

# Euromag Tailored inspection for high-quality magnets

In order to remain competitive and obtain better control of the quality of its magnets made from AlNiCo alloy, Euromag decided to analyse its castings upon output from the foundry. The proper calibration of a new machine required development of a plasma emission spectrometry analysis method.



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## OUR CUSTOMER

**Corporate name**  
Euromag

**Business activity**  
Euromag is a specialist of permanent magnets and their applications. The company produces ready-to-use integrated magnetic systems: contact-free coupling, magnetic transfer, magnetic tables and rollers, lifting system, magnetic chucks for grinding machines, etc

**Turnover**  
EUR 6.8 million

**Workforce**  
43 people

**E**uromag is a company located in Saint-Pierre d'Allevard in Isère (France), a city with a rich mining history and the birthplace of magnetism. Euromag manufactures aluminium, nickel and cobalt (AlNiCo)-based permanent magnets. The alloy is cast in the Croning sand moulds representing the shape of the magnet to be obtained. A heat treatment under an intense magnetic field then grants the product its magnetic properties. Finally, the magnet is given its permanent shape through grinding. "Our magnets are used in many

industrial sectors (aeronautics, machine tools, etc.) as well as in the plastic injection or advertising sectors, explained Grégory Masin, Method and Quality Manager at Euromag. *To better control the quality of our products output from the foundry, while saving analysis costs and time, we decided to analyse our parts by plasma torch spectrometry."*

**Sensitive calibration**  
*"As the first analyses carried out with this new technology led to different results than those usually obtained by X-ray fluorescence spectrometry, we decided to commission Cetim*

*to establish a third method to allow us to check the various results obtained and properly calibrate a new machine",* added Grégory Masin. Consequently, the experts at Cetim specially developed a scientific approach by plasma emission spectrometry for this very particular type of material. *"By comparing the results obtained with these three analysis methods, we were able to more accurately calibrate our new machine",* explained Grégory Masin. The plasma torch spectrometer should be operational in the very near future.

## Cetim's asset



Cetim's chemistry laboratory in Nantes (France) is Cofrac-accredited under No. 1-0037 for the chemical analysis of metallic materials (list available for consultation on [www.cofrac.fr](http://www.cofrac.fr)). It possesses equipment for "standard" and "tailored" chemical analyses of metallic parts.