Added Value of Using Real-Time Resource Reconciliation in Coal Mining Cansin Yüksel¹, Jörg Benndorf²

Delft University of Technology, Department of Geosciences and Engineering¹ TU Bergakademie Freiberg, Institut für Markscheidewesen und Geodäsie²

ABSTRACT:

Recently, an efficient resource model updating framework was proposed with the aim of improving the raw material quality control and process efficiency in any type of mining operation. This includes the integration of online-sensor measurements that are obtained during the production into the resource model. The concept has been applied in a coal mining environment with the aim of identifying local impurities in a coal seam and to improve the prediction of coal quality attributes in neighbouring blocks. The goal of this presentation is to demonstrate how the use of the resource model updating framework can provide added value for the mining industry. Both economical and environmental considerations are taken into account when the added value is investigated.