

COATING XPERT

Pôle Peinture Rhône-Alpes

RESEARCH 

INSTITUT NATIONAL DES SCIENCES APPLIQUEES DE LYON



A service offering to enterprises
A platform open to training

A PAINT APPLICATION SITE

member of
UNIVERSITÉ DE LYON

 INSA
LYON

COATING XPERT

Pôle Peinture Rhône-Alpes

**SERVING BUSINESSES INVOLVED IN THE
PAINT AND COATING INDUSTRIES**

Initiated by the Rhone-Alpes region via Automotive Cluster, CoatingXpert is a collaborative platform that associates the higher education and research laboratories of Lyon, including INSA Lyon, ITECH, and the Claude Bernard Lyon 1 university in view of carrying out R&D programmes and paint tests.



CoatingXpert

A PILOT PAINT APPLICATION SITE

RESEARCH AND DEVELOPMENT

Piloted by the Engineering Laboratory for Polymer Materials -CNRS 5223 mixed research unit- CoatingXpert federates the skills of researchers so as to develop new coatings, also to study the application and drying processes, as well as the physical and mechanical characteristics of these coatings.

PAINT TESTS

Located in Oyonnax on INSA Lyon's plastics engineering site, CoatingXpert has an automated painting installation. This tool can reproduce and manage industrial application conditions on both small and large parts.



A SERVICE OFFERING TO COMPANIES

Consultancy, industrial feasibility studies, process improvement, project follow-up, research, tests of paint systems, characterisation and validation; these are the skills that CoatingXpert has to offer to enterprises.

MEANS

CoatingXpert proposes an offering that is adaptable to company needs including:

- a "paint application pilot site",
- the possibility of reproducing phenomena observed in an industrial context,
- the mastery and understanding of application processes for water and/or solvent based paints through a multidiscipline approach,
- the development of new paint technologies.

The projects carried out through CoatingXpert can bear the Rhone-Alpes "Pôles de Compétitivité and Clusters" label.



INDUSTRIAL FEASIBILITY

PROCESS IMPROVEMENT

RESEARCH

CONSULTANCY

CHARACTERISATION AND VALIDATION

PAINT SYSTEM





CoatingXpert

A PLATFORM OPEN TO TRAINING

The cross-disciplinary nature of the paint and coating field requires specific training which can benefit from the CoatingXpert environment and facilities.

This training, unique within French universities, relies on the skills of INSA Lyon, ITECH and Claude Bernard Lyon 1 university, with the participation of industrial partners.

The pedagogical actions are carried out in the form of workshops, end of study projects or more transverse programmes using the paint application pilot site.

These training programmes are part of the syllabus for students from engineering schools or masters and also part of continuing education (INSACAST, ITECH enterprises...).

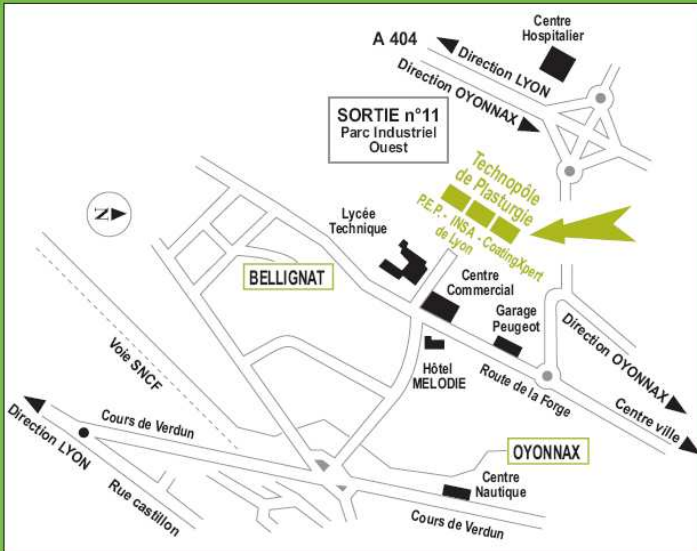
CoatingXpert is financed by the Rhone-Alpes region via Automotive cluster, the Oyonnax Communauté de Communes, the Ain Conseil Général and by a group of industrials: Plastic Omnium, RenaultTruck, Sames, Inoplast, Mecaplast and Bollig&Kemper.



CoatingXpert is :

- an automated, adjustable speed, conveyor adaptable to continuous application, either static or step by step.
- an application cabin that is temperature and humidity controlled.
- pulverisation tools (pistols or bowls) for robotised application of solvent or water based liquid paints (conventional or electrostatic).
- a hot air oven adjustable from 80°C to 180°C with real time monitoring of the object temperature and memorisation of the heating curve.
- a PLC that manages the process and memorises the test settings.
- high efficiency physical-chemical analysis and control tools:
 - . Wear properties (thickness, brilliance, covering, colour, adherence, resistance to scratching, chemical resistance, ageing...),
 - . Surface characteristics (optical and electronic microscope, surface energy, profiling, AFM...),
 - . Thermal and thermo mechanical rheological properties (DSC, ATG, DMA, TMA, Rheometers, shear stress machines, 3 point distortion...).





Les partenaires de CoatingXpert



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Collections



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