

HYDROGEN VALUE CHAIN



A unique **partnership** to ensure risk management, regulatory compliance and performance of your hydrogen equipment & system



The strength of an alliance between a key R&D player and a world leader in **safety, inspection and certification**

Your challenges



CONCEPTION

Accelerate the development of technological solutions adapted to the H2 environment.
Optimize the performance of an existing system or component.
Ensure compliance with standards.
Validate hydrogen specific materials.



Our solutions and services

- Technological and regulatory watch
- Support for normative, regulatory & technological compliance
- Risk management/Safety audits
- Systems functional safety
- Life Cycle Assessment (LCA) and review
- 3D design/calculation
- Design review
- Materials selection and validation through characterization or testing
- Trainings



SUPPLIERS QUALIFICATION

Elaborate detailed technical specifications.
Evaluate suppliers & verify compliance with international standards.
Assist in the selection of the best partners guaranteeing the quality, reliability & environmental impact of equipment.
Propose solutions that meet the specific requirements in H2 environment.



- Elaboration of detailed specifications
- Support for suppliers consultation and responses analysis
- Suppliers Audits/ evaluations
- Verification of compliance with international standards
- QA/QC audits
- ESG criteria assessment, CSR, carbon footprint



INDUSTRIALIZATION

Transform innovations into reliable, competitive, manufacturable products.
Ensure a successful transition from design to mass production.
Integrate technological solutions into your industrialization process.
Guarantee industrial validation and compliance with international standards.



- Market analysis, strategic & technical advisory
- Integration of technological solutions into the production process
- Equipment suppliers audit
- Support for process control & industrialization
- Cleanliness analysis
- QMOS/QS
- Non-Destructive Testing
- On-site deployment assistance
- Facilities certification
- Industrial cyber security
- Audit 17025 & support on quality plans implementation



USAGE

Maximize the deployment & sale of H2 systems with market analysis, technical and strategic advice, as well as on-site deployment assistance.
Analyze failures and damages, detect leaks in systems and components.
Certify installations, ensure their optimal and safe use.
Train teams on risks in H2 environment.



- On-site industrialization of equipment and continuous processes
- Regulatory compliance check (ATEX, lifting, ...)
- Equipment commissioning
- Quality management monitoring
- NDT / monitoring / SHM
- Diagnosis of causes of underperformance
- Performance benchmarking
- Leak detection
- Failure and damage analysis
- Corrosion expertise
- Labeling (Origine France Garantie)



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