

BEST PRACTICE

LOCATION:	Quarry	ARTICLE YEAR	2019
ACTIVITY:	Production and Processing	COMPANY:	Terex GB
SUB ACTIVITY:	Aggregate processing	COMPANY LOCATION:	Dungannon
BEST PRACTICE No:	BP2053	COMPANY TEL:	0000
COUNTRY OF ORIGIN:			

TITLE	
OMNI by Terex revolutionises crushing and screening - WINNER	
ARTICLE	
DESCRIPTION The equipment used to crush and screen rock is located in busy and challenging environments with many potential hazards. Typically, an excavator operator will be responsible for managing several different tasks, clearing the stockpiles, loading the dump trucks and supervising the multiple machines involved in the crushing and screening process. The process control available to the operator is limited and his views of the material flow are often restricted. He is exposed to a range of hazards undertaking these tasks. In particular, he is exposed to the risk of slips, trips, falls or being hit by other vehicles when accessing and egressing his cab or operating the controls of the crushing and screening equipment. To minimise the exposure to these hazards and improve the efficiency of the operation, Terex has developed OMNI. It is a new, first-of-its kind innovation that connects and integrates the operator, the machines and the site. The system enables the operator to control all the activities associated with the crushing and screening operation from the comfort and safety of his excavator cabin. This innovation has significantly reduced the risk of injury. A tablet-based interface is located in the cabin of the excavator alongside the operator. It is connected via Wi-Fi to the crushing and screening equipment. The interface enables the operator to control the equipment using integrated information relayed on the tablet dashboard and from remote, multiple camera views. The cameras provide critical views such as material transition points and chamber inlets for each machine. The system enables the operator to make immediate and real-time decisions to maximise the efficiency of the operation. For example, the operator could pause the entire material flow of the machine train when any issues arise or change settings to keep material specification in check. Additionally, OMNI by Terex provides alerts that indicate when someone on the ground is making process adjustments and the ability to offer read-only access to other personnel on the jobsite (such as the wheel loader operator), enhancing their safety through the remote view of the operation. Feedback from test sites is that OMNI by Terex will completely revolutionise the safety and efficiency of the crushing and screening jobsite. A video demonstration and testimonial from RJT Excavations can be viewed on https://vimeo.com/329759484. BENEFITS • Simplifies the operation of crushing and screening equipment • Keeps the operator in control at all times • Increased visibility through live-camera views • Ability to intervene immediately without leaving the cab • Reduced risk of slip, trips and falls • Reduced direct contact with heavy duty crushing equipment at ground level • Reduced exposure to dust and other moving equipment • Improved functionality of equipment and safety for operator • Decisions based on real-time information and improved efficiency • Transferable to other applications of heavy equipment • Feedback from initial test sites very positive.	
ARTICLE IMAGES	
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