Kennametal Inc. is one of the world leading manufacturers of metal cutting tools, and supplies products to a variety of industries ranging from aerospace and automotive to earthworks.

XRF elemental analysis is routinely used to characterize a variety of samples at each stage of production of coated carbides, ceramics, cermets and steels for quality assurance, research and development, and process investigations. In case of coated carbides, we analyze from initial raw material powders, sintered substrate, and to coating of the final products. The highly versatile PANalytical Zetium was recently installed and has been commissioned to tune these applications. We will present current status, our experience, and discuss possible limitations and problems.