

QA/QC SOLUTIONS MATERIALS TECHNOLOGY



INNOVATION

ENGINEERING

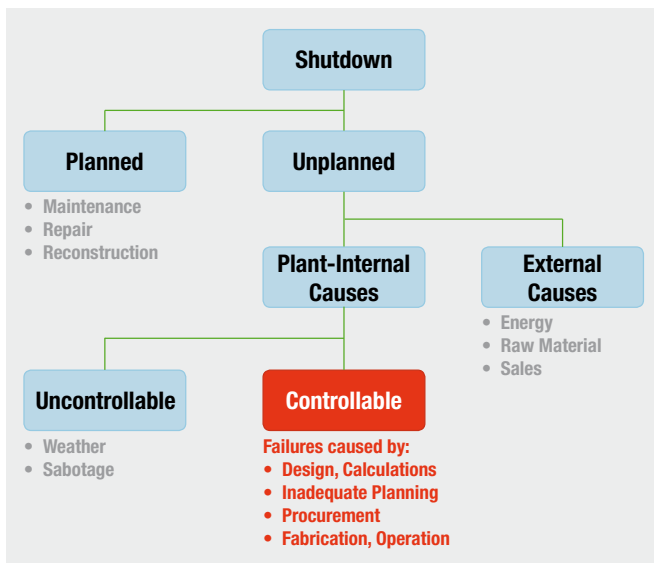
OPTIMIZATION

Quality Assurance in Capital Projects (QACP)

Importance and Economical Considerations of Quality Assurance (QA)/Quality Control (QC)

Proper material selection and fabrication is part of the life cycle cost approach of a unit. Small savings in capital projects compromising the equipment quality usually significantly increase maintenance cost and unit down time. Fixing problems prior to completion of fabrication, during construction or after plant start up is very expensive and puts risk in place.

tion technology used and full coverage of full life cycle approach to minimize future maintenance costs. Our QC inspectors monitor the fabrication of semi-finished products (materials, piping, castings, head dishes etc) or equipment manufacturing step-by-step, proposed and agreed upon hold points.



Causes for Down-Time of Process Plants



Heat Exchanger

Quality Management by Bayer Technology Services

Our engineers develop a specific quality management concept based upon your request as bare bone program or risk-oriented approach depending on the complexity of the equipment design or fabrica-

A professional state of the art material knowledge, the permanent close contact to our customers, fabricators and materials suppliers as well as the effective use of multiple and advanced non-destructive examination (NDE) technology testifies our proven expertise.



Bayer Technology Services
Powering Your Performance

All these elements combined with fabrication and welding know-how enable us for the efficient and professional evaluation of suppliers based upon detailed audits in order to determine the capabilities and limitations of all kind of manufacturers and fabricators.

We partner with you on quality assurance concepts for construction, design and specification, materials, fabrication and testing technologies within capital investment and replacement projects.

Our QA Services

- We develop customized QA concepts based on specific risk analysis.
- We offer fully technical support for equipment specification development and equipment procurement by material, manufacture and testing expertise and profound knowledge of capabilities and limitations of suppliers.
- We support the project team and technical procurement with our special know-how prior of placing purchase orders, e. g. pre-manufacturing meeting with the bidder about fixing the number and type of QC hold points with regard to manufacturing surveillance and welding technology.
- We offer fabrication surveillance, e. g. semi-finished material examination, manufacturing accompanying examinations, welding technical quality assurance, final test and documentation.
- We perform technical audits to identify the limitations of suppliers (semi-finished material, material) or equipment manufacturers.
- We develop strategies for trouble-shooting and repair based on approved code, design, and manufacturing know-how in case of deviations from the engineering specification. We fix corresponding problems which may have impact on project schedule and budget.
- We execute, evaluate and document non-destructive tests according to the client's inspection and testing plan (ITP).

Benefits and Competitive Advantages

The know-how of our experienced global teams of experts helps you to complete your capital projects successfully:

- Materials know-how (metallic, non-metallic, coatings, liners)
- Fabrication know-how for technical auditing of materials suppliers, semi-finished products suppliers, piping and equipment manufacturers
- Testing know-how through proven knowledge in methods and application of non-destructive testing technology going along with testing and inspection personnel
- Problem solution strategies deviations in engineering specifications

Our services assure that the quality of equipment is suitable to requirements as well as the project schedule. We find a qualified and competitive supplier and may support your desire for strategic global sourcing. Our consistent use of non-destructive examination allows achieving better reliability, availability and productivity of your equipment.

Our innovative quality assurance concepts include the position of Quality Lead Engineers, risk-based equipment grouping for inquiries, risk-based vendor selection, and a hold point concept containing mandatory quality checks amongst other things. Such measures ensure that a lot of problems will not even occur during the project lifetime and the operation of the plant.

Results of formalized supplier audits – initiated by customers being either engineering or procurement organizations – can be stored in a so called Global Supplier Database (GSD). This software provides common information about suppliers which is an essential basis for successful project execution.

Bayer Technology Services – The Fabrication & QA Experts

We are a team of material, fabrication, welding and NDE engineers, supported by accredited NDE technicians (holding level II and level III qualifications). We base our service on the extensive experience acquired during years of materials engineering together with internationally recognized experts with a strong academic background. State of the art technology including the full range of laboratories, in which we simulate processes and corrosion conditions, complements our expertise.

Our track record indicates more than 40 years of experience within the capital investment business of a global chemical-pharmaceutical company – the Bayer Group.

The wide experience of Bayer Technology Services is at your disposal. In conjunction with BayOpX® – our Operational Excellence approach – you get access to our full portfolio of services targeting optimum plant reliability and efficiency.



Production Facility in Baytown, TX USA