

# Internship MIM injection

FERONYL, based in Mouscron since 1950, is specialised in injection moulding and manufacturing polymer & composite components for the civil engineering, defence, aerospace and medical sectors

## Task

- Research the literature on the MIM injection process (key parameters, rheological behaviour of the material, etc.)
- Develop a numerical model (with MOLDEX) and compare it with experimental results (model justification, material data sheet, etc.)
- Develop an experimental plan to define the key injection parameters and optimise the quality of the injected part
- Characterise parts after injection (dimensional & density measurement, shrinkage, PVT, etc.)
- Critique, analyse results and suggest ways of improving them

## Skills required

- M1 or M2 students specialising in physical chemistry or materials science/engineering
- Interest in modelling and experimentation
- Knowledge of multiphysics modelling

## Why choose us?

- Working on next-generation products for the aerospace and defence industries
- Exciting and stimulating projects
- Pleasant environment

