



FLAMINGO

Fabrication of Lightweight Aluminium Metal matrix composites and validation In Green vehicles

Deliverable D 2.4 Report on specification for recyclability

Lead Beneficiary

KAMPAKAS

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1. Publishable Executive Summary

This document includes details about protocols and methods for the selection of scrap Aluminum compatible with the compositions selected in FLAMINGO, details on the current standard for Al recycling, and a definition of nanoparticles limit in secondary aluminum. In this document there is general information about the importance of aluminium and the recycling process as well as the sectors aluminum is widely used and recycled e.g., automotive, constructions etc. The document analyses the production of primary aluminium from bauxite and the recycling process in the automotive sector. Except for this general information, the current regulatory environment to maximize the efficiency of the recycling of aluminium industry is presented along with the ELV directive of the European Parliament and Council which is vital for the objectives of the FLAMINGO project. The main goal of this deliverable is to outline the processes for the recycling of aluminum and how these will be applied to Al-MMnC. Specifically, the production of the desired secondary aluminium from the selected scrap and the recycling of the aluminium nano-composite components that are produced within the FLAMINGO project. In terms of these processes, the methodology for the evaluation process of nanoparticle removal and the acceptable limits of nanoparticles in secondary aluminium are included in this technical report.

