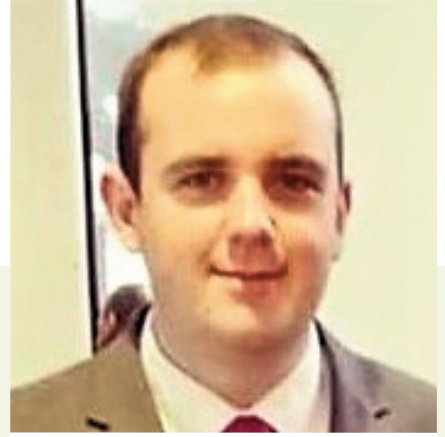




Speaker 6

## *The impact of process parameters on blast furnace dust output*



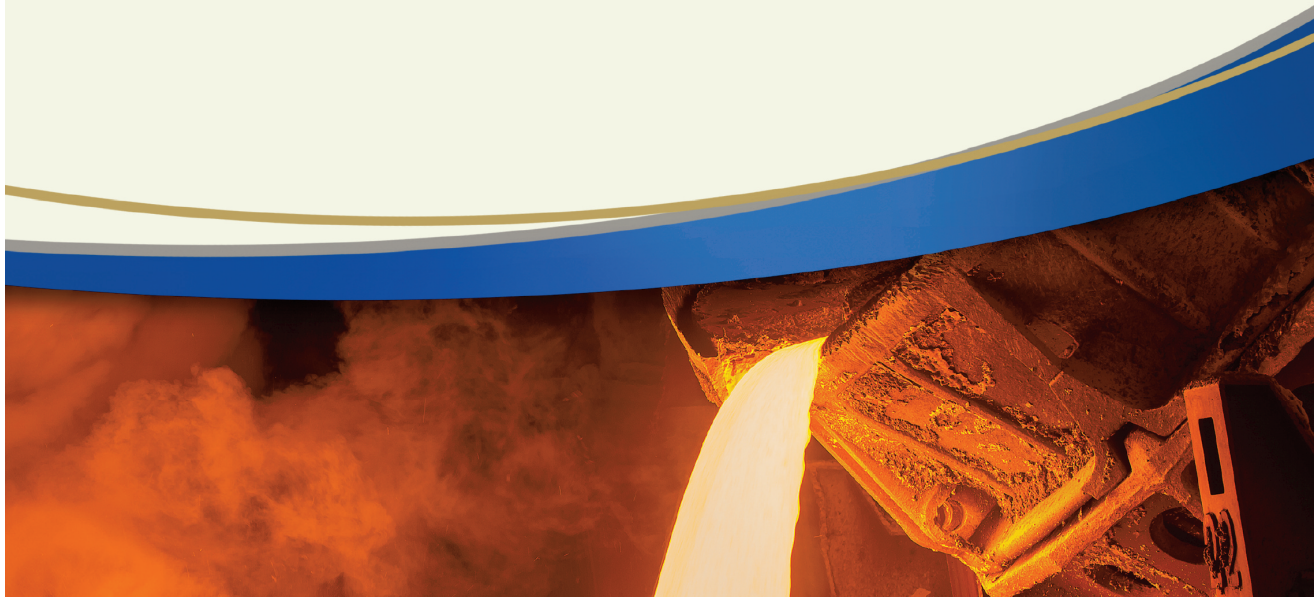
John Lewis

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**ABSTRACT:**

To assess the combustion efficiency of coal injected into the blast furnace, dust samples have been analysed for various analytes and carbon type differentiation techniques applied. The dust output of the furnace has been measured using a suspended solid meter in the water flume and trended against live process parameters. The dust output is not influenced one parameter, but more a combination of parameters. The live dust measurements have been validated by a manual suspended solid technique and the dust analysed for carbon type via the Canmet method. A recognised method for carbon type differentiation. With increase in dust output, we see a decrease in the difference between carbon types. The data can be influential in optimising a process for combustion efficiency with minimal influence on the product. The impact of the project is dependent on the outcome of the work and actual impact of the change in process parameters.



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