



PRINCIPIA

Innovative industrial casting processes
for the aerospace industry

BUDGET

€2,946K

GRANTS
OBTAINED

€1,185K

ANR FUNDING

2011 - 2015

THE PROJECT

The PRINCIPIA project aims to provide a major contribution to the definition of innovative processes for preparing and casting plates for the production of thick semi-finished wrought products (mainly rolled products) made of high-performance aluminium alloys (7XXX and 2XXX families, in particular the new AlCuLi alloys) for future generation civilian aircraft structures:

- by understanding the factors influencing the reduction of porosities and inclusions in semi-continuous casting products for rolling and forging
- by multiphysical and multiscale modelling of the melting and solidification processes concerned and integrating these models into a piece of industrial software
- by exploratory experimentation in the laboratory and on industrial pilots of the avenues for improvement and innovation revealed by of these studies.

ViaMéca
French mechanical cluster

PROJECT SPONSOR

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