

CORROSION & METALS
RESEARCH INSTITUTE

kiMab

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This is KIMAB



- ➔ The leading European Industry Research Institute in Corrosion and Metals.
- ➔ 130 staff in the Institute. A third have undergone research training and obtained licentiates or doctorates.
- ➔ Subsidiary in France (Institute de la Corrosion)
- ➔ Quality certification to ISO 9001.

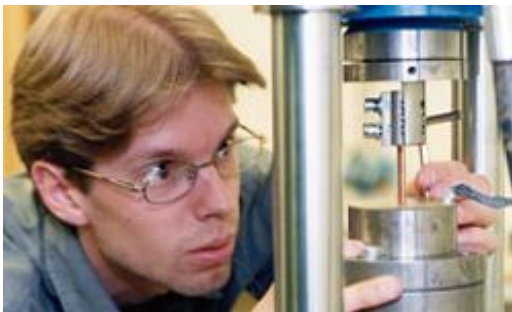
This is KIMAB



➔ 150 Member Companies World Wide in five Member Programmes (Metals, Corrosion, Joining, Heat treatment and Thermodynamic calculations)

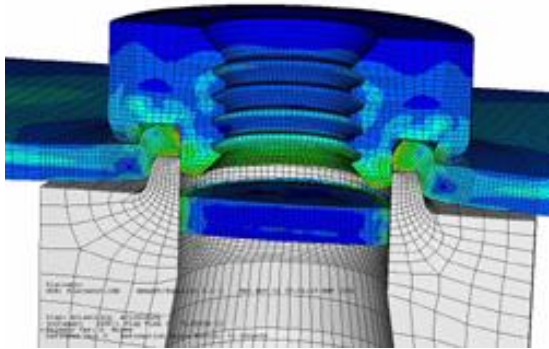


➔ Research and development take place in close co-operation with companies in the steel, metal, pulp, process, electronics, engineering, plastic, manufacturing, power and automotive industries.



➔ Independent party in failure and damage investigations with regard to metallic materials.

Research efforts 2005



Member programmes	30 %
Industry assignments	38 %
EU-projects	16 %
National research programme	16 %



Services

- Contract research
- Mechanical testing
- Corrosion testing
- Reference material
- Manufacturing of alloys
- Damage investigations
- Education
- Consulting
- Library service



Business areas

Materials and Process Development

Materials Applications

Corrosion





Materials and Process Development

Alloy Design

CCT, Computational support to product- and process development, Alloy development, Powder materials

High temperature

Developments of qualities and productivity in casting and solidification, Materials processing of hot workability

Cold processes

Materials processing for cold forming, On line NDT Structural Monitoring, Annealing

Surface technology

Optimization of surface treatment, Functional surface coating, Local heat and surface treatment technology

Metallography

Modelling of microstructural changes during hot working, Microstructure development

Materials analysis/
assignments

CRM, Bulk analysis, Micro analysis, Surface characterisation, Microstructure development, Education



Materials Applications

Joining Technology

Joining Technology
Centre

Process optimisation, Arc Welding, Adhesive bonding, Mechanical joining, Arc brazing

Vehicle Strength

Strength of joints; Fatigue and crash

Durability

High temperature strength, Creep and Fatigue with oxidation and corrosion

Electronics & Failure
analysis

Soldering, Electrical contacts, Fretting,
Environmental impact, Recycling,
investigations

Failure

Tooling Technology

Forming & Machining

Wear, Tribology, Forming techniques,
Formability, Temperature and force measure-
ments, Machinability, Surface integrity.

Heat Treatment

Through hardening, Surface hardening,
Strength, Fatigue, Toughness, Distortion



Corrosion

Metallic Materials	Materials development, Materials selection, Electrochemistry, Corrosion processes in liquids, Computer modelling
Polymeric Materials	Materials development, Materials selection, controls, Field exposures, inspections
Industrial processes	Materials selection, Plant tests, Autoclave tests, Corrosion protection
Infrastructure	Corrosion in soil, concrete and atmosphere, Cathodic protection, Stray currents, Protective coatings corrosion, Protection painting
Consultation/testing	Investigations, Inspections, Failure investigations, Advisory service, Field Stations, Standardisation, Accelerated testing
IC (Brest, France)	Marine corrosion, Coil coating, Testing, Investigations

KIMAB core values

- World class in competence and equipment
- Solution provider for Metals and for corrosion protection
- Delivers results of applied research with focus on high customer value.
- International network of companies and research organisations.
- Independent