

## Increased Circularity in Metals Production Using the Ausmelt TSL Process

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**Abstract :** The Ausmelt Top Submerged Lance (TSL) Process has been widely applied for the processing of both primary and secondary copper, nickel, lead, tin, and zinc-bearing feed materials. Continual development and evolution of the technology over more than 30 years has resulted in a more intense smelting process with higher energy efficiency, improved metal recoveries, lower operating costs, and reduced fossil fuel consumption. This paper covers a number of recent advances to the technology, highlighting their positive impacts on smelter operating costs, environmental performance, and contribution towards increased circularity in metals production.

**Keywords :** ausmelt TSL, smelting, circular economy, energy efficiency

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