

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



2020/06/01
START



2022/09/30
END

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

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



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



EXPECTED RESULTS



PROTOTYPE DRYER

- **34%** reduction of THERMAL ENERGY consumption
- **21%** reduction of ELECTRIC ENERGY consumption
- **39%** total reduction of CO₂ EMISSIONS



NEW FORMULATIONS OF SLIPS

- VIRGIN RAW MATERIALS saved by **5 - 15%**
- COST reduction of **3 - 8%**



TECHNOLOGY FULLY VALIDATED

- Trials and demonstrations in operational environment
- Full life cycle assessment and life cycle costing performed
- About **5400** sanitaryware and **1200** tableware pieces successfully dried

DRYING CYCLE reduced to **8 - 10 hours**

PRODUCT QUALITY preserved

