

RAPID DRYING OF CERAMICS REDUCING ENERGY CONSUMPTION AND CO₂ EMISSIONS WHILE PRESERVING PRODUCT QUALITY

The **RAPID DRY** project aims to optimise the DRYING OF CERAMIC CAST PIECES thanks to a

New dryer and shorter drying cycles:

- **REDUCTION OF ENERGY CONSUMPTION AND CO₂ EMISSIONS, MITIGATING CLIMATE CHANGE**



HOW?

- Introduction of a **software** managing all drying parameters and avoiding waste of energy
- Installation of **fans and cones** to improve the recirculation of the air flow and guarantee a homogeneous air distribution on the pieces to be dried

New ceramic body formulations:

- **REDUCTION OF PRIMARY RAW MATERIALS CONSUMPTION, DECREASING MINERAL MINING AND RECYCLING CERAMIC WASTE**



HOW?

- Introduction of **grinded broken ceramic pieces** as recycled raw material

FINAL RESULTS



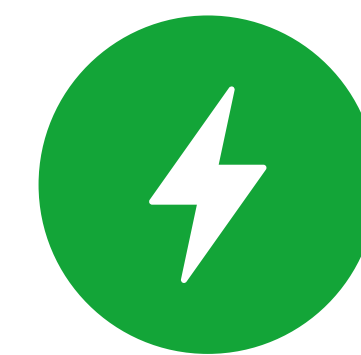
DRYING CYCLE

shorter than
8 hours



THERMAL CONSUMPTION

is only
98 kcal/kg
with respect to 288 kcal/kg
of traditional dryers



ELECTRICAL CONSUMPTION

is only
0.003 Kwh/kg
with respect to 0.019 Kwhl/kg
of traditional dryers

ENVIRONMENTAL RESULTS

The LCA analysis is still ongoing, but the preliminary results have shown:



-8%
VIRGIN RAW MATERIALS
consumption



At least
-60%
CO₂eq
emissions

