ABOUT INNOVEVA

INNOVEVA is a multidisciplinary engineering company specializing in capital projects of all sizes and providing support to ongoing plant maintenance and construction.

INNOVEVA PROVIDES THE FOLLOWING SERVICES:

- Project Management
- Project Monitoring & Control
- Process Engineering & Design
- Mechanical Engineering
- Arrangement Design & Piping Engineering
- Civil & Structural Engineering
- Electrical Engineering
- I&C Engineering

WHAT WE CAN DO FOR OUR CUSTOMER

INNOVEVA provides high-quality and efficient engineering and design services for all size projects in:

- Power Plants
- Industrial Plants
- Refineries
- Petrochemical Plants
- Chemical Plants

HOW WE DO IT

INNOVEVA is a flexible company able to adapt its tools, methods and deliverables to individual customer needs in order to assure optimal project life cycle.

INNOVEVA uses state-of-the-art technology and works in compliance with International Norms and Standards.

INNOVEVA is equipped to operate globally and concurrently with integrated services provided by our home office, regional satellite offices and site-based teams. Worldwide communication facilitates information exchange with clients and project partners anytime, anywhere. INNOVEVA has a wide range of Partners who provide access to the best technologies, resources and knowledge bases which bring significant advantages to our clients. Our resources include joint ventures with other world-class organizations created to provide our clients with a full complement of extended services.

RESOURCES

Our engineers have many years of experience in plant development and design, with a special focus on all types of power plants and refineries. Our staff is predominately engineering and design professionals, being experts in all areas of plant facility engineering and operation. Our management is actively engaged in guiding each project and ensuring that every client is satisfied.

For some clients we provide basic engineering resources for full-service assistance.

For others, we provide specialists for specific tasks.

Our project teams respond immediately to any call for engineering assistance, and they collaborate on integrated project implementation according to clients' needs and choices.



MNOVEVA

INNOVEVA AG

Marktplatz 158 CH-5080 Laufenburg Switzerland

Phone: +41 (0) 62 874 4070 FAX: +41 (0) 62 874 4074

www.innoveva.com mail@innoveva.com

INNOVEVA d.o.o.

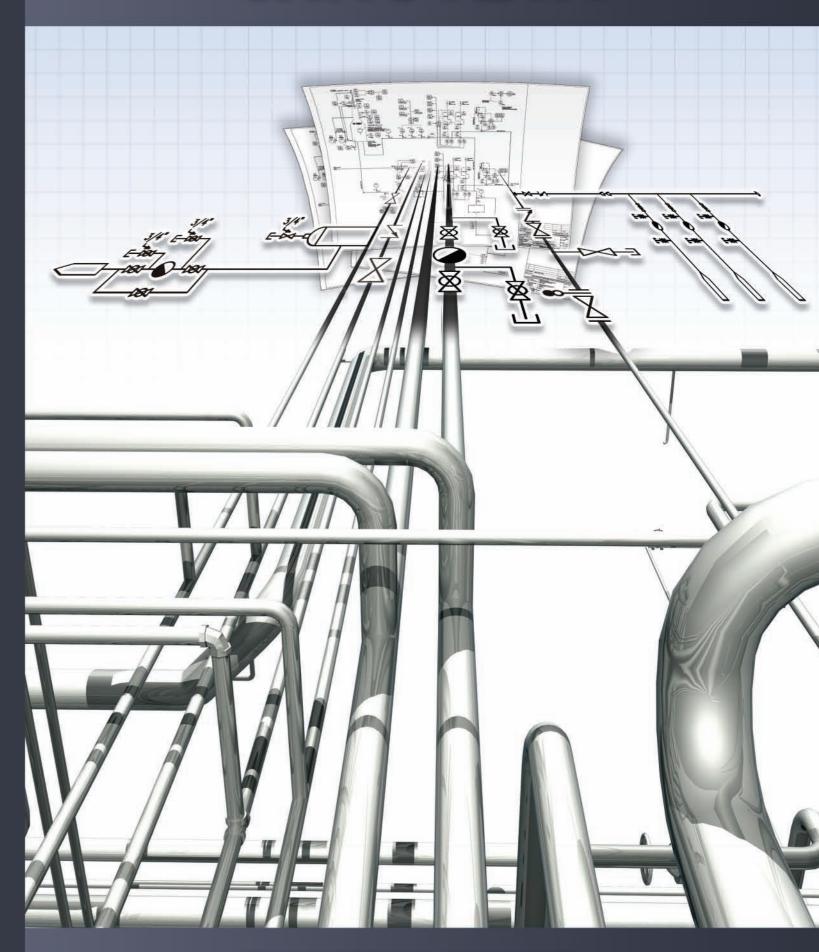
Siget 19 HR 10020 Zagreb Croatia

Phone:

+385 (0) 1 652 82 64 **FAX**:

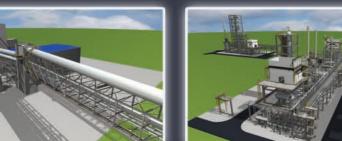
+385 (0) 1 652 84 62

www.innoveva.com mail@innoveva.com



ENGINEERING SERVICES















IDEA EVOLUTION

- Support definition of project committee
- · Formulate general project idea or concept
- Identify alternative solutions or scenarios for the idea(s)
- Investigate idea/concept and alternative solutions
- System analyses and proposals

CONCEPT AND FEASIBILITY STUDY

- · Refinement of the solutions and scenarios
- · Conduct and analyse feasibility study
- Scope packaging
- ROI calculations and project cost estimations
- System solutions

PROJECT SET-UP AND START

- Define project deliverables, priorities and schedule
- Define work packages
- Cost estimation
- System environment definition
- · Hand-over procedures and rules

ENGINEERING

CONCEPT ENGENEERING

Preparing data for design: process descriptions, preliminary engineering plans and schedules, owner?s specifications, critical equipment and materials, preliminary costs, starter schedule and procurement plans.

Preparing preliminary conceptual designs and "sketches" that illustrate the design

Optimizations of alternatives and to "freeze" concepts that are carried into basic engineering.

- Plant layouts
- Process and technology building services
- · Clean room zone plans including pressure stages
- Site master plan
- · Rough project time schedule
- Personnel and material flow plans
- Project cost estimation



OPERATION AND MAINTENANCE SUPPORT

- Training
- · Service support
- Modernisation
- Revamping
- Repowering

ERRECTION AND COMMISSIONING SUPPORT

- Errection and commissioning scheduling
- Training services
- · On-site design
- As built data and design capturing

PROCUREMENT AND PRODUCTION SUPPORT

- Supplier Integration
- Inspection and testing plan preparation
- Shop and field construction support
- Testing and turn-ower support

BASIC ENGENEERING

General Arrangement Designs, outline specifications for equipment budgetary quotations and construction requirements, Budgetary cost and schedule estimates

- Process Simulation
- Final Process Flow Diagrams (PFDs)
- Final Piping and Instrumentation Diagrams (P&IDs)
- Hydraulic Calculations
- Equipment Sizing
- Elaboration and definition of engineering basics
- · Final determination of mass and energy balances
- Implementation HSE- requirements
- · Building descriptions and planning
- Layout and erection planning
- · Clean room classification
- Logistic and magazine planning
- Basic risk analysis
- · Validation master plan (VMP)

DETAILED ENGENEERING

Final detail "for construction" drawings and detail specifications for equipment purchases and to fully define construction requirements.

- PID freeze
- Sizing of components
- · Checking of technical specifications.
- · Interface Management
- Operating instructions
- System Electrical Load List
- · Overall system description
- Engineering Release for Procurement (all foundation)/Construction / Customer
- · 3D model with detail design
- · BOQ (complete)
- · Suppliers follow up
- Equipment detail document delivery schedule
- Equipment detail engineering (drawings, curves..)