

Our Rock and Concrete Drilling Research ... as seen in ...

Academic Research Journals

Cooper M, Susi P, Rempel D [2012]. Evaluation and Control of Respirable Silica Exposure During Lateral Drilling of Concrete. *Journal of Occupational and Environmental Hygiene* 9 (2):D35–D41.

Rempel D, Star D, Barr A, Janowitz I [2010]. Overhead drilling: Comparing three bases for aligning a drilling jig to vertical. *Journal of Safety Research* 41(3):247-251.

Rempel D, Star D, Barr A, Blanco MM, Janowitz I [2010]. Field evaluation of a modified intervention for overhead drilling. *Journal of Occupational & Environmental Hygiene* (4):194-202.

Rempel D, Star D, Barr A, Gibbons B, Janowitz I [2009]. A new method for overhead drilling. *Ergonomics* 52(12):1584-9.

David Rempel, Demetra Star, Bilty Gibbons, Alan Barr and Ira Janowitz [2007]. Overhead drilling: development and evaluation of a new device. *Professional Safety*, November.

Trade Publications

David Frane, "ErgoMek Drill Boss: This rig holds one or more rotary hammers and is designed to boost productivity while reducing exposure to muscle strain, vibration, and silica dust." *Tools of the Trade*, 2/8/2014

Jeff Rubenstone, "World of Concrete: Ergonomic Drill Rig Reduces Vibrations." *ENR*, 1/22/2014

Mike Larson, "Physician Pressed for a Solution for Easing Shoulder Pain of Overhead Drilling" *ENR*, 1/12/2011

"WOC Participants Take Ergonomically Friendly Drill Jig for Test Drive." *Construction Superintendent*, 2/18/2014

From OSHA website

"Contractors Adopt Innovative Concrete Drill Jig to Reduce Physical Stress, Silica Exposure." Occupational Safety and Health Administration, OSHA.gov.

TOOLS OF THE TRADE
CONCRETE DRILLING AND BREAKING TOOLS
Hot Topics: Current Survey
From: Tools of the Trade 2014 | Posted on: February 8, 2014

ErgoMek Drill Boss
This rig holds one or more rotary hammers and is designed to boost while reducing exposure to muscle strain, vibration, and silica dust
By David Frane

The Drill Boss is the commercial device developed by research ergonomics at the University of Berkeley. It's a rig that holds a hammer, and is designed to be while reducing the operator's strain, vibration, and silica dust holding a rock drill or rotary tool stands off to the side and turns Boss that advances the tool in video below). Strain and vibration the rig. Dust is handled by the vacuum and shroud (or hollow choice). The purchaser supplies which need not be a particular models can be bolted into the rig. Holes can be drilled horizontally, vertically, and at between.

Is there a Drill Boss in your future? Probably not, unless your company drills hundred drills concrete on a regular basis. And there are companies that do that; most are involved with large commercial construction projects—which is where the device underwent testing. With a price tag of \$4,500, the Drill Boss is beyond the means of the average contractor. But large construction companies may buy them and one can hope that some of the rental yards will too.

ErgoMek Drill Boss

CONSTRUCTION SUPERINTENDENT
WOC Participants Take Ergonomically Friendly Drill Jig for Test Drive

The year of the World of Concrete, the Center for Construction Research and Training supported research that was conducted at the University of Berkeley. The new research rigging, and called the ErgoMek "Boss," is a new product from the team of David Frane and Alan Barr at the University of California, Berkeley.

The team, being near California construction sites after helping and possible long-term study with a similar rigging of other sites, will continue to make this boss a little easier to be equipped with a setting that can accommodate the rigging.

In addition, it's also an important to consider that the rigging is designed to be used in a variety of ways, including using the rigging to drill holes in concrete. This rigging can provide up to 100% of the rigging's power to the rigging.

Many did not think the rigging was a good idea, but it has been proven to be a good idea. The rigging is designed to be used in a variety of ways, including using the rigging to drill holes in concrete. This rigging can provide up to 100% of the rigging's power to the rigging.

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UNITED STATES DEPARTMENT OF LABOR
OSHA
Occupational Safety & Health Administration We Can Help

Contractors Adopt Innovative Concrete Drill Jig to Reduce Physical Stress, Silica Exposure

When drilling holes into concrete, the use of a rigging tool, the ErgoMek Drill Boss, can help reduce the physical stress and silica exposure to workers. The rigging tool, which is designed to be used in a variety of ways, including using the rigging to drill holes in concrete, can provide up to 100% of the rigging's power to the rigging.

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Building 101
Jeff Rubenstone is a contributor to ENR and ENR.com. He is based in New York.

World of Concrete: Ergonomic Drill Rig Reduces Vibrations
Posted by jeffrubenstone at 1/22/2014 5:39 PM CST

UCSF engineer Alan Barr (right) demonstrates his invention, the Drill Boss. In his work as a principal development engineer at the University of California, San Francisco, ergonomics expert Alan Barr has invented his share of devices to reduce worker fatigue and injury rates. His latest invention, the Drill Boss, is a vibration-reducing rig designed for one to two concrete drills.

"We're not trying to take the worker out of the loop," says Barr. "We need people to operate this. There's some feedback that goes into this work—you're not just a guy that knows 'I'm hitting rebar.' That comes from an operator still getting responsiveness."

While the Drill Boss offers feedback to the user, potentially harmful vibrations are significantly reduced. "Vibrations are reduced by a built-in compression spring and a rubber handle. By the time the vibrations reach

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To learn more contact principal engineer Alan Barr at Alan.Barr@ucsf.edu