

# UNDERGROUND SUPPORT - Tom Melbye, Mike Rispin, Odd Bjorn Kleven, Janne Lehto, Ismael Anabalon, Jouko Tenhunen, Rick Kraft



The sprayed concrete (wet shotcrete) for underground mining team from Normet is made up of Tom Melbye, Mike Rispin, Odd Bjorn Kleven, Janne Lehto, Ismael Anabalon, Jouko Tenhunen and Rick Kraft. Normet has been very well known as a leader in sprayed concrete machines and transporters which have over the last 20 plus years, from a technology perspective, changed the way mines looked at ground support, primarily during development but also for

production.

Normet produces sprayed concrete machines at its facilities in Iisalmi, Finland and Santiago, Chile. Sprayed concrete is now often the first ground support that a new mine will look at. Its effectiveness as a rapidly applied, active and durable means of areal support has changed the way that mines develop their operations. Its safety in application, whereby the operator is kept away from unsupported ground, and its ability to develop strength rapidly, make it a key component of a rapid development scheme.

The efforts of the individuals mentioned, and the support of many others, have been instrumental in moving the science of sprayed concrete forward in mining. Concrete mix design, super plasticisers, hydration control agents, alkali free accelerators, are all part of a successful sprayed concrete program. When it comes to the business end of the process, the application, Normet Line machines have led the way with their robust carrying capacity, versatile boom technology, precise accelerator dosing systems and built-for-purpose shotcrete pumps. Acquired in 2007 from Semmco Inc. in Chile, the Semmco Line of sprayers and transmixers have been equally instrumental in opening up the Latin American market for sprayed concrete, from Chile to Mexico. As a customer once remarked: "if you want to spray wet shotcrete, buy a Normet!" Normet was founded in 1962, turning 50 in 2012. In March 2014, Normet produced its 10,000th machine. While offering a variety of equipment, construction chemicals and rock reinforcement solutions to the global underground mining industry.