



DESCON ENGINEERING
SERVICES & TECHNOLOGY



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Who We Are

Descon Engineering is the flagship enterprise of a multinational conglomerate including Power, Chemicals and Engineering businesses with headquarters in Lahore, Pakistan. With four decades of experience, Descon has evolved as an integrated engineering services provider to major clients around the world.

Since the 1980's, Descon Engineering Services and Technology (DEST), the design engineering arm of Descon Engineering, has seen a gradual diversification across engineering and industrial services with engineering projects around the globe.

At DEST we recognize the unique challenges posed by diverse projects and have the technical and managerial capabilities to provide the engineering package required for the project, regardless of size or complexity.

With the help of a seasoned and multi-disciplinary team along with state-of-the-art tools, DEST has managed to attain recognition in the process and energy sectors.

+8.0
MILLION MHRS

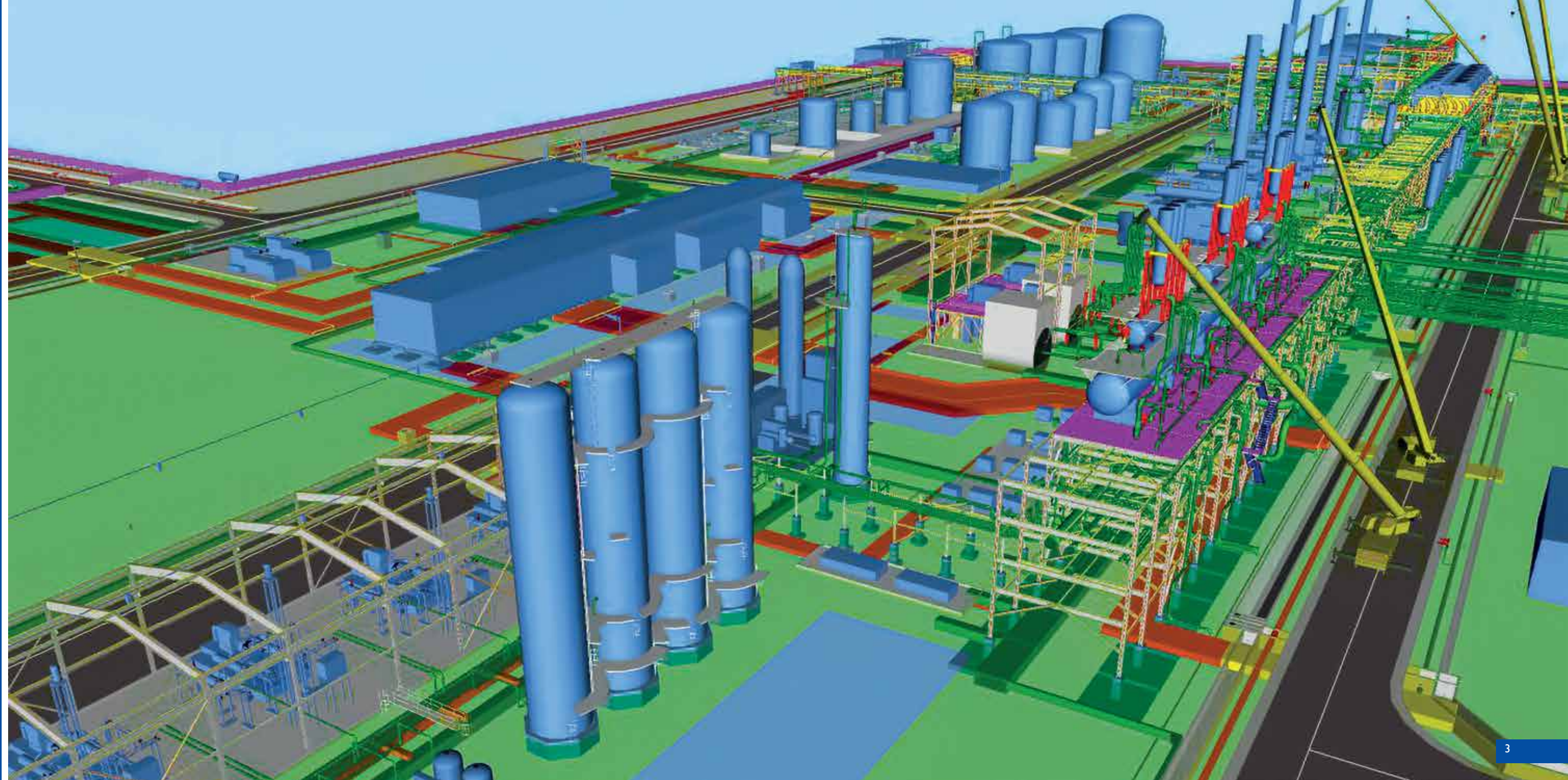
+1,000
PROJECTS

What We Strive For

We continue to build a reputation for providing quality given the time and budget constraints. We incorporate QA/QC & HSE (ISO 9001:2008, OHSAS 18001:2007 & ISO 14001:2004) within our functions.

At DEST, we know the importance of remaining on the cutting edge and are continuously looking to upgrade and improve our infrastructure and talent pool to maximize our efficiencies.

DEST has a sustained focus on engineering excellence and quality. This is achieved through an integrated approach to problem solving. A vital part of the process is programs for employee development and skills enhancement.





Our Core Values



Safety

“We believe HSE is of utmost importance and we attach the highest value to the safety of our employees and stakeholders.”



Continuous Improvement

“We believe excellence is a commitment to improve everything we do all the time.”



Leadership

“We believe leaders inspire others to learn and achieve more.”



Accountability & Ownership

“We believe in taking responsibility for our decisions, actions and their results.”



Team Work

“We believe in the strength of the individual, yet we accomplish more by working together.”



Open Communication

“We believe open communication is the foundation of trust.”



Services Portfolio

DEST offers its clients an elaborate range of engineering & design consultation and project management services, which include:

Engineering and Design

- Basic Design
- Detailed Design
- HAZOP Studies
- 3-D Model Reviews
- Site Survey & Field Engineering
- Geotechnical Engineering Services
- Brown-Field Revamps
- Plant Assets Validation /Valuation
- Pre-commissioning / Commissioning
- Design House Services
- Long-term Service Agreements

Project Management and Consulting

- Owner's Engineer / Advisor
- Concept Selection / Pre-FEED Study
- FEED Preparation & Verification
- Budgetary Cost Estimation
- ITB Preparation & Contractor's Proposal Evaluation
- Engineering Execution Plan
- Project Monitoring & Control
- Design Optimization
- Document Control & Management
- Design Interface Management



Capabilities & Business Areas

Oil & Gas

- Gas Processing Plants
- Refining
- Onshore Wellhead Tie-ins
- Tank Farms & Terminals
- Onshore Flowlines
- Early Production Facilities

Chemicals & Petrochemicals

- Petrochemical Plants
- Fertilizer
- Hydrogen Peroxide
- Soda Ash
- Polyester

Energy & Power

- Renewable Energy
- Thermal Power Plants
- Grid Stations & Substations

Industrial

- Automotive & Others
- FMCG

Water & Environment

- Hydel
- Water Transmission Lines
- Storage Dams
- Water, Waste Water & Effluent Treatment Plants
- Barrages & Canals

Major Projects:

Oil & Gas

Gas Processing Plants

- FEED for MPCL Zarghun South Gas Field Development, Pakistan
- PPL Adhi LPG & NGL Recovery Plant III, Pakistan
- Makori Field Development for MOL, Pakistan
- PPL Adhi EPF Upgradation, Pakistan
- Sulphur Recovery Unit for PPL, Pakistan
- Takreer Gas Oil Transfer Facilities, UAE

Refining

- PARCO Mid-Country Refinery, 100,000 BPD, Pakistan
- Atyrau Refinery Reconstruction, 104,000 BPD, Kazakhstan
- Dung Quat Refinery (DQR), 148,000 BPSD, Vietnam
- KNPC Clean Fuel (CFP) for Mina Al-Ahmad Refinery, 346,000 BPD, Kuwait
- UOP Multi storied Modular Chlorosorb Skid Unit, Malaysia

Onshore Wellhead Tie-Ins

- ADCO Tie-Ins at South East (Package-B), UAE
- Upgrade of Wellhead Control & Safety Systems at Thamama C, UAE
- ADCO HIPPS, UAE



Onshore Flowlines

- OMV Sawan Latif Flowlines Concept Selection Study, Pakistan
- Banagas Field Pipelines, Bahrain
- Bosicor Onshore SBM Pipelines, Pakistan

Tank Farms & Terminals

- PAPCO Storage Terminals MOGAS, Pakistan
- Attock Petroleum Limited Bulk Oil Terminal, Pakistan
- Banagas Field Sitra Storage Expansion, Bahrain
- Design of Tanks for QAFCO-5, Qatar
- Detail Engineering of PMP Tanks for TCJV, Qatar

Early Production Facility

- PPL-Adhi EPF Upgradation Project, Pakistan
- TOTAL-Diyab Gas EPF Project, UAE

Chemicals & Petrochemicals

Petrochemical Plants

- ACT Bulk Liquid Chemical Terminal, KSA
- Sadara Aromatic Project, KSA
- Borouge Polyolefin Flare Recovery Project, UAE

Fertilizer

- Fertil New Bagging & Truck Loading Facility, UAE
- Fertil Urea Debottlenecking Project, UAE
- Fertil Ammonia Flare Project, UAE
- Engro 340 MTPD CO₂ Recovery Plant, Pakistan
- Fatima Fertilizer BMR Project, Pakistan

Hydrogen Peroxide

- Oxychem Hydrogen Peroxide Plant Phase I & 2 Pakistan

Soda Ash

- ICI 150 KTPA Light Ash Project Phase I & 2, Pakistan
- ICI 50 KTPA Soda Ash Plant Expansion, Pakistan
- ICI 65 KTPA Soda Ash Expansion, Pakistan
- ICI 14 KTPA RSB-4 Expansion, Pakistan
- ICI 70 KTPA DAP-3 Expansion, Pakistan

Polyester

- ICI Polyester Expansion Project, Pakistan



Energy & Power

Renewable Energy

- 50 MW Wind Power at Jhampir, Pakistan
- 2 x 50 MW Wind Power at Gharo, Pakistan
- Gul Ahmad 50 MW Wind Power, Pakistan
- Gul Ahmad 50 MW Metro Wind Power, Pakistan

Thermal Power Plants

- 225 MW Combined Cycle Bhikki Power Plant, Pakistan
- UCH-II 400 MW Combined Cycle Power Plant, Pakistan
- BOP for 42 MW Power Generation Package for FFCL, Pakistan
- 50 MW Khorfakkan Power Station, UAE
- Sharourah Power Plant Extension Project, KSA

Grid Stations & Substations

- 132 KV - 50 MW Wind Power at Jhampir, Pakistan
- 132 KV - 2 x 50 MW Wind Power at Gharo, Pakistan
- 132 KV - Gul Ahmad 50 MW Wind Power, Pakistan
- 132 KV - 117 MW CFPP at Port Qasim, Pakistan
- 132 KV - FIEDMC Industrial City at Faisalabad, Pakistan
- 132 KV - LESCO Punjab University New Campus at Lahore, Pakistan
- 132 KV - DHA Phase-8 at Lahore, Pakistan
- 132 KV - DHA Phase-9 at Lahore, Pakistan
- 132 KV - MEPCO at Sanjar Pur Sadiqabad, Pakistan



Industrial

Automotive & Others

- Hi-Tech Industries Alloy Rim Manufacturing Plant, Pakistan
- Hyundai Motors Car Manufacturing Plant, Pakistan
- Indus Motors (IMC) Paint Shop Expansion, Pakistan
- Mughal Steel Reheat Furnace BOP, Pakistan
- Master Tiles and Ceramic Engineering Consultancy for Electrical Power Distribution System, Pakistan
- US Apparel Engineering Consultancy, Pakistan

FMCG

- Pakistan Aluminum Beverage Cans (PABCL) Plant, Pakistan
- AA Pulp & Puree Plant Design Consultancy & Construction Supervision, Pakistan
- Pakola (Mehran Bottlers) Production Building, Pakistan



Water & Environment

Hydel

- 18 MW Ranolia Hydropower, Pakistan

Water Transmission Lines

- Fatima Fertilizer Conveyance Channel and Infrastructure, Pakistan
- Intake Structure, Pump House and Water Pipeline of UCH-II Power, Pakistan
- Pump House, Tube Well System and Water Pipeline, Pakistan

Storage Dams

- Mirani Dam in Baluchistan, Pakistan

Water, Waste Water & Effluent Treatment Plants

- Byco Effluent Water Collection, Treatment and Disposal System Design, Pakistan
- Lotte Chemical Anaerobic Effluent Treatment Plant, Pakistan
- Engro Design of Water Pre-treatment System for LBOD Water Supply Scheme, Pakistan

Barrages & Canals

- Khanki Barrage Electrical Power Distribution System, Pakistan





Engineering Disciplines:

Process

Process design capabilities include:

- Process Simulation of New And Existing Process Units
- PFD & P&ID Development
- Heat & Mass Balance
- Equipment Sizing
- Hydraulic Calculations
- Flare System Design
- Multi-phase Pipelines & Network Analysis

Brown-field adequacy of existing utilities is also part of the portfolio.

Instrumentation & Control

Instrumentation & Control department offers FEED, basic and detail engineering. Its main capabilities include:

- Process Control System and Emergency Shutdown System Design
- Modular Systems, PLC, SCADA, FGS System Design
- Field Instrumentation Design
- Control Valves & On/Off Valves Design
- Analyzers & FGS Field Devices Design
- Package Systems

Typical detail engineering documents and tasks include:

- Design Basis
- Specifications & Datasheets
- Instrument Index & I/O Lists
- Interlock Logic Diagrams
- Instrument Loop Diagram
- Instrument Layout
- As-Built Drawings and Documentation



Piping

Piping is one of the core disciplines in the engineering portfolio. We have a well trained and experienced team of engineers, designers, CAD Worx, PDS, S3D administrators, operators and draftsmen to meet the requirements of clients.

We design plant piping keeping in mind the ease of construction with reduced construction time and cost where possible. We achieve this goal by involving the construction management and commissioning teams during the design phase of the project.

We can deliver specialized engineering and design solutions to meet the individual needs of our clients while adhering to the relevant internationally accepted codes & standards and applicable statutory regulations.



Electrical Engineering

This particular expertise includes design of:

- High & Low Voltage Generation & Substation Design
- Design for Power Distribution System
- Adequacy Check and Power System Studies including:
 - Load Flow & Short Circuit Analysis
 - Motor Starting & Protective Device Coordination
- Electrical Design Calculations for Lighting, Earthing, Lightning Protection
- Construction Layouts for Power, Earthing and Lighting
- Procurement Support for Electrical Equipment which includes Specifications, Datasheets, Material Requisitions, Technical Bid Evaluation & Vendor Document Review
- 2D Drafting and 3D Modeling

Civil Structure

Civil design services encompass all types of steel and concrete structures including process and rotary equipment foundations. Static and dynamic analysis for complex structures and equipment is done using latest softwares. Special concrete structures like chimney, silo, and clarifier design expertise is also catered along with integrity checks of existing steel and concrete structures.



Architecture

We offer architectural design services starting from concept development to detailed construction drawings of industrial buildings, substations, offices and residential buildings along with associated utilities and infrastructure.



Mechanical Design

This Mechanical design services include design review and technical support for procurement of all types of:

- Static Equipment: (Storage Tanks, PHEs, Vent & Flare Stacks, Hoist & Cranes, Pressure Vessels, Columns, Reactors, Heat Exchangers, AFCs, etc.)
- Rotary Equipment: (Compressors, Pumps, Steam & Gas Turbines, Fans & Blowers)
- Package Equipment: (Water Treatment Package, Chemical Dosing, Boiler & Utility Package, Gas Conditioning Skids, etc.)

HVAC

HVAC design capabilities cover:

- Load Calculations
- Design Layouts
- Equipment Schedules & specifications

We also provide preparation of:

- Technical Inquiry Documentation
- Material Requisitions and Technical bid evaluations for:
 - Air & Water Cooled Chillers
 - AHUs
 - VRF
 - Packaged Air Conditioning Systems
 - Industrial Ventilation Equipment
 - Humidifiers
 - Dehumidifiers
 - Active & Passive Cooled Shelters



HSE Engineering

Our HSE engineering services include:

- Risk Management
- HSE Plans
- Philosophies
- Specifications & HSE studies (HAZID, HAZOP, SIL, and HSEIA etc.)

We also have the design capabilities for:

- Loss Prevention
- Passive Fire Protection
- Active Fire Protection
- Spray/Sprinkler Systems
- Fire & Gas Detection
- INERGEN/Flooding Systems



Clientele



HEAD OFFICE

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BRANCH OFFICES

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