



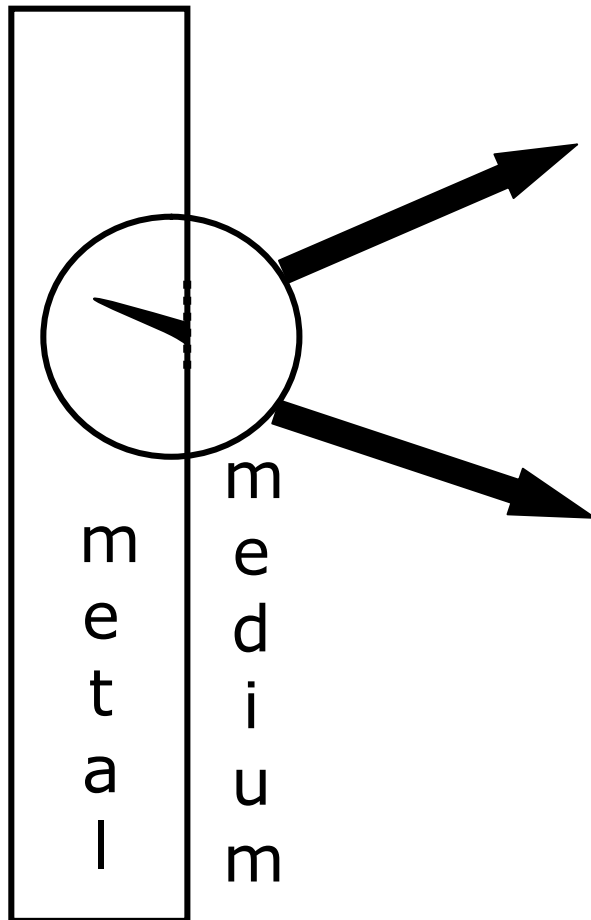
METALogic n.v.

www.METALogic.be

METALogic

Control & monitoring of
material degradation – corrosion
through materials knowledge &
by means of **advanced monitoring**
techniques

- Technology
- Organisation
- Products
- Vision



- Electrochemistry = corrosion process control
- Ultrasound technology = structure control

- Technology
- Organisation
- Products
- Vision

R&D

Materials
investigation

Materials
engineering

Material selection,
material evaluation

Failure analyses,
advice

Corrosion testing

Knowledge
field of
**corrosion &
materials
science**

Corrosion study

Materials &
corrosion advice

RBI, inspections,
remaining life time

Materials Monitoring

Process equipment

Storage tanks

Coatings

- Technology
- Organisation
- Products
- Vision

Continuous electrochemical corrosion monitoring

Different electrochemical techniques and sensors
(EIS, ENA, LPR, ER, EFM)

- Uniform corrosion
- Pitting corrosion
- Stress corrosion => new development and demonstration project with BASF
- Coating monitoring

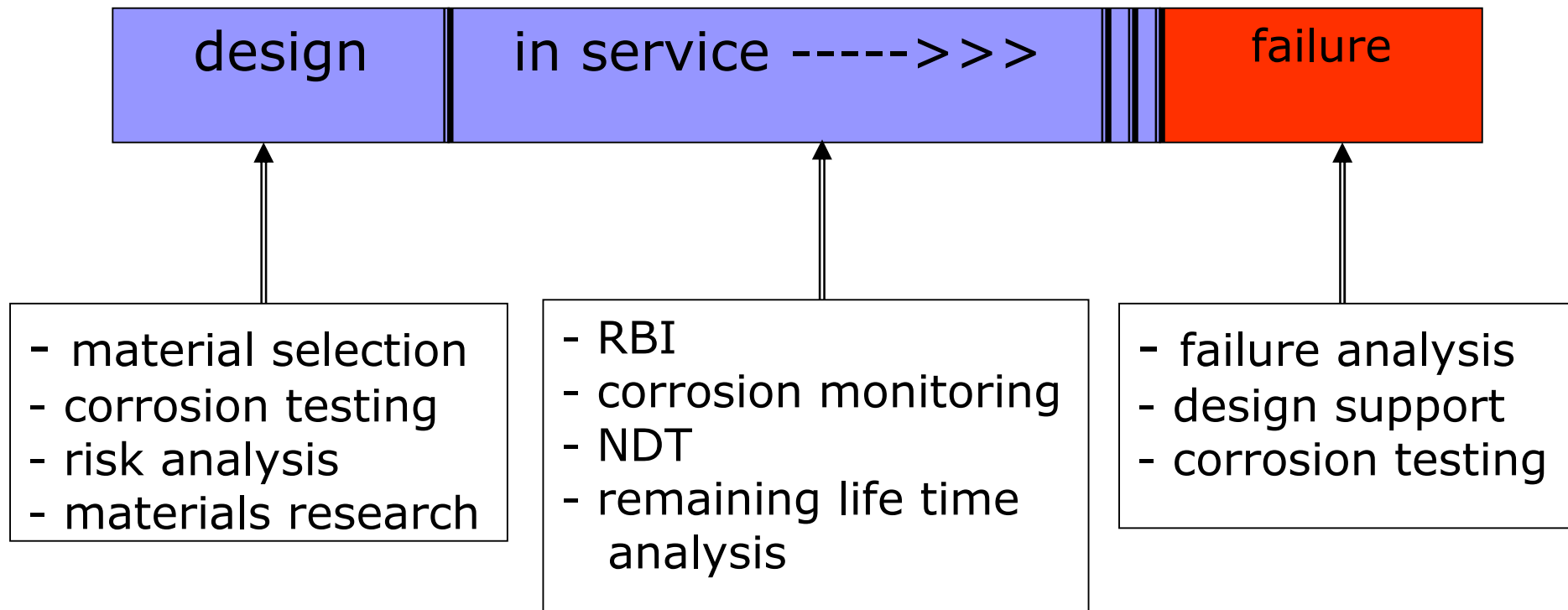
Applications: process installation, cooling water systems, storage tanks, pipelines,..

AISHA I & II

Scope: development of a structural health monitoring (SHM) system based on ultrasonic Lamb waves and electrochemical techniques able to detect fatigue cracks under dynamic load, thermal degradation, **general and pitting corrosion** and impact damage in metallic and composite materials

- Technology
- Structure
- Products
- Vision

Total life cycle



- **3rd AAT FP7 Call**

- AAT.2010.3.4-6. Enhancing strategic co-operation with Russia in the field of enhanced maintenance and operation safety
 - 'smart' maintenance, monitoring/detection of corrosion