

Getting Back to Work

By Ted W. Sofis

THE SHUT DOWN

The COVID-19 Pandemic affected our lives in ways none of us have ever experienced in our lifetimes. I've been in construction for 45 years and I have never seen our economy shut down, businesses closed, or people required to stay at home. In 2001, the attacks of September 11th temporarily shut down air travel and the stock market, but the American economy remained intact and air travel resumed within a couple of weeks. However, COVID-19, has affected our lives in ways that we could never have imagined. Schools and universities were closed; professional, collegiate and high school sports seasons were suspended and canceled; and restaurants and businesses were closed. We were told to stay home and work remotely, if possible, and businesses across the country followed those directives.

In recent months, on bids that I've submitted, I dealt with estimators working from their homes. In Pennsylvania, we were issued stay at home orders and our offices were closed. Only essential and emergency work could be performed. Construction was not among the industries given an exemption. Initially, the wording from our governor was all but essential businesses were to be closed. Within a week that was amended to only "life sustaining" businesses could remain open. In other states, like Florida and North Carolina, construction work continued. And in Florida, I was informed, more DOT work was scheduled to take advantage of the decreased number of drivers on the roadways.

REOPENING THE ECONOMY

Counties in Pennsylvania were coded red, yellow, and green for the various stages to reopening. In Pittsburgh where I live, we moved into the Green Phase on June 5th, meaning that we could open and perform work as long as we observed the state's COVID-19 protocols. These mandated procedures included the



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SHOTCRETE HELMET PAPR PROTECTS AGAINST COVID-19

By Nick Quail

Shotcrete Helmet is the most advanced respirator for Shotcrete application today. It is also a very highly rated respirator for the protection against COVID-19, a virus transmitted by droplets. The challenge is to convince customers to wear a Shotcrete Helmet Powered Air Purifying Respirator (PAPR) instead of disposable masks, like N95 or filtering facepieces. Why? Because the Shotcrete Helmet PAPR respirator will offer a more secure form of respiratory protection.

Here are eight "talking points" of why a Shotcrete Helmet PAPR will afford you better protection against COVID-19 than N95 respirators or cloth masks:

1. The Shotcrete Helmet is a unique, compact "all-in-one" respirator system. You do not need visors, goggles, or other PPEs. It is a total and complete protective device without hoses, cables, or other accessories located on a belt. Batteries, blowers, and filters are all part of the Shotcrete Helmet itself.
2. Shotcrete Helmet's fan and filter air intake system is located at the back of the helmet. As a result, the air intake area is farther away from the potential droplets area. A dual set of powerful fans takes air in through the twin filters and pressurizes the air into the helmet.
3. Exhale air valves are located away from the mouth and nose of wearer and built into the lower area of the fabric collar. You can further protect the collar exhale valves from contamination by wearing coveralls with a collar.
4. The Shotcrete Helmet uses HE filters that are 99.97% - efficient against DOP (0.3 micrometers). This means it has a higher filter capacity than most common protective devices. Only PAPRs, such as the Shotcrete Helmet, can use HE filters. Most disposable masks used in healthcare are only 95% efficient. As the Shotcrete Helmet uses positive pressure, impurities are kept out by the pressure of filtered air and not pulled in by inhaling.
5. The Shotcrete Helmet differs from common respirators as it has a fixed visor that makes for zero risk of aerosol penetration.
6. No accessories, no hoses, no cables, no straps to avoid any contamination. The Shotcrete Helmet is easily washed and cleaned.
7. The user does not need to do a "fit test" as needed for common respirators. Anyone with beard, mustaches or eyeglasses can wear the Shotcrete Helmet.



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wearing of face masks, providing hand washing stations, cleaning and disinfecting surfaces, and equipment every day or every shift. As I drove home from the office on June 5th, I noticed that traffic was returning to normal for the first time in three months. Georgia and Texas began reopening long before we did. The timetables, for reopening have varied from state to state and in Pennsylvania, from county to county.

RETURNING TO NORMAL

So, questions remain. Where do we go from here? Will we be able to make up for the months we lost? How will the COVID-19 restrictions and procedures affect our productivity? In the northern US states and in Canada we lost a significant part of our construction season. As we ramp up our activities we can begin to address these questions and issues. I can't claim to have the answers to these concerns, but I do know this. Shotcrete work is difficult and it requires people with determination to perform the work. I've always felt that being a good shotcrete nozzleman requires certain personal qualities. There is a degree of toughness that all good nozzlemen seem to possess. It takes people with confidence and self-reliance and a certain amount of cockiness, to do the work we do, and to do it well. I have confidence that the work will get done. I believe when we get back into the swing of things we will make up for much of the lost ground. I say this because I know the people in the industry and the nature of who we are.



Ted Sofis and his brother, William J. Sofis Jr., are the Principal Owners of Sofis Company, Inc. After he received his BA in 1975 from Muskingum College, New Concord, OH, Ted began working full time as a shotcrete nozzleman and operator servicing the steel industry. He began managing Sofis Company,

Inc. in 1984 and has over 40 years of experience in the shotcrete industry. He is a member of various ASA committees and an ACI Shotcrete Nozzleman Examiner for shotcrete certification. Over the years, Sofis Company, Inc. has been involved in bridge, dam, and slope projects using shotcrete and refractory installations in power plants and steel mills. Sofis Company, Inc. is a member of the Pittsburgh Section of the American Society of Highway Engineers (ASHE) and ASA.

8. The Shotcrete Helmet reduces consumption of disposable masks, that means less cost of maintenance and less environmental impact.



Shotcrete Helmet



Nick Quail is a member of ASA and the President of shotcretehelmet.com, The St George Company. He started as the Technical Manager of The St George Company after receiving his BA from the University of Waterloo, Waterloo Ontario, then went on to become the President after buying the company in 2006.

Nick has over thirty years of experience in the respiratory protection business and supply's helmet respirators to all fields of industrial, medical and agricultural applications.

COVID Q&A

How has COVID affected your volume of work?

Our volume of work was not impacted. However, everything is online now and not in person or via travelling.

What COVID related changes are working well in your field work processes?

My "field work" was primarily in-person meetings. All of these are now replaced by web-meetings.

*Axel G. Nitschke, Ph.D., P.E. *, VP,
Tunnel Practice Leader (NATM), WSP*

How has COVID affected your volume of work?

We, mutually with the owner, had to cancel a large job due to COVID, since the measures and safety procedures we would have had to implement were too costly compared to our pre-COVID pricing.

What COVID related changes are working well in your field work processes?

All of our supervisors and crew are taking COVID seriously and are implementing the safety protocols necessary to protect themselves and those working around them. They understand that if anyone in the crew gets sick, they all have to be quarantined for 14 days.

What do you find most challenging in providing COVID protection to your crew?

The most challenging time was in mid to late March when it was very difficult to purchase respirators and face masks due to the lack of inventory. Thankfully, the unavailability of those items was short-lived.

*Randle Emmrich, President,
COASTAL GUNITE CONSTRUCTION COMPANY*