employers with regard to the new ETS.

### 1. 100-EMPLOYEE COVERAGE THRESHOLD

The ETS requires covered employers, those with 100 or more employees, to implement a policy on vaccination ensuring their employees are fully vaccinated by January 4, 2022, subject to required accommodations. OSHA explains in the ETS’s preamble and FAQs that “employers must include all employees across all of their U.S. locations, regardless of employees’ vaccination status or where they perform their work. Part-time employees do count towards the company total, but independent contractors do not.” Fully remote workers count towards the 1 OD-employee threshold. Corporate entities with more than one location must count “all employees at all locations ... for purposes of the 1 DO-employee threshold.” Franchisors and franchisees are “separate entities for coverage purposes, such that the franchisor



would only count ‘corporate’ employees.” Despite OSHA’s suggestion that staffing agencies and host clients share some level of joint responsibility over staffing agency workers “only the staffing agency would count these jointly employed workers for purposes of the 1 DO-employee threshold for coverage under this ETS” because “the staffing agency would typically handle administrative matters for these workers.” At multi-employer worksites, “such as a construction site, each company represented - the host employer, the general contractor, and each subcontractor - would only need to count its own employees.”

### 2. COMPLIANCE DATES AND VACCINATION REQUIREMENT

Covered employers must ensure that employees have received both shots of a two-dose vaccination regimen, or one dose for single-dose vaccines by January 4, 2022, or they must undergo at least weekly testing as of that date. (Although employees are not considered “fully vaccinated” under the ETS until they are two weeks beyond the final shot, the ETS does not mandate weekly testing for those who are in their final two-week waiting period as of January 4th.) Employers must be in compliance with the rest of the ETS’ requirements -- such as masking, recordkeeping, removal of COVID-positive employees -- by December 5, 2021.

To avoid the testing obligation for unvaccinated employees, the last day on which an employee may receive a one-dose vaccine (such as Johnson & Johnson) is January 4, 2022. The ETS prescribes that employees pursuing a two-dose vaccination may not receive a second dose within fewer than 17 days of the first dose, which means the latest date for the first dose in a two-dose regimen would have to be December 18, 2021. For employees who follow the recommended time between doses (28 days between shots for Moderna, and 21 days between shots for Pfizer-BioNTech), employees should receive the first dose of Moderna by December 7, 2021, or the first dose of Pfizer-BioNTech by December 14, 2021.

The ETS requires employers to obtain written documentation of employee vaccination, which would include an attestation stating that more formal forms of proof are unavailable. Employers then must maintain the records and written roster of employee vaccination status.

### 3. VACCINATION STATUS AND WEEKLY SURVEILLANCE TESTING

Employees who have not received their full vaccine course by the January 4, 2022 deadline must start producing verified negative tests to their employer on at least a

weekly basis. Employers must exclude from their workplaces any employee who receives a positive test result or a positive COVID-19 diagnosis. Any unvaccinated employee must mask in the workplace, with certain designated exceptions. Again, while employee testing need not begin until on and after January 4th, masking, leave, recordkeeping and other obligations under the ETS go into effect on December 5, 2021.

Employers must determine employees' vaccination status, including requiring delineated types of documentation. If an employee cannot provide one of the designated documents, an attestation meeting defined criteria is allowable. Employers must maintain records of vaccination, including a "roster of each employee's vaccination status," which are subject to OSHA's medical records requirements at 29 CFR 1910.1020; however, the ETS exempts them from 1910.1020's typical retention requirements, advising the vaccination records "must be maintained and preserved while this section remains in effect." 29 CFR 1910.501(d)(4). There are similar maintenance and retention requirements for employee test results. See *id.* at 1910.501 (g)(4).

Employers can but are not required to allow for vaccination or testing options. Acceptable tests under the ETS include those that are:

- Cleared, approved, or authorized, including in an Emergency Use Authorization (ELIA), by the FDA to detect current infection with the SARSCoV-2 virus (e.g., a viral test);
- Administered in accordance with the authorized instructions; and
- Not both self-administered and self-read unless observed by the employer or an authorized telehealth proctor. Examples of tests that satisfy this requirement include tests with specimens that are processed by a laboratory (including home or on-site collected specimens which are processed either individually or as pooled specimens), proctored over-the-counter tests, point of care tests, and tests where specimen collection and processing is either done or observed by an employer.

#### 4. EMPLOYERS MUST PAY FOR THE COSTS OF VACCINATION

The ETS requires employers to give employees (a) reasonable paid time for each primary vaccination dose (i.e., up to four hours for each dose) and (b) paid sick leave for employees' reasonable recovery time due to side effects from each primary vaccination

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dose. 29 CFR 1910.501 (f). Neither paid time off mandate is retroactive prior to the promulgation of the ETS.

Paid time for receiving the vaccination must be paid at an employee's regular rate of pay. [1] Importantly, the paid time of up to four hours for each primary vaccination dose must be provided as a standalone benefit to employees. It cannot be offset by any other leave that an employee has accrued (e.g., paid sick leave, vacation time, PTO, etc.). If an employee needs more than four hours to receive a primary vaccination dose, the additional time would be deemed unpaid, protected leave as long as it is reasonable. The employee can use other leave time that they have available (e.g., sick leave or vacation time) to receive pay in these situations.

Paid sick leave for vaccination side effects also contains several unique components. Notably, there is an offset option for employers, depending on the circumstances. If an employer offers separate buckets of paid leave to employees (e.g., paid sick leave, vacation, etc.), the employer can require the

employee to use any available, accrued paid sick leave when recovering from side effects. The employer cannot force use of vacation or personal time in these situations. However, if the employer offers a single bucket of PTO, the employer may require employees to use that leave when recovering from vaccination side effects.

If an employee does not have available paid sick leave or PTO at the time they are experiencing vaccine side effects, the employer must provide the employee with additional paid sick leave. In other words, the employer cannot require that the employee use advanced paid sick leave, borrow against future accruals or "go into the negative." The ETS indicates that the amount of paid sick leave must be "reasonable," and OSHA presumes that if an employer makes available up to two days of paid sick leave per primary vaccination dose for side effects, the employer's setup would be considered "reasonable."

Other federal, state or local laws, as well as collective bargaining agreements, may mandate that employers provide additional

paid time off to employees for vaccination or recovery from vaccination side effects. Employers should examine COVID-19 paid leave mandates, non-COVID-19 general paid sick leave mandates, and other state and local time off laws when assessing their paid time off obligations related to vaccinations.

## 5. EMPLOYERS NEED NOT PAY FOR THE COSTS OF TESTING

Generally, the ETS does not require employers to pay for the cost of COVID testing (including time spent testing), though employers are not prohibited from doing so. While this may first read as a “win” for employers, unfortunately it does little to clarify the confusing state law matrix or collective bargaining obligations regarding employer responsibility for paying for testing costs or associated testing time.

The ETS and associated FAQs acknowledge that there may be circumstances under which employers must pay, e.g., based on “other laws, regulations, or collective bargaining agreements or other collective negotiated agreements.” See 29 CFR 1910.501 (g). Regarding CBAs, the very first section of the ETS, 29 CFR 1910.501 (a), reads that “nothing in this section prevents employers from agreeing with workers and their representatives to additional measures not required by this section and this section does not supplant collective bargaining agreements or other collectively negotiated agreements in effect that may have negotiated terms that exceed the requirements herein.”

Regarding potentially competing state laws, about a half-dozen jurisdictions generally require employers to reimburse employees for reasonable and necessary expenses (such as California, Illinois, Seattle), but since testing is an alternative to vaccination and arguably not “necessary,” it is just unclear how these laws may be applied. About 22 states require employers to pay for the cost of “medical examinations,” but these are generally older laws not passed specifically in connection with COVID or COVID testing, and it is not entirely settled whether each and every type of potential COVID test would be considered a “medical examination” pursuant to these laws. Ultimately, as the FAQs point out, the subject of payment for costs associated with testing “pursuant to other laws or regulations not associated with the OSH Act is beyond OSHA’s authority and jurisdiction.”

With regard to the time spent to get tested, while the ETS supports the notion

that employers should not have to pay for time spent testing, other laws may well bear upon the compensability of such time, particularly depending on when during a work shift testing is conducted. Whether an employer must pay non-exempt employees for time spent on testing remains unclear and often subject to the state in which it takes place and the details of the employer’s testing program.

## 6. OSHA RECORD-KEEPING OF COVID-19 ILLNESSES

The ETS reminds employers of existing record-keeping obligations as they apply to COVID-19 illnesses. Employers must report work-related COVID-19 fatalities and in-patient hospitalizations to OSHA. See *id.* at 1910.501 (h). The ETS does not require employers to provide paid leave to employees missing work time due to a COVID-19 diagnosis, though other laws may mandate such leave. See *id.* at 1910.501 (h).

## 7. EMPLOYERS MUST TRAIN EMPLOYEES ON THE ETS

Employers must communicate the requirements of the ETS to their employees, in language they can understand, along with providing the document “Key Things to Know About COVID-19 Vaccines,” information on anti-retaliation, and OSH Act prohibitions against supplying false information or documentation. See 29 CFR 1910.501 (i).

## 8. COMPETING FEDERAL VACCINE MANDATES

The ETS and FAQs explains that the ETS does not apply to workplaces covered by the Safer Federal Workforce Task Force COVID-19 Workplace Safety: Guidance for Federal Contractors and Subcontractors. Nor does it apply to worksites covered by the existing healthcare ETS (29 C.F.R. 1910.502). Accordingly, the same employer could have some worksites that involve federal contracts that are covered by the federal contractor EO, and others covered by the ETS. A health care employer similarly could operate an ambulatory care facility covered by the new ETS, and a hospital covered by the health care ETS.

The White House Fact Sheet, “Biden Administration Announces Details of Two Major Vaccination Policies,” acknowledges the competing federal COVID-19 vaccine mandates and - helpfully- tries to harmonize them:

Streamlining Implementation and Setting One Deadline Across Different Vaccination Requirements: The rules released today ensure employers know which requirements apply to which workplaces. Federal contractors may have some workplaces subject to requirements for federal contractors and other workplaces subject to the newly-released COVID-19 Vaccination and Testing ETS. To make it easy for all employers to comply with the requirements, the deadline for the federal contractor vaccination requirement will be aligned with those for the CMS rule and the ETS. Employees falling under the ETS, CMS, or federal contractor rules will need to have their final vaccination dose - either their second dose of Pfizer or Moderna, or single dose of Johnson & Johnson - by January 4, 2022. This will make it easier for employers to ensure their workforce is vaccinated, safe, and healthy, and ensure that federal contractors implement their requirements on the same timeline as other employers in their industries. And, the newly-released ETS will not be applied to workplaces subject to the federal contractor requirement or CMS rule, so employers will not have to track multiple vaccination requirements for the same employees.

This officially pushes the federal contractor deadline back from December 8, 2021, and indicates that federal contractors who have already started implementing protocols under the Safer Federal Workforce Task Force Guidance do not have to implement the OSHA (or CMS) mandate at their covered contractor workplaces. That is, covered contractors who already developed protocols under the “show or provide” vaccination documentation directive in the Guidance should not be subject to new OSHA recordkeeping requirements at their covered contractor workplaces.

In addition to not covering those under the umbrellas of the Task Force Guidance or CMS regulations, see 29 CFR 1910.501(b) (2), OSHA’s ETS excludes employees “who do not report to a workplace where other individuals such as coworkers or customers are present; ... While working from home; or ... Who work exclusively outdoors,” 29 CFR 1910.501 (b) (3).

## 9. CHALLENGES TO COME

The Task Force Guidance clearly stated its position on preemption:

Q19: Does this clause apply in States or localities that seek to prohibit compliance with any of the workplace safety protocols set forth in this Guidance?

A: Yes. These requirements are promulgated pursuant to Federal law and supersede any contrary State or local law or ordinance. Additionally, nothing in this Guidance shall excuse noncompliance with any applicable State law or municipal ordinance establishing more protective workplace safety protocols than those established under this Guidance.

Aligned with the Task Force's position, OSHA's FAQs accompanying today's ETS indicate that the: ETS preempts States, and political subdivisions of States, from adopting and enforcing workplace requirements relating to the occupational safety and health issues of vaccination, wearing face coverings, and testing for COVID-19, except under the authority of a Federally-approved State Plan. In particular, OSHA intends for the ETS to preempt and invalidate any State or local requirements that ban or limit an employer's authority to require vaccination, face covering, or testing.

OSHA's authority to preempt such State and local requirements comes from section 8 of OSH Act, and from general principles of conflict preemption...Once OSHA promulgates federal standards addressing an occupational safety and health issue, States may no longer regulate that issue except with OSHA's approval and the authority of a Federally-approved State Plan.

However, we have already seen States and others challenge President Biden's federal contractor COVID-19 vaccine mandate, and we anticipate prompt litigation over the ETS once it is officially published in the Federal Register and, therefore, in effect. Indeed, 24 State attorneys general foreshadowed their legal arguments in a September 16, 2021 letter to President Biden.

To navigate your various obligations under the multiple federal vaccine mandates and to assist in understanding the impacts of these anticipated legal challenges, we recommend that you reach out to your attorney. As you know, analyzing the nuances of and interactions among your myriad requirements is complicated.

[1] *By comparison, the ETS does not include a specific rate of pay that employers must use for vaccine side effect paid sick leave.*



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# Medical Vault at Stanford Removed Using Diamond Cutting

**A** medical linear accelerator (LINAC) is the device often used for cancer patients being treated with external beam radiation, a localized system of radiation delivery. It sends high-energy X-rays to the exact region of the patient's tumor, which is beneficial because it avoids delivering radiation to the surrounding healthy tissue. The LINAC uses microwave technology to produce these high-energy X-rays that can be shaped as they exit the machine to conform to the specific shape of the patient's tumor. The LINAC is placed in a vaulted room with thick, reinforced lead and concrete walls so that the X-rays are isolated and no one other than the patient is exposed to them. A radiation therapist can only turn on the accelerator from outside of the concrete vault, and the machine will only emit the radiation necessary for treatment once it is turned on from outside, making the risk of unintentional exposure to the X-rays very low.





At Stanford Health Care in Pleasanton, California, General Contractor Hensel Phelps was working on a solution to dismantle and remove the existing concrete LINAC vault while the hospital conducted business as usual. Hensel Phelps and Stanford Health Care had both previously worked with CSDA member Lombardo Diamond Core Drilling of Santa Clara, CA, and knew they could expect professionalism, accuracy and a successful job from the contractor. Lombardo was contracted to remove the existing 3,985-square-foot interior of the concrete accelerator vault in the busy and operating Stanford Health Care and put their expertise to work to complete the job skillfully and safely.

The Lombardo team decided that wire sawing and core drilling the concrete vault opposed to robotic or manual

demolition would be best suited for this removal, as mitigating any loud concrete breaking or vibrating inside the occupied hospital was paramount. The concrete LINAC vault was located on the first floor of the hospital and was surrounded by patient rooms and the infant delivery room was directly above it on the second floor. A team of six Lombardo operators utilized a Hilti DS3015 Wire Saw and an ICS Pentrunder 3P8 HF Wire Saw to complete the sawing component of the work, sawing the perimeter of the 3,985-square-foot vault. The Lombardo operators also used a Diamond Tech 12 GPM Hydraulic 4 speed motor and Diamond Products M-6 25 GPM White Motor Hydraulic Core Drill with EZ Cut Products diamond bits for the core drilling component of the removal.

The concrete vault was constructed with embedded 10' x 10' x 10" thick steel shielding plates, and the overall concrete



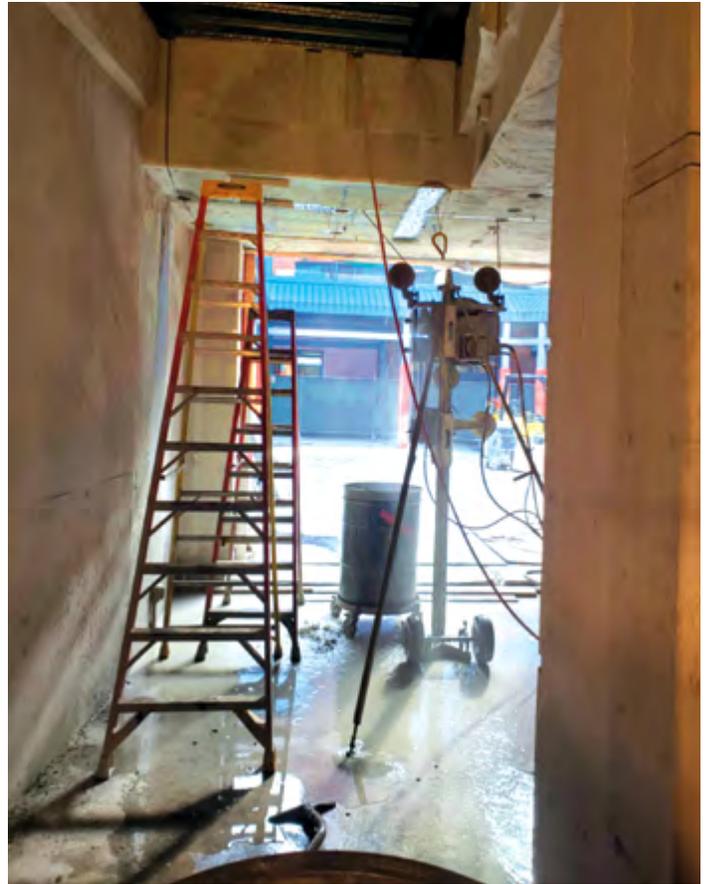
structure ranged from 32-inches to 58-inches in depth. The two Lombardo concrete drilling operators drilled approximately (130) 2" diameter wire access holes and an additional (180) 8" diameter holes for the removal process, completing a total of approximately 1,500 lineal feet of core drilling. In addition to the extensive core drilling, Lombardo's two wire saw operators cut 1,680 lineal feet of concrete to remove the concrete vault lid and wall sections of the LINAC in its entirety. All concrete sections were dismantled and sawcut into 2' x 2', 3' x 3' or 4' x 4' sections based on the overall thickness of the individual pieces and the weight capacity of the specific equipment used.

Lombardo's safety management team provided a plan to the GC prior to mobilizing and brought in a structural engineering firm, FBA, Inc. to assist in composing the plan. There were concerns with the lid removal due to the limited access as well as conduit power lines. The existing KV480 conduit power lines that ran over the top of the concrete vault lid were the main power feed for the surrounding hospital operations and for very critical locations, including the pharmacy and Department of Pediatrics. However, the GC was able to support the power lines while the Lombardo team dismantled the concrete lid around them with no damage, injury or disruption to power.

The overall project was immense due to the limited work space and occupied hospital with patients and pedestrians in close proximity of the workspace. The Lombardo team cites the biggest challenge was that they were working under the infant delivery department. The team was monitored closely during the entire removal process by the Hensel Phelps Safety team and Stanford Health Care with specific maximum acceptable noise decibels with the threat of the entire project being shut down if it was surpassed. By utilizing the diamond drilling and sawing techniques, Lombardo was able to keep the overall noise abated and the project on track.

The general contractor, Hensel Phelps, and Lombardo worked closely on the entirety of this project from the early budgeting stages through to the final contracting phase. The Lombardo team provided a solution for the complexity of this project that satisfied both the GC and the hospital. The methods and procedures utilized during this project were approved by both the owner and client prior to the dismantling process.

The vault dismantling and removal project by Lombardo was completed safely and on time. They continue to have a working relationship with the general contractor, Hensel Phelps. Lombardo is also a preferred vendor for Stanford Hospital Facilities and Stanford University Campus. The





Lombardo team was very satisfied with the outcome of the project. Their skilled concrete drilling and sawing operators were able to complete this project swiftly and with zero injuries or safety issues, which is always the most important part of these tricky projects.

Project leader Jason Saiz said that he believes Lombardo was chosen for this project for their reputation for finishing jobs on time, as well as their trustworthiness. Saiz said about this project, “Lombardo Diamond Core Drilling, Inc. was elected to complete this project based on our great reputation. Our talented team of diamond operators have been providing concrete sawing and drilling services for contractors here in the Bay Area for 60 years.” CSDA takes pride in representing contractors that are respected and utilized in communities because of their character. Lombardo is a longstanding member of CSDA and encompasses the CSDA mission of having the highest standards of safety, quality and integrity.

#### COMPANY PROFILE

Established in 1961, Lombardo Diamond Core Drilling, Inc. has been in business 60 years. They offer a wide array of services, including GPR scanning, utility locating, core drilling, slab sawing, wall sawing, wire sawing, robotic breaking, demolition and excavation. They have a fleet of 40 trucks that services the greater Northern California Bay Area. Their company strengths are all aspects of concrete sawing and drilling. Lombardo has been a member of CSDA for 50 years. President Richard D. Long was one of the founding members of the association.

#### RESOURCES

##### General Contractor

Hensel Phelps

##### CSDA Contractor

Lombardo Diamond Core Drilling, Inc.

##### Contact for Story:

Jason Saiz

Email: Jason@LombardoDrilling.com

Tel: 408-727-7922

Website: www.lombardodrilling.com

##### Methods Used

Core Drilling, Wire Sawing

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**MICHAEL FINDEIS**  
*IACDS President*

**A** very special scent wafts through the house - the scent of mulled wine and gingerbread fills the air. It is a very special time of the year. The days are getting shorter and there is a smell of snow in the air. It's the time before Christmas. But it is also the time when we review the past year again.

This is how I draw the balance for the IACDS and in light of the difficult times we were extremely successful:

At the end of the year, the IACDS is proud to present its Yearbook. This year, the focus lies on innovation and every member association has presented their innovative projects.

Our working paper on the subject of slurry management will also appear shortly. A cooperation under the leadership of the U.S. association, CSDA. The topic of slurry management comes more and more into focus because it is part of the holistic way of dealing with the waste product - the drilling and separation water.

The structural survey that we carried out in September has recently been evaluated and made available on our website. For the second time, contractors and manufacturers around the world were surveyed and the data obtained allow a look at the different markets and their characteristics worldwide.

We made very successful use of the contactless time with webinars during this second year of the COVID-19 pandemic. We held a total of six webinars, including GPR technologies, the PQ-6 connection and the safety guidelines of handling of diamond tools. We look forward to continuing this series next year.

At the end of the year, I would like to thank you for your trust and support and look forward to welcoming you again in person next year. I wish you and your families a Merry Christmas and stay healthy!

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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](mailto:editor@concreteopenings.com).

## Battery Powered Tool Benefits



Innovation in battery-powered tools is one of the biggest trends in the construction industry. These tools are easier to maneuver around a jobsite, more convenient for quick jobs, easier to operate in some cases and of course, create a greener option for our health and environment. While battery-powered tools might not always eliminate the need for gas or corded electric powered equipment, there is definitely a growing place for these tools in a contractor's fleet.

In this article, we will explore the benefits and drawbacks of battery powered tools in the light construction equipment space and why contractors should consider adding these tools to their fleet.

### Positive ROI

One of the most beneficial factors of battery-powered tools is lower cost over time and lower maintenance that directly impacts profits and return on investment.

For example, a 94 volt battery powered cutter has three basic components: the

battery, the saw and the blade. The battery, in essence, replaces the fuel tank, fuel filter, engine, carburetor, recoil rope and spark plug – all the normal service areas for wear and tear items on a gas-powered machine. This means over time, the saw will have a greater ROI as fewer parts and labor will be needed to keep the saw in good running condition.

Battery-powered tools do not need gas or oil, so immediately there is cost savings over the lifetime of the tool, as well as eliminating the potential for deferred filter maintenance or incorrect fuel mixture being used and causing damage to the engine components.

### Battery-specific diamond tools

When using diamond tools with battery products, it is important to use a diamond tool that is specifically designed for the application. Battery-powered machines can respond differently to load conditions than gas machines. Using a diamond tool specifically engineered for the battery machine will minimize friction, reduce vibration, and optimize overall machine performance.

### Applications for batteries

Remote job sites, or sites lacking utilities, can function at full capacity if using battery-powered equipment. The portability of battery powered hand tools offer increased mobility within the jobsite. This can reduce worker fatigue - as fewer additional items are needed to perform the task at hand. In addition, cordless tools reduce tripping hazards and are easier to store – maximizing storage space.

Indoor applications with minimal ventilation and confined outdoor spaces, like trenches, have increased the drive for battery tools. Mechanical contractors, fire departments, sprinkler installers, concrete paver contractors, demolition contractors, hardscape contractors, mason contractors, plumbers, electricians and HVAC specialists can optimize productivity with machines that emit zero-direct emissions, and easily start and stop for quick intermittent uses.

In addition, no matter where the site is, contractors can capitalize on the usage of

batteries by charging them off-site, so they are ready to go when in the field. This increases productivity, and all an operator has to do is turn it on, perform the task and turn it off. Battery tools create less heat and emit zero-direct emissions. Allowing high volume work to continue in tight, or high-traffic work zones in or near public places during a neighboring business' hours.

### Battery tradeoffs

There are many advantages of battery-powered tools, but like all equipment, these tools are not without drawbacks. Batteries can be used for a variety of applications, in a variety of work environments, but they do require time to recharge. This is easy to overcome with a little preplanning – contractors will need to determine how long a project will take and ensure they have enough batteries to complete the job, or plan charging time into the workday.

For decades, gas and electric powered tools have proven to be reliable sources on jobsites and will always have a place on the construction site. These units are necessary for high powered and heavy-duty applications. Contractors may prefer the power of a gas or high frequency electric tool if they need to make continuous full-depth cuts throughout the day, or if larger tools are needed for a large project.

### Ease of Use

Teaching workers how to run/operate a battery-powered tool verses a gas unit is less complicated. It is easier to train a new operator on how to start a battery machine. It requires less instruction and retention is greater. This is especially true for operators that do not have a lot of experience with gas-powered machines. Also, the batteries are often interchangeable with multiple tools.

In addition, battery-powered machines can offer improved safety. For example, safety features can be designed into the machine on a battery power cutter, because there are fewer forces in play on the machine compared to a gas version. Some saws even incorporate features to quickly stop a blade, reducing the risk of injury from a saw kickback.

### Stay Connected

Some battery tools coming to the market now have Bluetooth connectivity, which can connect to a fleet tracking system. For battery products, sensors record data like runtime, service intervals, and if the battery

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is approaching an overheat situation. This smart technology helps keep equipment in top performing shape and reduces downtime.

In the end, it all comes down to the right tool for the project. Having different power options ready to go in your fleet, and thoroughly understanding a project's need, can help you select the correct tool.

*Husqvarna Construction is a market leader in equipment and diamond tools for the construction and stone industries. The battery product range includes the K1 PACE power cutter, K 535i power cutter, WT15i water tank and BLi battery series. For more information, please visit [www.husqvarnacp.com](http://www.husqvarnacp.com).*



## The Importance of EHS Managers

By: Mark Critchfield



**M**ost of the larger general contractors that CSDA contractors work for have full time Environmental, Health and Safety (EHS) managers on staff. These EHS managers are specially trained to manage permits, protect the workers and their companies and carry a lot of clout while managing the jobsites. They are risk managers for the company and must know the details of regulations mandated by EPA, OSHA and others.

Slurry management will fall into this category. As a subcontractor working on a high profile or environmentally sensitive

projects, reach out to the jobsite EHS manager to see what is planned for compliance with the SWPPP rules.

Below, we will discuss how concrete slurry is addressed in each of these subcategories:

### **E = ENVIRONMENTAL**

The Storm Water Pollution Prevention Plan (SWPPP) is a required written document on file at the job trailer that will spell out the details of stormwater events, drainage protection and slurry disposal. All contractors are subject to these rules for prevention of job site water runoff. Many projects have

a designated slurry bin for dumping wet vacuums. If not, a good solution is to solidify the slurry to transport to a construction dumpster. Always attempt to leave slurry on the jobsite to prevent transfer of ownership to your company in case it contains residual hazardous waste. Another recent procedure being utilized is the use of flocculants to allow rapid settling of slurry solids so the water can be reused multiple times. This reduces the need of carrying large amounts of water to the job and also reduces the environmental impact of disposal. The EHS manager will appreciate this process and will recommend your company for future work.

## H = WORKER HEALTH

Concrete slurry is classified as Hazardous under the EPA Clean Water Act, due to the high alkaline level of over 12pH, and heavy metal contaminants. This pH level is similar to the caustic level of drain cleaner and can cause dermatitis or burns over time. Prevent skin contact, especially soaked pants that lay against your legs for an extended period of time. Also be cognizant of dust and slip hazards around the other trades working around you. They may not be aware of the hazards being produced. Even when using water as a coolant and dust suppressant, there is significant airborne silica dust that escapes the blade guard. Manage this by adjusting water tips to get the most efficient blade coverage as possible. Bring water tips into direct contact with the blade core to allow surface tension to sling water down toward the segments. EHS managers will be looking for airborne dust and slurry runoff in your work area and can enforce changes in procedures to protect workers.

## S = WORKER SAFETY

As everyone knows, CSDA contractors work in many hazardous conditions and safety procedures are discussed on a regular basis. Slurry Management is part of the daily routine. Be aware of slurry water on the slab and the slip and fall hazards. Electrical connections should be guarded, and cord condition checked. EHS managers normally have jobsite safety meetings and always have the right to shut down the operation anytime to correct violations and can even force you off the jobsite.

Remember, the CSDA contractor is the wastewater generator and is the responsible party along with the guidance of the general contractor and owner, so sawing and polishing companies must continuously instruct all their workers to adhere to these rules stipulated by the onsite EHS manager. This will help to avoid Environmental, Health and Safety liability for all workers, the companies they work for, and will make the project go smoothly and more professionally.

*Mark Critchfield is the owner of CSDA member company Slurry Solutions. He can be reached at [sales@slurrysolutions.com](mailto:sales@slurrysolutions.com) or 573-219-7330.*



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# LISSMAC

CONSTRUCTION TECHNOLOGY



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# GRAND HOTEL REDEVELOPMENT

**T**he city of Toronto, Ontario, Canada is experiencing a growth in hotel redevelopments in its downtown core from the construction of new, boutique style hotels, to high-end residential condominiums. One of the major projects is the demolition and redevelopment of the Grand Hotel, located at 225 Jarvis Street. The Grand Hotel has significant historical importance to the area. Originally built in 1972, it served as the headquarters to the Royal Canadian Mounted Police until 1993. Later, it was converted into a 177-suite hotel. Plans to redevelop the property proposed the addition of a 45-story condominium tower, integrating the existing 17-story structure adjacent to the building.

GFL Environmental, based out of Toronto, is a leading North American provider of diversified environment

solutions. They were awarded the contract to complete the initial abatement, and strategic structural demolition of the hotel. GFL Environmental and CSDA member Ontario Cutting and Coring Ltd. (OCC) have had a close working relationship on several previous, complex projects. For this reason, OCC was consulted to evaluate the plan and develop the safest, most cost effective and efficient methodology to complete the concrete cutting of the structural components of the building.

The existing 17-story Grand Hotel structure required both interior and exterior demolition to move forward with the development. Demolition proceeded ahead of the massive tower construction. Due to strict municipality construction and Toronto's Tall Building guidelines that limit space between buildings under construction, OCC began by scanning the area using ground penetrating radar (GPR) with a GSSI Structurescan Mini XT to confirm the locations of pre- and post-tensioned cables and rebar. GFL's engineer and Chris Volpe, Vice President of OCC, then used the data to develop optimal cutting procedures. The location of the

cuts had to be marked to ensure the structural integrity of the remaining floor areas would not be compromised, but also allow for floor slab removals. Once the building was scanned, demolition commenced.

GFL completed all interior removals, including decommissioning of electrical and mechanical systems, abatement and non-structural removals. GFL proceeded with this work floor by floor ahead of OCC. The engineer and OCC operators reviewed cut sizes, equipment capacity and crane selection that could not only handle the work, but also fit into the building. This all factored in to determine maximum size of concrete blocks that could be cut. OCC utilized GFL's tower crane to lift the necessary equipment and supplies to the roof. OCC then used a combination of wall, slab and wire saw equipment to cut and remove pieces all under the strict guidance of a structural demolition engineer.

OCC completed suspended floor slab, walls, T-Beams, ring beams and column cuts from the 17th floor (roof level) to the 3rd floor, working their way down. There were challenges getting staff, equipment, supplies and water to the roof, as there were no elevators in service and only a single crane on site. All major pieces of equipment being lifted were coordinated by booking the tower crane in advance. As power to the building and elevators were shut off, staff had to climb

17 floors to the roof and downward as work progressed. Dispatch Manager Nate Rogers and Operations Manager Mark Zapparoli joked that OCC tended to mobilize their younger staff for this work. The staff were exposed to high wind and cold weather conditions as work commenced late fall. Additionally, the exterior blocks of the building were removed, exposing everyone to the elements. The cutting had to be planned in a way to ensure wind was blowing away from the wall/slab/beam that was being cut.

The OCC team used Diamond Products FZ-4S wall saw with a 72" blade, Husqvarna WS482HF wall saw and a Hilti DST20-CA wall saw, both of which were equipped with Diamond Products Tactical Grain Distribution blades, to begin wall sawing the roof and penthouse floor wall. A Diamond Products CSH24 Chain Saw and a Husqvarna WSC40 chain saw with Diamond Products Heavy Duty DCCP9824PG diamond chains were used for cutting the tight concrete areas. A Diamond Products Core Cut WS50-XLE High Cycle, Husqvarna CS10 and Hilti WS3018 wire saws with Diamond Products DWHP2S diamond wire were also utilized by the OCC team for the T-Beam, Ring Beam and column removals. A Husqvarna 7000 Series hand tool and a Diamond Products Pro Series 25" Flush Cut 5803016 hand tool dismantled the tight areas. Core drills were needed to





eliminate overcutting. Diamond Products M2A-23-DK22 Anchor Drill Rigs with Diamond Products Premium Black Turbo TPOWL core bits were used to drill thousands of holes of various sizes. Finally, a Diamond Products Core Cut CC7574DDC-48 deck saw with Diamond Products TGD CMPTGDR blades was used to slab saw the floors.

The 3rd floor was completed using a more traditional demolition technique, hammering, by GFL.

Each floor demolished was similar in composition and included 28 columns each, weighing a whopping 9 tons per column, as well as a 50-ton T-Beam. Each floor also had 14 Ring Beams removed weighing 8 tons each, and nine infill slabs, each weighing 20 tons. The two penthouse structures that were removed each weighed 350 tons.

During operations, an engineer from GFL was on site to inspect the procedures. Engineered drawings were prepared and submitted to the owner's engineer for review prior to any dismantling. Daily onsite, pre-work staff meetings were held at the start of each day to review daily work activities and coordinate crews working in specific locations. Any Job Hazard Analyses (JHA) were adjusted to reflect specific daily activities and revised as job conditions changed. The Ministry of Labour required PPE, including a hard hat, safety vest, 8" high CSA approved boots, safety glasses and harness be worn by staff at all times.

With the size of their organization, OCC dispatch manager, Nate Rogers, was able to manage the required crews based on the anticipated scope of work, weather conditions and GFL workforce to assist OCC. The core group dedicated to this project included Mark Zapparoli, Dean O'Leary, Kyle Petrie, Mario Tricarico, Joe Tomiczek and Jeremy Stade.

Concrete cutting was implemented over traditional demolition methods due to the height of the building and proximity of adjacent buildings, as the tight working conditions and noise restrictions were heavily mandated. Noise from traditional operations would have been excessive and would have led to noise bylaw complaints. At the upper levels exposed to the environment, it would have been nearly impossible to control the dust that was being created. Saw cutting after scanning to confirm structural components was the safest and fastest way to demolish the building systematically. The scheduling time constraints made using other procedures almost impossible. No other alternative methods were considered for demolishing the Grand Hotel, primarily due to those reasons.

Naturally, various challenges arose during this colossal project. The difficulty to mobilize large equipment needed to complete work and remove concrete in such a confined space was a challenge only solved by scheduling the single crane



available to fly the necessary equipment to the top of the building, and then transport it from floor to floor as each floor was dismantled. The OCC team also pre-booked the crane to support and remove the cut blocks for disposal on the ground. This project also required a generator and fuel, as power was not available in the building during construction. Thankfully, GFL assisted with the coordination of their fuel deliveries with OCC requirement.

Exposure to the Toronto weather conditions, including wind, snow and rain over the 10-month period also played a huge factor in this project. The trained tower crane operator evaluated weather conditions each day and had control of



the site, determining operating conditions. The large, open area, sometimes as high as 17-stories off the ground and fully exposed to the elements could be tricky, but the OCC team ensured there were safety rails and well positioned anchor locations for safety harnesses to allow for the proposed cuts.

Despite the numerous challenges, The OCC team completed their portion of the demolition over a 10-month period, within the quoted timeframe and under budget. Based on their strong working relationship, quality of work and satisfaction of their safety protocols, GFL has continued with OCC into the next phase of the project, which will include scanning and precuts of the remaining floors.



David Ohashi, general manager of OCC was delighted by the success of the project and said, “Any time the client is happy with our work, we are happy. First and foremost, there were zero safety infractions, incidents or injuries. Through challenging projects, we were able to work cooperatively without any disputes. The culture was nurtured between GFL and OCC corporate management as they were continuously onsite to ensure the project was moving forward smoothly.” OCC would like to acknowledge GFL Environmental for their confidence in Ontario Cutting and Coring Limited and especially their field staff who assisted us to complete this project safely and efficiently. The assistance of John Hickman of GFL was tremendous to the success of this project.

OCC believes they were selected for this project because they provided key, initial technical advisory services and developed cost and time efficiencies within the dynamic phases of the project. GFL gained trust and confidence in OCC through successful challenging and complex projects in scanning, cutting and coring concrete. OCC offered the senior most experienced staff and commitment to deliver this project and offered cost effective pricing which was important for this tight budget. CSDA members show their value to the community through their commitment to safety, trustworthiness and dedication to completing challenging projects through collaboration.

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## COMPANY PROFILE

The family-owned business was founded in 1973 by President Tony Zapparoli, who quickly made a name for himself in the industry by taking on even the most challenging jobs with a personal level of service. Under Tony’s guidance, his son Mark Zapparoli manages the field operation side of the business along with Tony’s stepson, Chris Volpe, who is responsible for the overall management of the business including personally being involved in all major tenders, equipment selection and manpower. The company is based out of Mississauga, Ontario, Canada, immediately west of Toronto. With a fleet of over 30 trucks, they have a dedicated loyal field staff of 40 men, of which many have been with the company for over 20 years. They recently opened a new branch office in Canada’s capital city; Ottawa, Ontario being managed by Aaron Rosenberg. They have been members of CSDA for over 20 years.

OCC has gained a specialization in bridge demolition and large-scale transportation, infrastructure, high rise, water/wastewater, hydro, coal and nuclear facilities. OCC is retained for many of the complex projects in Ontario and have been used across Canada by a number of the largest contractors in the industry.

## RESOURCES

**General Contractor**  
GFL Environmental Inc.

**CSDA Contractor**  
Ontario Cutting and Coring Ltd.

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**Tel:** 905-279-2660

**Website:** www.OntarioCuttingandCoring.com

## Methods Used

Selective Demolition, Wall Sawing, Wire Saw, Slab Saw



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## 6 Commercial Spaces That Benefit from Polished Concrete Surfaces

By: Todd Gillman



**T**he flooring in commercial spaces faces a unique set of challenges not met by private residences. For example, it must be able to stand up to increased foot traffic, more accidents, and frequent vehicle traffic--all while providing an attractive appearance that meshes with the interior ambiance. To this effect, polished concrete is one of the most advantageous products on the market today. The following breakdown looks at how various commercial spaces can benefit from polished concrete surfaces.

### 1. HIGH SCHOOLS AND UNIVERSITIES

There is arguably no commercial space that will see heavier foot traffic than a high school or college building when class is dismissed. The hallways become a veritable sea of hundreds of students stampeding to make it to their next class on time, spilling drinks and snacks along the way without

the time or tools to clean them up. As a result, flooring in these spaces needs to be extremely durable and stain resistant, fending off damage until the custodial staff can arrive.

In addition to the durability and ease of maintenance that a polished concrete floor provides, it has some other benefits that are especially appealing to academic institutions, including:

- Versatility in finish, with the concrete capable of being stained to create a warmer, more inviting aspect than many other commercial hard flooring options

- Great for ADA compliance, as wheelchairs and motorized carts can easily move across a polished concrete surface to accommodate students with disabilities

- Non-toxic and does not harbor allergens, helping ensure interior air quality and protecting the health of building inhabitants

### 2. INDUSTRIAL STYLE OFFICES

The industrial-style office is exploding in popularity as commercial office design continues to migrate away from the cookie cutter office cubicle in favor of spaces that have more character and unique features. Some of the key hallmarks of the industrial office include:

- Large, metal tables and workstations
- High ceilings with prominent wood or metal rafters

- Exposed pipes in the office bathrooms
- Rustic wood shelving and metal storage baskets in place of traditional desk drawers, filing cabinets, or bookshelves

When all of these points are considered, it is clear how concrete flooring can seamlessly mesh with this rugged style of interior design.

### 3. RESTAURANTS AND BREWERIES

In addition to the obvious benefits of being able to withstand the foot traffic and food and beverage spills that dining establishments deal with in high frequency, there are a couple of other benefits that make polished concrete a strong choice for restaurants and breweries:

Polished concrete is very difficult to chip or scratch. As seating arrangements are constantly being rearranged inside of dining establishments, with chairs and tables being dragged and pushed to meet the needs of the next party, it is critical to choose a flooring that not only lends itself to this frequent rearrangement but will not show signs of damage from maneuvering furniture

Many contemporary restaurants and breweries are being designed with large windows and garage-style doors so that the exterior patio can be easily connected with interior seating to create natural, fresh-air spaces. Therefore, it is crucial that the flooring can not only transition well between the interior and exterior but also be resistant to UV damage

### 4. STORAGE UNITS

Statistics reveal that more than 1 out of every 10 Americans rent off-site storage for their sea of possessions, representing the fastest-growing segment in the commercial real estate industry over the past four decades. And as the cost of housing continues to increase at a record clip in 2021, people are being forced to relocate and downsize their dwellings, causing huge interest in tiny homes and van-style living and the need for more off-site storage space for furniture and electronics that will not fit in their residence.

Therefore, storage units can no longer be oversized boxes to cram unwanted inheritances and tacky knick-knacks. Consumers want modern storage units to feature the most fire-resistant building construction types, come equipped with climate controls and insulation, and have flooring that will not degrade over time or buckle under heavy pressure, causing damage to expensive possessions, making polished concrete one of the best materials for contemporary storage units.

### 5. RETAIL SPACES

Building managers for retail spaces must be able to efficiently change the face of a location when one patron moves out and a new business moves in. Polished concrete will stand up admirably as



motorized carts and forklifts come to move out inventory from a departing business and set up for a new one, providing a versatile, attractive appearance that requires little maintenance during this transition.

### 6. HOSPITALS

Hospitals are another type of commercial building in which ADA accessibility should be a primary focus, as a larger-than-normal percentage of visitors will be entering via wheelchair and motorized cart. In addition, medical personnel must be able to easily wheel beds and carts from one location to another, making the even durable surface of polished concrete ideal for this purpose.

In addition, as many hospital patrons will have difficulty evacuating the building in the event of a fire, the elite fire resistance

of concrete should make it a primary choice in medical facilities.

### CHOOSE POLISHED CONCRETE FOR YOUR COMMERCIAL BUILDING TODAY

Polished concrete offers a number of unique benefits to commercial spaces, such as elite durability, unmatched fire resistance, and a versatile appearance that goes well with a number of projects. From high school hallways to hospitals, industrial offices to restaurants, polished concrete is the ideal choice for a wide array of commercial properties.

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*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.*



## Introducing the Husqvarna Construction Experience Center



Husqvarna Construction, a market leader in equipment and diamond tools for the construction and stone industries, has recently opened the Husqvarna Construction Experience Center - a new training center in part of their North American headquarters located in Olathe, KS.

One of Husqvarna Construction's core beliefs is offering training programs for

our customers- to expand their knowledge and expertise. That is why we have been offering multiple types of training opportunities to our channel partners, contractors and employees since day one.

In 2020, construction was underway for our new training facility, the Experience Center.

The new 15,000 sq ft center will be utilized to deliver a hands-on product learning experience for all existing Husqvarna, Blastrac and Diamatic products. Training areas include: two education classrooms, technical instruction room, indoor and outdoor demonstration areas and a Blastrac classroom.

The primary training focus will consist of concrete placement, concrete drilling and sawing, technical certification programs, Husqvarna polish systems and Blastrac surface preparation.

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## Charlie Cunningham Named Vacuworx VP of Sales

Charlie Cunningham with Vacuworx has been promoted to Vice President of Sales from Senior Director of Sales for the North America region. Cunningham joined Vacuworx in January 2020. He now leads a global force of Vacuworx lifting systems sales professionals focused on diversity of geographic location and diversified product lines of vacuum lifting equipment and material handling technologies.

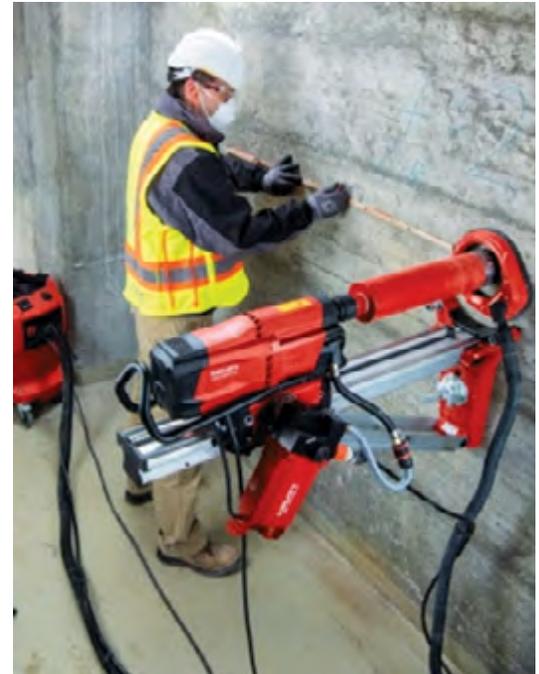
With remarkable sales management experience and an intensive product training background, Cunningham has been influential in unlocking dealer markets via the development of marketing initiatives with robust information flows—driving greater continuity of relationship among Vacuworx customers, dealer organizations and sales representatives.



Charlie Cunningham

Vacuworx lifting systems cover a range of diverse market segments with versatile material handling solutions for the oil and gas pipeline construction, utility infrastructure, steel fabrication, precast concrete, civil construction, hardscape and quarry and concrete renovation industries. Based in Tulsa, OK, Vacuworx is a leading provider of vacuum lifting technology for the oil and gas pipeline and construction trades worldwide.

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## Hilti Unveils Automated Core Drilling Solution; Complete System Minimizes Manual Work on the Construction Jobsite

Hilti North America, an innovator of tools, technology, software and services to the commercial construction industry, has unveiled a semi-autonomous core drilling solution. The DD 250-CA diamond core drill paired with the Cut Assist Auto Feed unit gives the operator an assisted experience by intuitively guiding the drill through the entire drilling process. With this semi-autonomous drilling system, contractors can achieve significant productivity gains and convenience on jobsites.

"We want our customers to experience efficiency at its best so they can stay on time and on budget," said Matt Jackson, Sr. Director of Electric Tools & Accessories at Hilti. "Utilizing a connected (i.e., 'smart') diamond drilling solution will result in a greater output and at the same time help ensure workers are operating in safer environments. This is the fastest and safest way to core in the industry, from start to finish."

The DD 250-CA diamond core drill leverages integrated technology to provide the operator guidance for proper drill setup, real time drilling feedback and valuable productivity data once the drilling is complete. The smart tool has unmatched range in its class for all applications including drilling penetrations for ducts, pipes and cables and drilling blind holes for setting anchors or post-installed rebar.

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## Husqvarna Construction is Here to Help

Husqvarna Construction, a market leader in equipment and diamond tools for the construction and stone industries, has opened two new service centers across the United States.

Husqvarna Construction is proud to announce the opening of two new service center locations! These new service centers are conveniently located to accommodate the most customers and offer service-minded, knowledgeable teams that provide world-class service and support.

Knoxville Regional Service Center  
4139 Appalachian Way  
Knoxville, TN 37918  
8:00 a.m. - 4:30 p.m.  
Philadelphia Regional Service Center  
622 Grant Rd.  
Folcroft, PA 19032  
7:30 a.m. - 4:00 p.m.

Customer uptime is the primary focus, and service centers are designed to keep Husqvarna equipment functioning properly for many years. Husqvarna customers can expect a dependable service team equipped to resolve all product issues. Each service center is staffed with professional service technicians that understand Husqvarna products inside and out. They are trained to perform repairs on all Husqvarna equipment and patented technology.

### For More Information

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## SlurryMonster is Now in MasterSpec

SlurryMonster, LLC., a slurry management and waste disposal company, announced they have created and received sole specification within MasterSpec for the management, compliance and waste disposal relating to slurry. This is also the first time a slurry management company has been awarded its own section.

Of the company's recent success, SlurryMonster's CEO, Ryan Klacking said, "Becoming a part of MasterSpec is becoming a part of history. With our own category, we are paving the way for slurry waste and disposal. Having this be recognized is one of my proudest moments."

Under section 017419.19 within MasterSpec is dedicated solely to SlurryMonster, LLC., at this time. This section covers the following:

- a. Removal, disposal, and compliance of concrete slurry waste materials
- b. Loading, securement, hauling and coordinating of removal of concrete slurry

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### Screening Eagle Announces FreePath GS8000 Software Release

Screening Eagle Technologies formally known as Proceq, has taken their game changing underground utility location GPR system and made it even better with the release of FreePath.

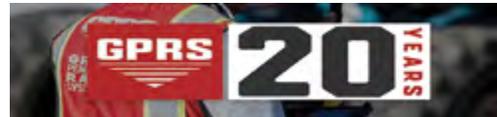
FreePath is a new software feature for the Proceq GS8000 Subsurface Mapping system that combines corrected GPS location capabilities with the high-quality data from Stepped Frequency Continuous Wave GPR. This combination of technologies results in a true subsurface mapping system with less than 5cm accuracy. Operators now can see themselves on a map while collecting data real time. There is no longer the need for grid spacing or cross directional data collection that makes mapping the subsurface more user friendly than ever before.

These enhancements will change your subsurface mapping workflow forever:

- Results are tied to the local GIS platform you select
- Multiple views during collection, review 2D data while mapping or view 3D data on satellite view or standard map
- Easy reviewing of findings, allowing users to fill in and label utilities at depth for reporting exports
- Add target designations from complimentary technologies with marker lines added to your collection map
- Export your data in SHP, DXF, KML, HTML and URL formats

FreePath is a welcome addition to a comprehensive app-based package that allows data manipulation in the field and cloud-based storage to enable real time report sharing between the jobsite to the office, and directly with clients. Additionally, FreePath allows you to manage your team and project data from your PC with Workspace, the online portal to your projects and equipment.

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### GPRS Celebrates Their 20 Year Anniversary

GPRS announces its 20th anniversary as the industry-leading subsurface investigating contractor. Focusing primarily on utility locating and concrete scanning services for varying construction projects, GPRS founder and CEO, Matt Aston, started this journey with a single ground penetrating radar system and the headstrong will that is needed to create a successful business.

Over the last 20 years, GPRS has grown into the industry-leading, subsurface investigations provider, with more than 300 Project Managers nationwide. Since its inception in 2001, GPRS has expanded beyond utility locating and concrete scanning services. As the industry changed, GPRS had two choices: continue to grow, or be left behind. Therefore, within the last few years, Matt Aston and his GPRS team expanded their services to include Video Pipe Inspection (VPI) and Facility Mapping and Modeling. And with the addition of SiteMap, GPRS' cloud-based facility mapping deliverable, the company continues to provide knowledge and experience for all their clients.

Through continuous growth, GPRS has made safety their number one goal. Matt Aston set out to create a world with a hundred percent damage prevention. To achieve this goal, Aston implemented the utilization of SIM-qualification, which encompasses not only top of the line technology, but intensive classroom training and on-site Project Manager mentorship. And through SIM, GPRS has achieved a damage prevention rate of 99.8%, an industry-leading statistic that places this company above competitors.

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### Get Closer to the Drilling and Sawing Industry Through the IACDS Yearbook 2021

The IACDS Yearbook 2021, the third edition of this publication, which provides an overview of the international drilling and sawing industry, is now available.



On this occasion, the publication focuses on innovation, a topic of great interest to professionals in the sector. Thus, in its pages we can find the vision of the national associations that are members of IACDS and other associations and entities.

Likewise, there is also an important space to highlight the different initiatives carried out by IACDS and for some articles focused on specific topics, such as training, written by professionals in the sector.

The IACDS Yearbook 2021 is now available for online consultation, accessible from any device and for request for hard copies.

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**[www.iacds.org](http://www.iacds.org)**



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### Brokk Launches Brokk Connect 2.0

Brokk launches Brokk Connect 2.0, the next step in the online platform for connected Brokk robots that was launched earlier this year. This version includes several new features, such as a sophisticated geofencing function, user customization of the platform and a weekly status report that helps Brokk owners to stay up to date on their fleet's status. Most importantly, with Brokk Connect 2.0, the service is now available all over Europe and North America.

Brokk Connect 2.0 delivers several new features. These include a sophisticated always-on geofencing functionality that helps Brokk owners keep control of their fleet of machines and assists the owner in case of theft or unauthorized use. It is now also possible to customize the online platform based on personal preference and receive weekly status reports on Brokk robots to make sure everything is up to date.

"As we said when we announced Brokk Connect, it is a solution that we will continue to develop and expand," said Martin Krupicka, CEO of Brokk Group. "Brokk Connect 2.0 is now the next step, but it is definitely not the last. Connected machines and all their benefits are here to stay."

One of the key benefits of Brokk Connect is providing access to real-time information about the location of the robot, the status, operational data and any need for attention. Brokk Connect also lets owners leverage the data to manage fleet utilization and optimize project planning. Finally, combined with a Brokk Uptime service contract, Brokk will monitor the machines' status, as well as troubleshoot any issues remotely and proactively. Machine uptime is maximized, and the robot is always ready for the next job.

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### First Safety Summit Held

The American Society of Concrete Contractors (ASCC), St. Louis, MO, and the Tilt-Up Concrete Association (TCA), Mt. Vernon, IA, held their inaugural ASCC/TCA Safety Summit in Houston, TX, on November 12, 2021. The event brought together those responsible for safety in their companies for a day of information exchange. Safety professionals from ASCC and TCA members across the country came together to share best practices and their most daunting challenges," says Bev Garnant, executive director of the ASCC.

The summit opened with keynote speaker, Tim Manherz, operating manager, Encore Concrete Construction, Houston. Manherz is a winner of ASCC's prestigious Owner/Executive Safety Award, a past president of TCA, and a board member of ASCC. The remainder of the day was devoted to breakout sessions, the heart of the program. Attendees discussed Medical Case Management, Safety vs. Production, Medical Marijuana on the Job, Root Cause Analysis and Implementing Change, among other topics. "The goal was for every attendee to leave armed with new ideas and contact information from fellow members, eager to continue the conversations, and with renewed energy for keeping their companies safe," says TCA executive director Mitch Bloomquist. "I have no doubt this is exactly what took place."

The ASCC is a non-profit organization dedicated to enhancing the capabilities of those who build with concrete, and to providing them with a unified voice in the construction industry. Members include concrete contracting firms, manufacturers, suppliers and others interested in the concrete industry, such as architects, specifiers and distributors. There are approximately 720 member companies in the United States and 12 foreign countries.

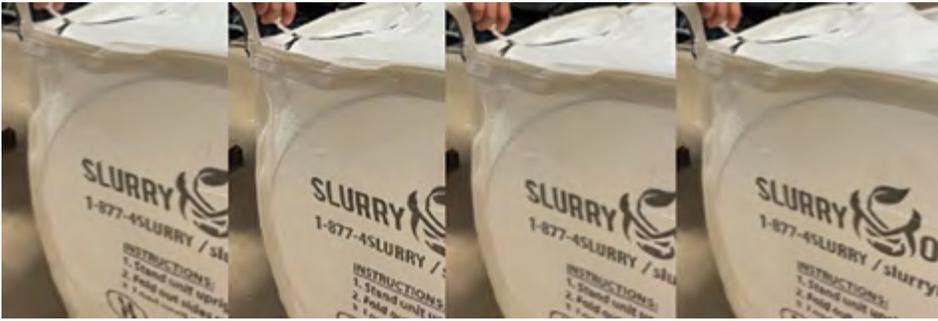
The Tilt-Up Concrete Association (TCA) is the international nonprofit trade association for the global tilt-up concrete construction industry and was founded in 1986 by a dedicated group of contractors, professionals and manufacturers with the interest of improving the quality and acceptance of tilt-up construction. For more information, please visit [www.tilt-up.org](http://www.tilt-up.org).

**For More Information**  
**Contact: Beverly A. Garnant**  
**Tel: 314-962-0210**  
**Email: bgarnant@asconline.org**  
**www.asconline.org**

### Andy Weyrens Joins DDM Concut's Sales Team

DDM Concut is pleased to announce that Andy Weyrens has assumed the role of Territory manager. Andy will be responsible for the North Texas market. Andy has a strong background in technical sales. Andy has considerable experience in the construction industry having worked with Penhall, DPR and most recently with Gunit Supply. Andy's hobbies include golf, hockey, and bowling. He lives in McKinney, TX along with his wife and 10-year-old daughter and they are expecting another child in the spring.

**For More Information**  
**Contact: Andy Weyrens**  
**Tel: 214-206-6311**  
**Email: aweyrens@ddmconcut.com**  
**www.ddmconcut.com**



### Totes That Make Sense

It's time to make the switch from bulky IBC totes to SlurryMonster's ZipPack™ Totes. Not only do these totes allow the customer to hold the same amount of waste as an IBC tote, but slurry can also be treated in them, or even use them as holding containers for water on site.

These totes are made to work for customers. Some of the great benefits and features of the ZipPack Tote include:

- Self-standing – reinforced sides ensure sturdiness
- Glued in liner means they won't drip
- They'll hold up to 3,000 lbs. or 275 gallons
- Zip tight enclosure provides added protection
- UN-Rated – they're landfill ready
- Forklift straps make it easy to transport
- Compact and foldable – they save space

#### For More Information

Contact: Sarah E. Bryan  
 Tel: 248.210.1936  
 Email: sarah@slurrymonster.com  
 www.slurrymonster.com

### Born and Reborn in Texas

Expert Equipment Company (EEC) of Houston, TX introduces as part of its Expert Diamond Tool line, a newly developed and locally in house assembled core bit line (Born In Texas). The core bits in stock range from 7" to 24" with larger diameters available by special order. The same applies for refurbished core bits local cutters drop off for retipping services (Reborn in Texas). The value chain remains local and the service including turnaround time remains unmatched.



#### For More Information

Contact: Markus Bartl  
 Tel: 713-797-9886  
 Email: info@expertequipment.com  
 www.expertequipment.com

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### IACDS Diamond Award 2022- Your Works and Products Merit an International Recognition

Submissions for the Diamond Award 2022 are now open. There are two categories in this international competition: job and products. With this, IACDS seeks to recognize the expertise of contractors and the innovation of manufacturers. All this while, of course, promoting best practices and the professionalization of the drilling and sawing activity around the world.

**Who Can Participate?** Companies that carry out drilling and sawing projects and equipment manufacturers for drilling and sawing. All companies, IACDS member or non-member, are welcome.

**What Can be Submitted?** Any kind of drilling and sawing product and job carried out between April 11, 2019 and June 30, 2022.

**When?** The submission period is open now. The deadline is June 30, 2022.

**For More Information**  
**Contact: IACDS - International Association of Concrete Drillers and Sawers**  
**Tel: (+34) 911 294 440**  
**Email: [info@iacds.org](mailto:info@iacds.org)**  
**[www.iacds.org](http://www.iacds.org)**

### Fieldwire Joins Hilti to Establish the Leading Construction Jobsite Management Platform

Hilti Group, a global leader in innovative tool and fastening solutions, technology, software and services for the commercial construction industry, has entered into an agreement to acquire Fieldwire, a San Francisco-based construction technology company for an approximate \$300 million. The strategic acquisition will bring together Fieldwire's best-in-class product and Hilti's global brand and market reach to help drive productivity at contractors and on construction sites. Fieldwire provides a leading platform for jobsite management that powers more than a million jobsites worldwide.

"The acquisition of Fieldwire will accelerate Hilti's capability to deliver productivity to our customers through software solutions. Since digitalization has become a major driver of productivity in construction, Hilti has been investing in digital solutions for construction professionals. This acquisition will strengthen our software portfolio and is a logical step towards our vision of becoming the leading digitalization partner for our customers. We intend to continue investing in the platform to create the next market leader in construction project management software." said Christoph Loos, CEO of the Hilti Group.

With Hilti's support, the team at Fieldwire will expedite the work on building the preferred digital solution for construction professionals in the market. Not only will all current Fieldwire team members be invited to stay with Hilti Fieldwire under the continued leadership of the two founders, Yves Frinault and Javed Singha, but additional efforts will also be made to significantly grow the team.

**For More Information**  
**Contact: Danielle Wilson**  
**Tel: 972-202-6178**  
**Email: [Danielle.Wilson@hilti.com](mailto:Danielle.Wilson@hilti.com)**  
**[www.hilti.com](http://www.hilti.com)**

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## OPERATOR CERTIFICATION

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

## MINIMUM REQUIREMENTS

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



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

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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

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Seven Hills, NSW, Australia

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Fairmont, WV.

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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

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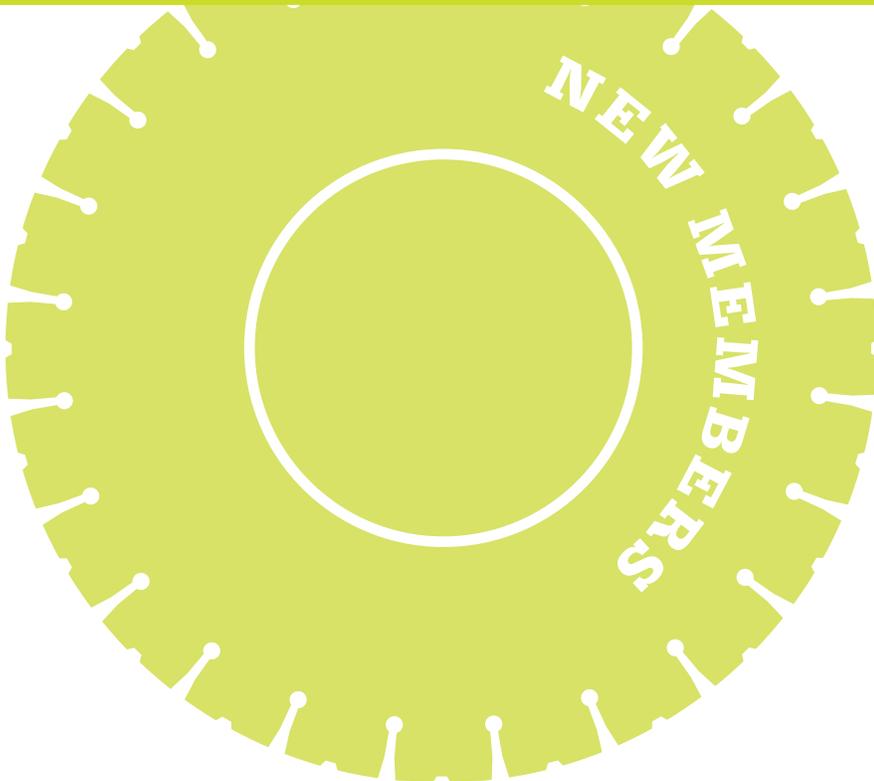
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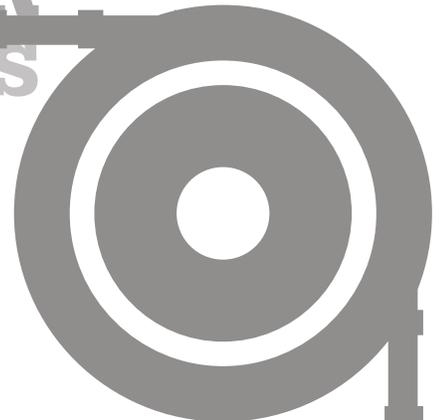
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**STRAIGHT LINE SAWING & CORING**  
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# MEMBER BENEFITS



## 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

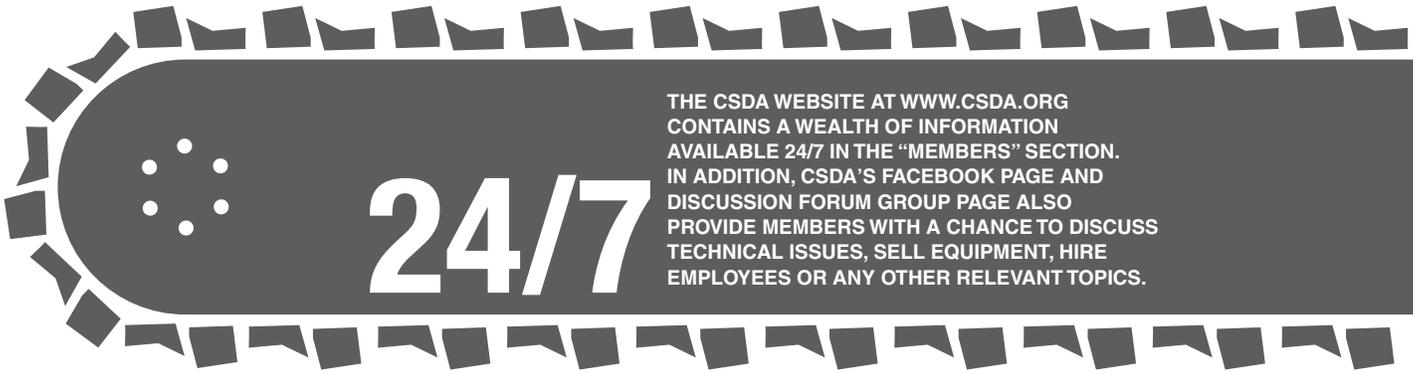
## NETWORKING AT THE ANNUAL CONVENTION AND QUARTERLY MEETINGS

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.



# 24/7

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

## TRAINING

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



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\$3 - 5M	\$2,335			\$4,425	\$3,330		
\$5 - 10M	\$2,955	\$3,705	\$7,375	\$5,985			
> \$10M							



For more information about CSDA membership, visit [www.csda.org](http://www.csda.org), call 727-577-5004 or email [info@csda.org](mailto:info@csda.org).



## Concrete Job Estimation & Bid Preparation Course

January 17–18, 2022

Las Vegas Convention Center  
Las Vegas, NV  
Te: 727-577-5004  
Email: info@csda.org

## CSDA Spring Board & Committee Meetings

March 28–29, 2022

The Scott Resort & Spa  
Scottsdale, AZ  
Tel: 727-577-5004  
Email: info@csda.org

## World of Concrete

January 18-20, 2022

Las Vegas Convention Center  
Las Vegas, NV  
Tel: 727-577-5004  
Email: info@csda.org

## CSDA Annual Convention & Tech Fair

March 30 – April 1, 2022

The Scott Resort & Spa  
Scottsdale, AZ  
Tel: 727-577-5004  
Email: info@csda.org

## GPR Certification Course

January 20, 2022

Las Vegas Convention Center  
Las Vegas, NV  
Tel: 727-577-5004  
Email: info@csda.org

## Chicago Build 2022 Expo

March 31–April 1, 2022

McCormick Place  
Chicago, IL  
Tel: 312-924-9772  
Email: marketing@chicagobuildexpo.com

## Canadian Concrete Expo

February 17–18, 2022

The International Centre  
Toronto, ON  
Tel: 519-300-2635  
Email: rod@exposition.com

## Bauma

Oct 24-30, 2022

Neue Messe München  
Muchen, Germany  
Tel + 49 89 949-11348  
Email: info@bauma.de

## New York Build 2022 Expo

March 2–3, 2022

Javits Center  
New York, NY  
Tel: 212-461-4253  
Email: info@oliverkinross.com

## CONEXPO-CON/AGG 2023

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Tel: 414-298-4116  
Email: pkaufmann@aem.org

# concrete openings



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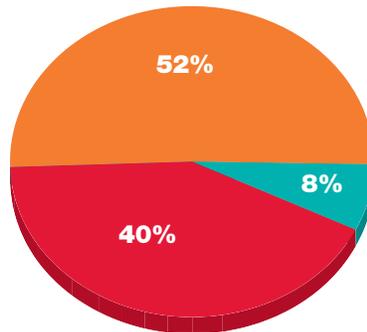
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### How Do You Reach 19,000+ Concrete Industry Professionals?

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.

### READERSHIP BY PROFESSION



- Specifiers
- Contractors
- Manufacturers, Distributors

### 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](http://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.



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

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Inside Front Cover, 30-31, Inside Back Cover	Diamond Products Limited	800-321-5336	jpalmers@diamondproducts.com
51	DDM Concut Diamond Tools	404-312-0770	ghenderson@ddmconcut.com
19	Diamond Vantage	866-322-4078	tlaidlaw@diamondvantage.com
49	DMI Tool's	385-449-2700	kristy0@dmitools.com
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2	ICS, Blount, Inc.	800-321-1240	jessica.gowdy@blount.com
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5	Real Power	317-443-0805	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](mailto:info@csda.org) for bulk pricing packages.

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**ERIN O'BRIEN**  
*Executive Director*

## Improvise...Adapt...Overcome

**S**ome of you will recognize this mantra of Paul de Gelder, Keynote Speaker at the 2018 CSDA Convention in Maui, also a Navy diver, shark attack survivor, author and all-around badass. His words struck me as I contemplated all that CSDA and our members have been through these past two years.

It's no secret it has been a tough go, with almost all of our member companies and everyone in the construction industry re-evaluating the way they do business. Our association is no exception. We canceled the 2020 Convention two weeks before it was to take place, as well as the following year, shifted our meetings to a virtual/hybrid model, scrambled to increase the member benefits we could offer online and virtually and dove deep to examine what was really important to the survival of our members, industry and association.

I think we have been extremely successful in these efforts – we are seeing a surge in membership, a whole new library of online training courses and safety resources and increased contractor member engagement due to the availability of these resources and the advent of hybrid meetings. Our industry is resilient, and there was never any doubt that we could overcome the challenges thrown our way.

We are continuing to improvise and adapt as well – the 2022 Convention & Tech Fair scheduled for Bermuda was recently relocated to Scottsdale, AZ due to travel restrictions to Bermuda. We are determined to hold our first convention in over two years, and hope that you all can join us in Scottsdale, March 28–April 1. Registration is now open, so make your plans to attend today! We cannot wait to reconnect and are excited for the future.

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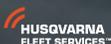
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