TAHA analyses its carbon footprint

Environmental considerations are becoming increasingly pertinent in “green” aluminium production making reducing or eliminating waste ever more so important. TAHA, a multidiscipline solutions provider with corporate offices in Bahrain, offers innovative, environmentally-friendly and cost-effective services, equipment and products to the aluminium and steel industry worldwide. TAHA’s aluminium dross process is a radical innovation in its industry whose process consumes less energy and produces no toxic salt cake. This enables organizations to save valuable resources and reduce costs.

In order to provide insights into the carbon footprint compared to the benchmark, TAHA, KMF and EY analyzed the carbon footprint of TAHA’s aluminium dross process through a process life cycle assessment. This analysis demonstrates that the carbon footprint of TAHA’s method vastly outperforms the conventional TRF method.

TAHA’s aluminium dross process is a radical innovation in its industry. Its process consumes less energy and produces no toxic salt cake. This enables organizations to save valuable resources and reduce costs. In order to provide insights into the carbon footprint compared to the benchmark, TAHA, KMF and EY in collaboration with the Austrian Montanuniversität Leoben (in the renowned ‘Shanghai Ranking’ in the category ‘Global Ranking of Academic Subjects’, Montanuniversität was ranked 15th in the field of Metallurgical Engineering), analyzed the carbon footprint of TAHA’s aluminium dross process by means of a process life cycle assessment. The commissioned study was completed in February 2021, and the analysis demonstrates that the carbon footprint of TAHA’s method vastly outperforms the conventional TRF method, showing more than 81% less GHG emissions.

The carbon footprint was calculated based on globally acknowledged emission factors. For scope 1 & 3, the emission factors from DEFRA and the Ecoinvent LCA database in SimaPro were used. In SimaPro the Greenhouse Gas Protocol (v1.02) was used to calculate the emission factors. For Scope 2, the emission factors from EPA were used. The carbon footprint was calculated for both the TAHA and TRF processes. The data for these processes was provided by TAHA, KMF Machinenfabriken GmbH and was sourced from publicly available data from Befesa Salzschlacke GmbH. TAHA and KMF have provided their most recent operational figures for their aluminium dross processes stemming from 2020, the publicly sourced information from Befesa stems from 2019 and was not verified externally. EY has used this provided data to perform the carbon footprint benchmark.

FOR MORE INFORMATION ABOUT TAHA’S PROCESS, OR MORE INFORMATION ABOUT THIS STUDY PLEASE CONTACT: PR@TAHACORP.COM