

METALLURGICAL ENGINEERING IN FOUNDRY AND FORGING

Master your forging and casting processes thanks to comprehensive metallurgical expertise, from digital to experimental.

Your expectations

You want **to develop or characterise** new alloy nuances, **find innovative solutions** to your manufacturing problems (recycling, replacing elements, etc.) or **better control the metallurgical aspects** throughout your production process (melting, solidification, heat treatment, etc.)?

Our solutions

Our experts support you in meeting your technical specifications for all types of metallurgy (cast iron, steel, aluminium, etc.) in line with your process:

- **Audit** of your casting and forging processes
- **Bibliography / State of the art**
- **Assistance and advice** for adapting your metallurgy
- **Digital approach to development** (Thermo-Calc) to **validate new candidate grades**. Generation of material databases for the simulation of foundry and forging processes
- **Semi-industrial scale experimentation** (test pieces, demonstrators, etc.) from development to heat treatment
- **Experimental characterisation** of alloys (mechanical and thermophysical)
- **Training** Cetim Academy Inter or tailor-made courses in forging and foundry metallurgy (50 forging/foundry courses available, including [9 dedicated to metallurgy](#))

Your benefits

A comprehensive offering (digital, experimental foundry, characterisation) tailored to your needs

Time savings in development and fewer fine-tuning trials thanks to our digital approach

Direct access to a multidisciplinary team covering metallurgy, foundry and forging processes

