Contribution ID: **142** Type: **Oral Presentation**

Filter cake by-product from pickling line transformation into a valuable product to recover the metallcs for EAF steelmaking process.

Tuesday 7 October 2025 11:30 (20 minutes)

Lhoist together with a steelmaking company based in UK developed a new product to be recycled into the EAF process. This new product is based on the transformation of Filter cake by_product coming from the pickling line process containing valuable metallics. Indeed such by-product is mainly landfilled over the world. Three main reasons may explain : the water content is very high > 45%, the dry product is very fine D50 ~20 µm, and its contains an important dosage of CaF2. Transforming thus Filter cake to be recycled into an EAF process is mainly motivated by the metallic recovery and the avoidance of the landfilling. This paper will explain first all challenges to be circumvented. In a second part the results of the feasibility tests at lab scale and pilot scale will be discussed. In the last part the successful results of a 40t trial at industrial scale will be presented. All positive and negative technical results will be discussed. This 40t trial opens the door to a circular business solution to be extended to other geographies.

Primary author: PERRIN, eric (LHOIST Innovation)

Co-authors: Mr PICKFORD, Adam (Lhoist UK); Mr HOULDWORTH, Ian; Mr SMALES, Phil; Mr CAUCHIE, Alain (Lhoist Western Europe)

Presenter: PERRIN, eric (LHOIST Innovation)

Session Classification: Raw Material Optimization & Scrap Management

Track Classification: Steelmaking - Electric steelmaking