



## COTRA

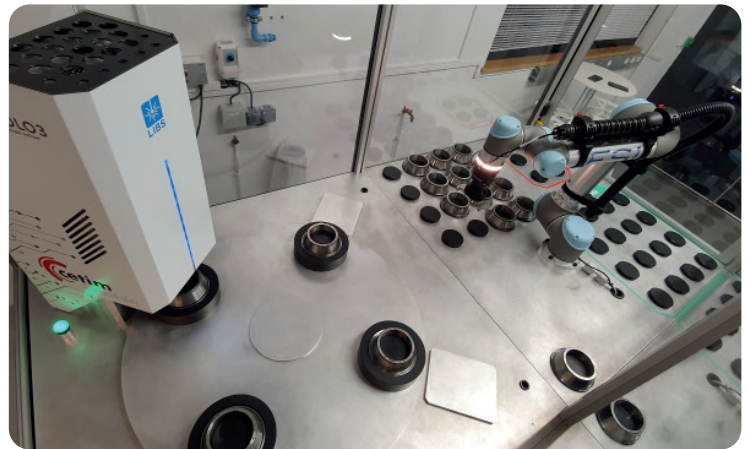
# A new way of introducing non-destructive testing into production lines

Cotra is deploying two emerging technologies and demonstrating them in an operational environment. Controls are carried out in real time and make it possible to switch from a normally destructive sample check, to a 100% non-destructive check, all in phase with the upstream production line.

Cetim & MICA Carnot Institutes

### Scientific / technological breakthrough

The teams from Cetim Carnot Institute and its partner Cetim Grand-Est centre – part of Carnot MICA Institute – have deployed two emerging technologies which have been demonstrated in an operational environment: the 3MA, a combination of magnetic controls on the depth of the thermochemical processing of a part together with its hardness, and Holo3's laser induced breakdown spectroscopy (LIBS) technology, which makes it possible to control the chemical composition of the material.



### Competitive advantage for the economic stakeholders

Thanks to the Cotra demonstrator, it is now possible to control all the parts coming off a thermochemical processing line, in real time and without actually destroying them! In addition to technical performance, with this demonstrator the teams from Cetim Carnot Institute and its partner Cetim Grand-Est, part of Carnot MICA Institute, showcase their ability to offer innovative and digital solutions to industrial firms during each phase of their development (feasibility, prototype, pre-series, etc.). It provides manufacturers with a unique, customized service, in phase with their needs and with the digitalisation of their company.

#### Contact

Cetim Carnot Institute – H  l  ne DETERME – helene.determe@cetim.fr  
Cetim Carnot Institute – J  r  my VIALE – jeremy.viale@cetim.fr