In April 2019 The National Institute for Occupational Safety and Health (NIOSH) has released updated recommendations for dust control in Mining and Quarrying industries (https://www.cdc.gov/niosh/mining/works/coversheet2094.html). Personnel de-dusting issue has been highlighted as one of the main problems of Occupational Health and Safety (OHS) in the industries, related to Silicosis and Black Lung crisis all over the world. To help solving the problem NIOSH published an overview of the most efficient and safe ways to clean workers clothes in dusty environments.

Emphasizing systems that use regulated compressed air, NIOSH gives a brief overview of Bat Booth, a system that has been developed using the NIOSH and Pittsburgh University concept of removing dust from clothes. It is a unique personnel dust extraction device, created specifically for workplaces where dust is a hazard. The system can permanently remove up to 80% of dust in seconds and is effective against even the smallest dust particles such as silica. Bat Booth uses compressed air to blow the dust off the contaminated clothing. The dust is then captured and contained via a special filtering system. The Bat Booth is equipped with powerful HEPA filters which comply with the latest American NIOSH standard and are currently the most efficient filters commercially available. The process takes only 10 12 seconds and tests have shown a 50% improvement in dust removed from clothes over other methods. Bat Booth could be used for a variety of applications, comes fully assembled and requires minimum installation.
It has already been implemented at Holcim, Boral, Glencore, BHP, Hanson and other sites in Australia with high silica level. Besides, Stillwater Mining in the US and TECK Canada use the system for several years.

Bat Booth was presented in the second edition of NIOSH Dust Control Handbook for Industrial Minerals Mining and Processing as one of the best examples of removing dust from personnel uniforms thus helping prevent dust related diseases, in particular those caused by silica exposure.

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**Attachments**

01 A new method to clean dust from soiled work clothes

Holcim Lynwood-2, NSW

03 Reducing Dust Exposure from Contaminated Clothing

The Influence of Human Physical Activity and Contaminated Clothing Type on Particle Resuspension

IMG_0649

02 Reducing Respirable dust using an improved clothes cleaning process