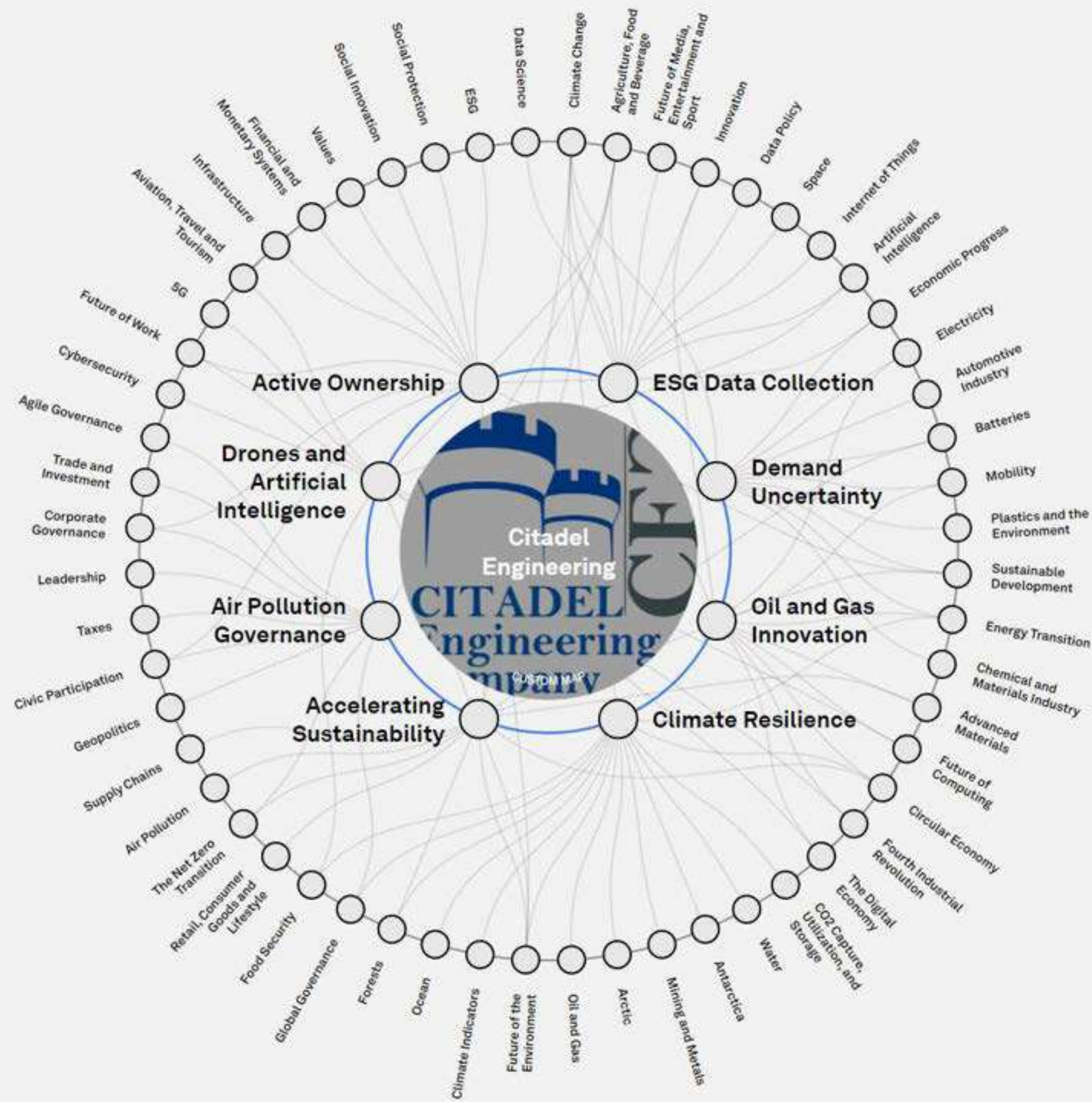


# ENGINEERING PORTFOLIO





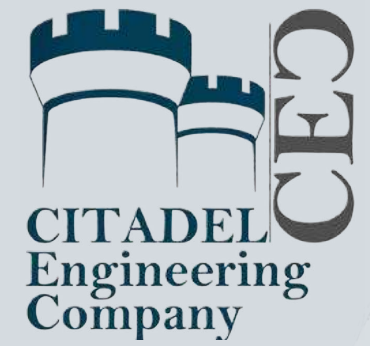
# STRATEGIC INTELEGENGE BRIEFING



# WHO WE ARE



# HISTORY OF CITADEL ENGINEERING COMPANY



<p>1 <b>2015</b> CITADEL ENGINEERING COMPANY (CEC) WAS ESTABLISHED IN 2015 UNDER THE NAME UNITED CITADEL ENGINEERING COMPANY.</p>	<p>2 <b>2016</b> EXPANDED ITS SERVICES TO INCLUDE COMPREHENSIVE INSPECTION AND CALIBRATION SOLUTIONS.</p>	<p>3 <b>2016</b> ICEC, EMBARKED ON A STRATEGIC EXPANSION PLAN, ESTABLISHING BRANCHES OUTSIDE THE USA TO SERVE CLIENTS GLOBALLY.</p>	<p>4 <b>2017</b> ACHIEVED API ACCREDITATION, ISO CERTIFICATION, AND BECAME THE SOLE API Q2 CERTIFIED COMPANY.</p>	<p>5 <b>Stage 5</b> Baker Hughes Channel Partner API American Petroleum Institute</p>
<p>9 <b>2017</b> LAUNCHED CITADEL ACADEMY, PROVIDING PROFESSIONAL TRAINING PROGRAMS TO ENHANCE SKILLS AND KNOWLEDGE IN VARIOUS INDUSTRIES.</p>	<p>8 <b>2018</b> JOINED THE TIC COUNCIL AS A MEMBER AND PLAYED A SIGNIFICANT ROLE AS A BOARD MEMBER.</p>	<p>7 <b>2019</b> EXPERIENCED SUBSTANTIAL ORGANIC GROWTH AND OBTAINED ADDITIONAL ACCREDITATIONS, FURTHER SOLIDIFYING OUR POSITION AS A TRUSTED PROVIDER OF ENGINEERING SERVICES.</p>	<p>6 <b>Stage 9</b> ANAB ACCREDITED PERRY JOHNSON REGISTRARS, INC. UKAS MANAGEMENT SYSTEMS IAC-MRA FILA Calibration</p>	<p>10 <b>2020</b> ENHANCED ITS NDT DIVISION WITH ADVANCED EQUIPMENT FOR MORE ACCURATE TESTING.</p>
<p>11 <b>2021</b> PARTNERED WITH LEADING OEMS, ENHANCING OUR OFFERINGS AND EXPERTISE.</p>	<p>12 <b>2022</b> EXPANDED ITS SERVICE PORTFOLIO TO INCLUDE COMPREHENSIVE SOLUTIONS SUCH AS TANK AND VESSEL CLEANING AND WASTE MANAGEMENT.</p>	<p>13 <b>2023</b> RECEIVED ENDORSEMENT FROM THE MINISTRY OF OIL IN IRAQ, AFFIRMING OUR EXPERTISE AND CAPABILITIES IN THE OIL INDUSTRY. ADDITIONALLY, WE OBTAINED THE IN-COUNTRY VALUE (ICV) CERTIFICATION FROM THE UAE, SOLIDIFYING OUR COMMITMENT TO SUPPORTING LOCAL ECONOMIES AND COMMUNITIES.</p>	<p>U.S. Chamber of Commerce KIZAD ICV</p>	<p>ABB EMERSON Honeywell Haskel</p>





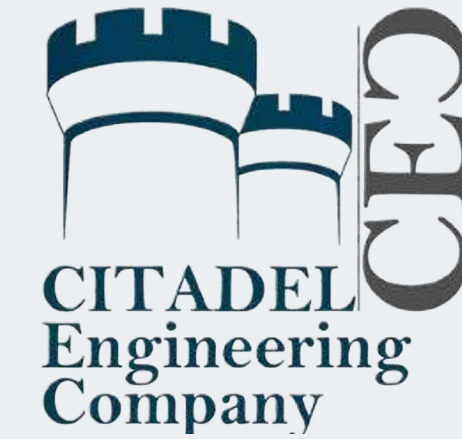


# ENGINEERING SERVICES

- TECHNICAL DOCUMENTATION & SUPERVISION OF PROCUREMENT
- PUMP STATION AND METERING SKIDS CONTROL SYSTEM
- PIPELINE ENGINEERING, INSPECTION, AND SUPERVISION OF CONSTRUCTION
- OIL AND GAS PLANT ENGINEERING SERVICES
- POWER PLANT AND COGENERATION PLANT CONSULTING AND ENGINEERING SERVICES
- PROJECT MANAGEMENT & PROCUREMENT FOR EIC ENGINEERING PROJECTS
- AUTOMATION SOLUTIONS

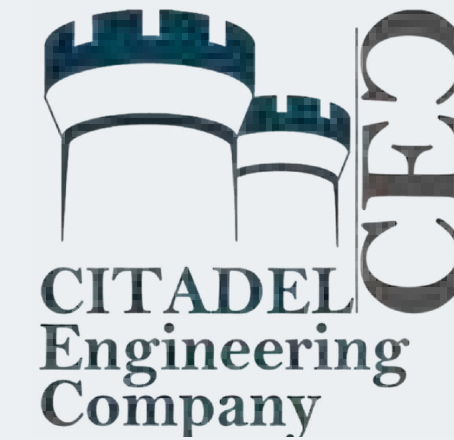


# OIL, GAS PLANT AND REFINERY ENGINEERING SERVICES



- SPECIALIZED ENGINEERING SOLUTIONS FOR OIL AND GAS FACILITIES.
- COMPREHENSIVE DESIGN, INSTALLATION, AND MAINTENANCE SERVICES.
- ENHANCEMENT OF PRODUCTION EFFICIENCY AND SAFETY MEASURES.
- CUSTOMIZED STRATEGIES FOR THE OPTIMIZATION OF OIL AND GAS OPERATIONS.





- COMPREHENSIVE SOLUTIONS FOR POWER PLANTS AND COGENERATION PLANTS
- EXPERTISE IN ENGINEERING DESIGN, CONSTRUCTION, MAINTENANCE, AND OPTIMIZATION
- UTILIZATION OF ADVANCED TECHNOLOGIES FOR RELIABLE POWER GENERATION
- FOCUS ON MAXIMIZING ENERGY EFFICIENCY AND MINIMIZING ENVIRONMENTAL IMPACT
- TRUSTED PARTNER FOR ALL YOUR POWER AND COGENERATION PLANT NEEDS

# POWER PLANT & COGENERATION PLANT



# TECHNICAL DOCUMENTATION & SUPERVISION ON PROCUREMENT

- COMPREHENSIVE TECHNICAL DOCUMENTATION SERVICES FOR PROCUREMENT ACTIVITIES
- PREPARATION OF DETAILED SPECIFICATIONS, TECHNICAL DRAWINGS, AND OTHER NECESSARY DOCUMENTATION
- CLOSE COLLABORATION WITH CLIENTS TO UNDERSTAND SPECIFIC NEEDS AND REQUIREMENTS
- EXPERT SUPERVISION THROUGHOUT THE PROCUREMENT PROCESS TO ENSURE COMPLIANCE WITH GUIDELINES
- QUALITY CHECKS AND VERIFICATION OF SUPPLIER COMPLIANCE WITH PROJECT SPECIFICATIONS
- THE STREAMLINED PROCUREMENT PROCESS, MITIGATING RISKS AND ENSURING RELIABLE SUPPLIER SELECTION

TRUST IN CITADEL ENGINEERING SERVICES FOR EFFICIENT AND EFFECTIVE TECHNICAL DOCUMENTATION AND SUPERVISION DURING PROCUREMENT.



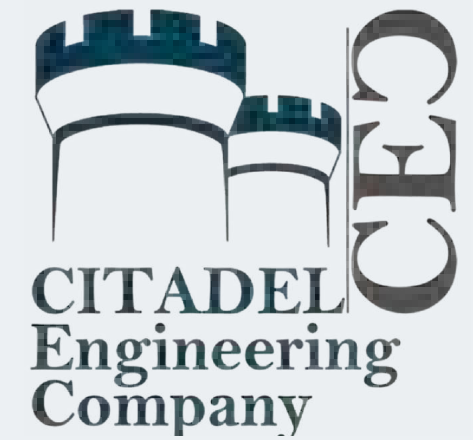


# PUMP STATION AND METERING SKIDS CONTROL SYSTEM RETROFIT



- UPDATING AND RETROFITTING CONTROL SYSTEMS FOR PUMP STATIONS AND METERING SKIDS
- DEVELOPMENT OF DISTRIBUTED CONTROL SYSTEM (DCS) BASED CONTROL SYSTEMS
- REPLACEMENT OF OUTDATED CONTROL SYSTEMS TO IMPROVE EFFICIENCY AND RELIABILITY
- ENHANCING THE SMOOTH OPERATION OF PUMP STATIONS THROUGH TECHNOLOGICAL ENHANCEMENTS
- INTEGRATION OF ADVANCED CONTROL SYSTEMS FOR PRECISE MONITORING AND OPERATIONAL CONTROL
- IMPROVING ACCURACY AND RELIABILITY OF FLOW MEASUREMENT IN METERING SKIDS
- ENSURING COMPLIANCE WITH INDUSTRY STANDARDS AND REGULATIONS
- MINIMIZING DOWNTIME DURING CONTROL SYSTEM UPGRADES THROUGH EFFICIENT INSTALLATION AND COMMISSIONING PROCESSES
- PROVIDING COMPREHENSIVE TRAINING AND SUPPORT TO OPERATORS FOR A SEAMLESS TRANSITION TO UPGRADED CONTROL SYSTEMS



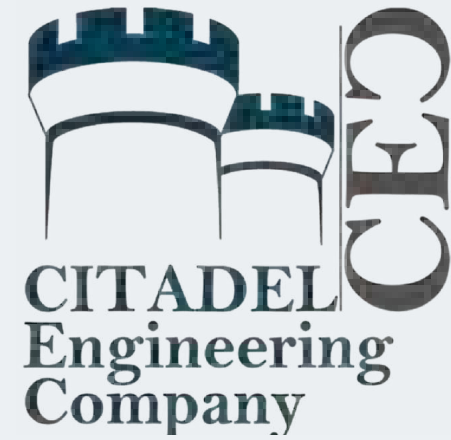


# PIPELINE ENGINEERING, INSPECTION, AND SUPERVISION ON CONSTRUCTION

- COMPREHENSIVE PIPELINE ENGINEERING AND DESIGN SERVICES FOR EFFICIENT AND RELIABLE PIPELINE SYSTEMS
- RIGOROUS INSPECTION SERVICES TO ENSURE PIPELINE SAFETY, PERFORMANCE, AND COMPLIANCE WITH INDUSTRY
- EXPERT SUPERVISION DURING CONSTRUCTION TO ENSURE ADHERENCE TO REGULATIONS AND QUALITY ASSURANCE
- IMPLEMENTATION OF ADVANCED TECHNIQUES AND TECHNOLOGIES FOR THE LONGEVITY AND EFFICIENCY OF PIPELINE
- THOROUGH EVALUATION OF MATERIAL SELECTION, ROUTE PLANNING, AND ENVIRONMENTAL CONSIDERATIONS
- INTEGRATION OF STATE-OF-THE-ART MONITORING SYSTEMS FOR REAL-TIME PIPELINE PERFORMANCE ASSESSMENT



# CONSULTING SERVICES



- OVERALL, BASIC, AND DETAILED ENGINEERING TO ENSURE THE SUCCESSFUL IMPLEMENTATION OF THE PROJECTS
- INTERFACE ENGINEERING TO COORDINATE AND INTEGRATE DIFFERENT ASPECTS OF THE PROJECTS
- PROCUREMENT ENGINEERING TO SUPPORT EFFICIENT AND EFFECTIVE PROCUREMENT PROCESSES
- EPC PROJECT MANAGEMENT TO OVERSEE THE ENTIRE PROJECT LIFECYCLE
- TECHNICAL CONSULTANCY TO PROVIDE EXPERT GUIDANCE AND ADVICE
- SUPPLY SERVICES TO FACILITATE THE PROCUREMENT OF NECESSARY EQUIPMENT AND MATERIALS
- SITE TECHNICAL SUPERVISION AND SUPPORT TO ENSURE SMOOTH PROJECT EXECUTION ON-SITE
- EXPERTISE IN CIVIL, MECHANICAL, ELECTRICAL, INSTRUMENT, AND CONTROL ENGINEERING TO ADDRESS ALL ASPECTS OF THE PROJECTS

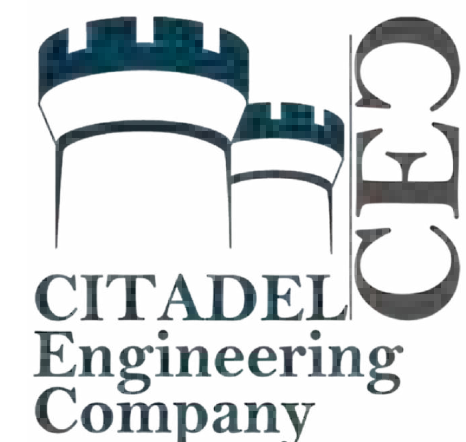






# OIL AND GAS PLANTS ENGINEERING SERVICES SUCH AS

- GAS REFINERY PLANTS
- CRUDE OIL DISTILLATION PLANTS
- PETROCHEMICAL COMPLEXES







### **GAS REFINERY PLANTS:**

- DESIGN AND ENGINEERING OF GAS PROCESSING UNITS
- OPTIMIZATION OF GAS TREATMENT AND PURIFICATION PROCESSES
- DEVELOPMENT OF GAS REFINING AND FRACTIONATION SYSTEMS
- INTEGRATION OF ENVIRONMENTAL SUSTAINABILITY PRACTICES
- COMPLIANCE WITH SAFETY REGULATIONS AND STANDARDS

### **CRUDE OIL DISTILLATION PLANTS:**

- ENGINEERING AND DESIGN OF CRUDE OIL DISTILLATION UNITS
- OPTIMIZATION OF REFINING PROCESSES FOR MAXIMUM YIELD AND QUALITY
- IMPLEMENTATION OF ADVANCED TECHNOLOGIES FOR EFFICIENT DISTILLATION
- INTEGRATION OF ENVIRONMENTAL PROTECTION MEASURES
- QUALITY CONTROL AND ASSURANCE FOR REFINED PRODUCTS





# POWER PLANT AND COGENERATION PLANT CONSULTING AND ENGINEERING SERVICES:

- THERMAL, SIMPLE, AND COMBINED CYCLE POWER STATIONS
- DESALINATION PLANTS (RO AND THERMAL DESALINATION SYSTEMS)
- REVAMPING & EXPANSION (SIMPLE CYCLE TO COMBINED CYCLE POWER PLANT)



**17** PARTNERSHIPS  
FOR THE GOALS

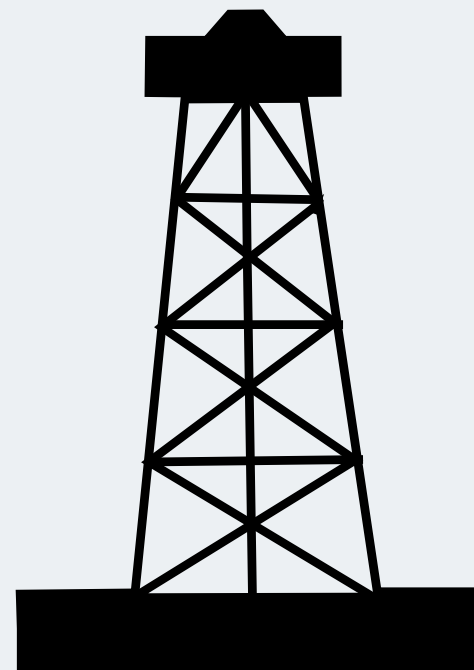


- OVERALL, BASIC, AND DETAILED ENGINEERING FOR POWER STATION PROJECTS
- DESIGN AND OPTIMIZATION OF THERMAL, SIMPLE, AND COMBINED CYCLE POWER SYSTEMS
- INTEGRATION OF ADVANCED TECHNOLOGIES FOR EFFICIENT POWER GENERATION
- ENVIRONMENTAL IMPACT ASSESSMENT AND COMPLIANCE WITH REGULATIONS
- SAFETY PROTOCOLS AND RISK MANAGEMENT STRATEGIES
- PROJECT MANAGEMENT AND COORDINATION OF VARIOUS ENGINEERING DISCIPLINES



# EFFICIENT PROCUREMENT SOLUTIONS FOR OIL AND GAS AND POWER PLANT PROJECTS

OUR COMPREHENSIVE TECHNICAL DOCUMENTATION AND SUPERVISION SERVICES ENSURE SMOOTH AND SUCCESSFUL PROCUREMENT PROCESSES FOR A WIDE RANGE OF EQUIPMENT IN OIL AND GAS AND POWER PLANT PROJECTS.

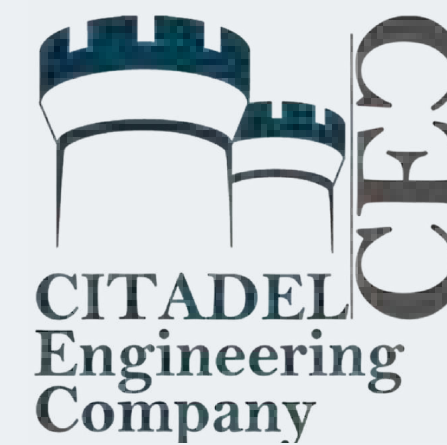


- GAS TURBINES
- STEAM TURBINES
- CENTRIFUGAL COMPRESSORS
- PUMPS
- EXCHANGERS
- KNOCKOUT DRUMS
- TRANSFORMERS
- VALVES
- INSTRUMENTS

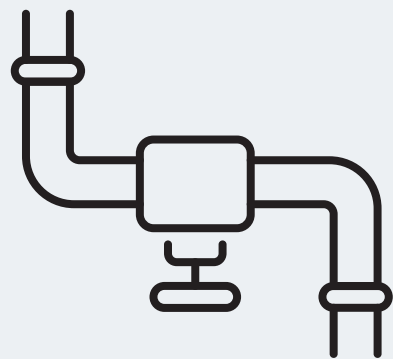




# PIPELINE ENGINEERING, INSPECTION, AND SUPERVISION ON CONSTRUCTION



- PIPELINE REPLACEMENTS: ALL SIZES AND MATERIALS
- PIPELINE MAINTENANCE PROJECTS: ENSURING ONGOING OPERATIONAL EFFICIENCY AND INTEGRITY
- CLASS LOCATION UPGRADES: ENHANCING SAFETY AND COMPLIANCE WITH REGULATORY REQUIREMENTS
- LAUNCHER/RECEIVER INSTALLATIONS: EFFICIENT AND RELIABLE EQUIPMENT FOR PIPELINE OPERATIONS
- PIPELINE ABANDONMENTS: SAFE AND ENVIRONMENTALLY RESPONSIBLE DECOMMISSIONING



## COMPLETE PIPELINE SOLUTIONS: TESTING, REPAIRS, PROTECTION, AND ENGINEERING

- HYDROTEST AND PNEUMATIC TEST PROGRAMS
- EMERGENCY REPAIRS
- CATHODIC PROTECTION SYSTEMS
- PIPELINE CONTROL AND INSTRUMENTATION
- PUMP STATION REVAMPING
- PRESSURE REGULATION
- NATURAL GAS STATION CONSTRUCTION





## COMPREHENSIVE PROJECT SUPPORT SERVICES FOR SEAMLESS OPERATIONS AND EXCEPTIONAL RESULTS



- REVIEWING MONTHLY AND FINAL INVOICES OF CONTRACTORS
- MONITORING HEALTH, SAFETY, AND ENVIRONMENT (HSE) COMPLIANCE
- OPTIMIZING SYSTEMS BASED ON LOCAL CONDITIONS AND CLIENT REQUIREMENTS
- ATTENDING MEETINGS TO HANDLE PROJECT REQUIREMENTS
- PROVIDING MATERIAL TAKE-OFF FOR PROJECT IMPLEMENTATION
- EVALUATING POTENTIAL LOCAL SUPPLIERS AS REQUESTED BY THE CLIENT
- ASSESSING BALANCE OF PLANT (BOP) MANUFACTURING DOCUMENTS BASED ON FACTORY INSPECTIONS



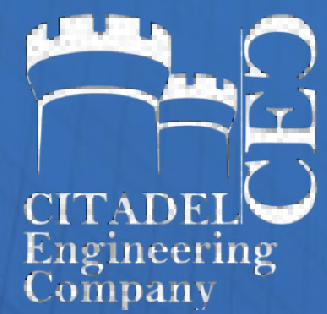
# EFFICIENT DOCUMENT REVIEW, TECHNICAL CONSULTANCY, AND PROJECT SUPPORT FOR OPERATIONS

- REVIEW OF CONTRACTOR DOCUMENTS TO ENSURE COMPLIANCE WITH SPECIFICATIONS AND CLIENT EXPECTATIONS
- PROVISION OF NECESSARY DRAWINGS, DOCUMENTS, INSTRUCTIONS, PROCEDURES, MANUALS
- EXPERT TECHNICAL CONSULTANCY TO ADDRESS PROJECT-SPECIFIC CHALLENGES AND REQUIREMENTS
- SUPPORT IN DEVELOPING AND REFINING THE PROJECT TIME SCHEDULE FOR IMPLEMENTATION
- SPECIFICATION OF MINIMUM REQUIREMENTS FOR SPECIAL TOOLS AND CONSUMABLES DURING STARTUP
  - COMMISSIONING
  - OPERATION
  - MAINTENANCE PERIODS





# CEC REFERENCES



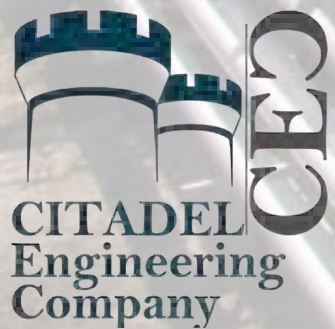
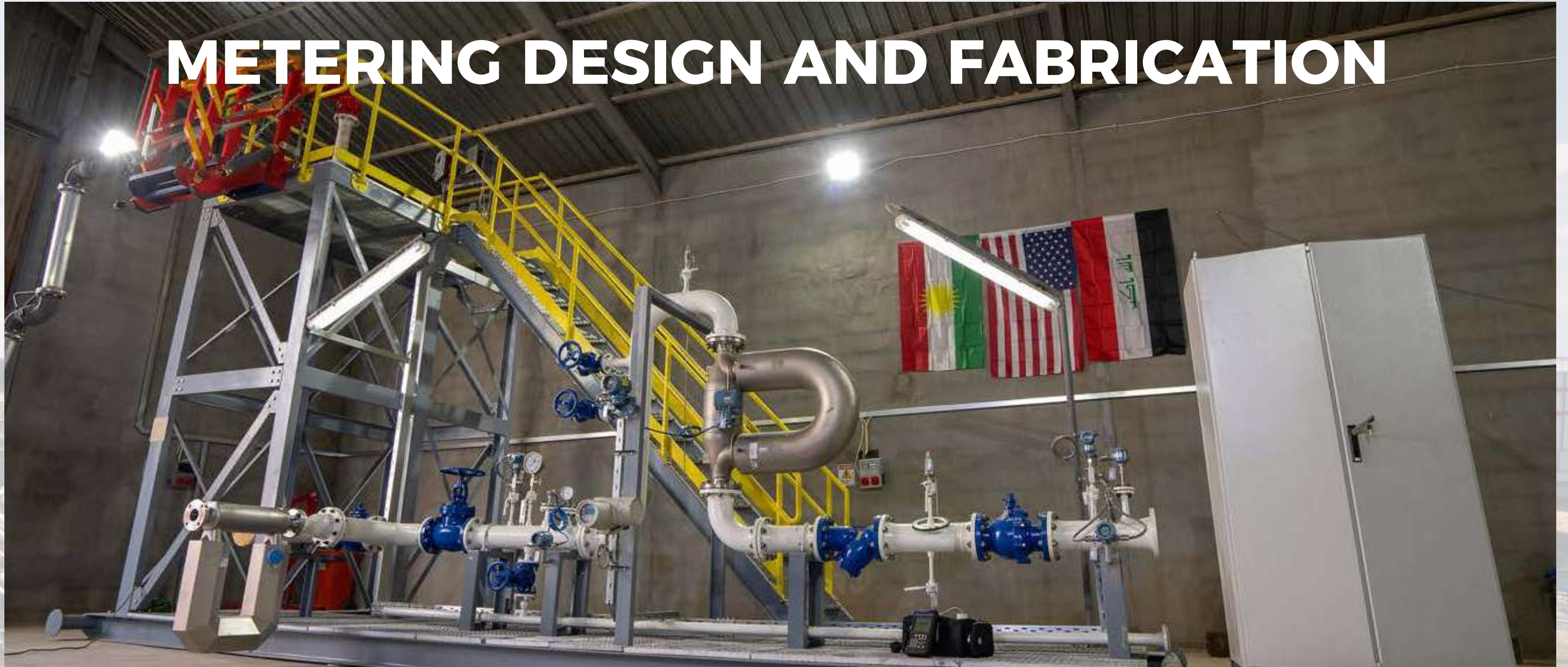


# DELIVERING TRUSTED SOLUTIONS (CEC) IS YOUR RELIABLE PARTNER



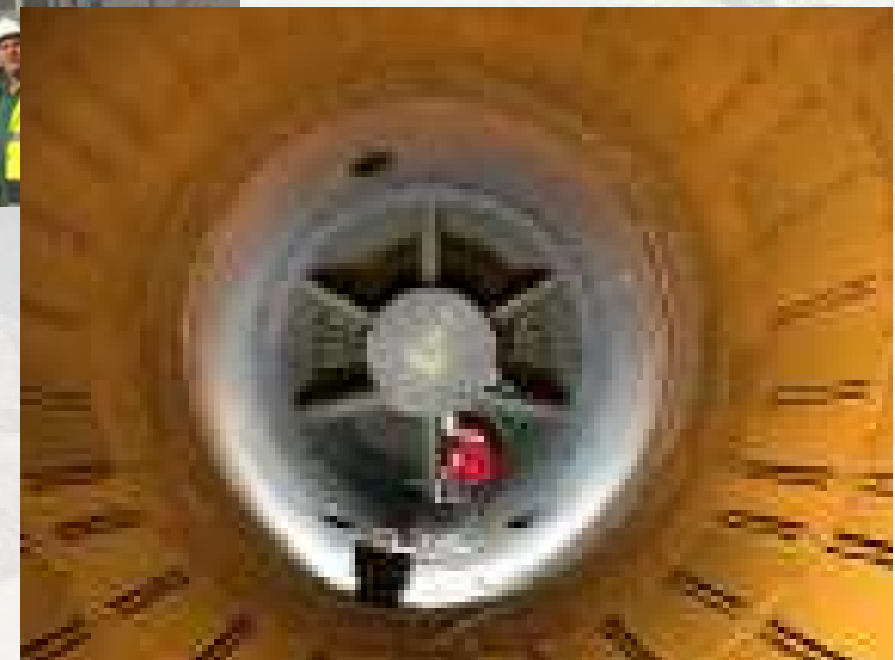
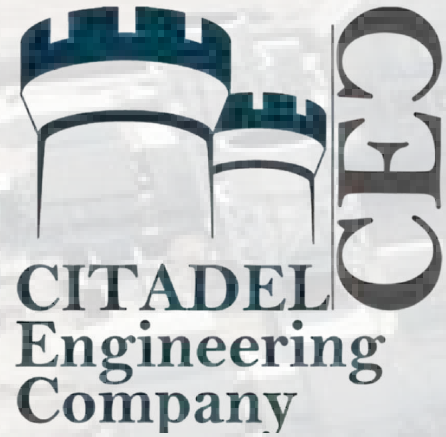


# METERING DESIGN AND FABRICATION





# SIEMENS



## 150 MW GAS POWER PLANT BASED ON SIEMENS SGT-600





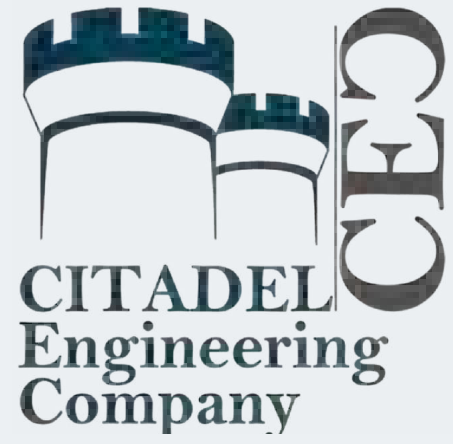
**EFFICIENT FLOW COMPUTER AND CONTROL  
SYSTEM  
SOLUTIONS FOR 4 METERING SKIDS**



**ROSNEFT**







# METERING SKID AND PIPE PROVER DESIGN AND FABRICATION ALONG WITH CONTROL SYSTEM





# NATIONAL OIL COMPANIES CUSTOMERS



CITADEL Engineering Company

### OUR SERVICES:

1. Feasibility Studies, Front-Eng Engineering & Design (FEED),
2. Engineering, Procurement, Construction & Commissioning (EPC),
3. Custom Process Systems
4. HAZOP, HAZID, NSEIA, FMEA, COMAH Studies
5. ICSS, PLC, DCS, ESD, F&G, SCADA, BMS Syst
6. F&G Detection And Suppression Systems.
7. Liquid & Gas Metering Skids.
8. High Integrity Pressure Protection System



CITADEL Engineering Company

### METERING SKIDS

Our measurement systems are flawlessly executed from design to the final automation integration. These systems must accurately measure the volume of product being moved between transport, pipeline, and storage. Many factors can impact the accuracy of the transferring fluid:

Therefore, automatic sampling and measurement is a component of the skids designed and built by CEC. In addition, Citadel Calibration Services offers the highest level of ISO/IEC 17025 accreditation to ensure accurate service.

CITADEL Engineering Company

CITADEL Engineering Company



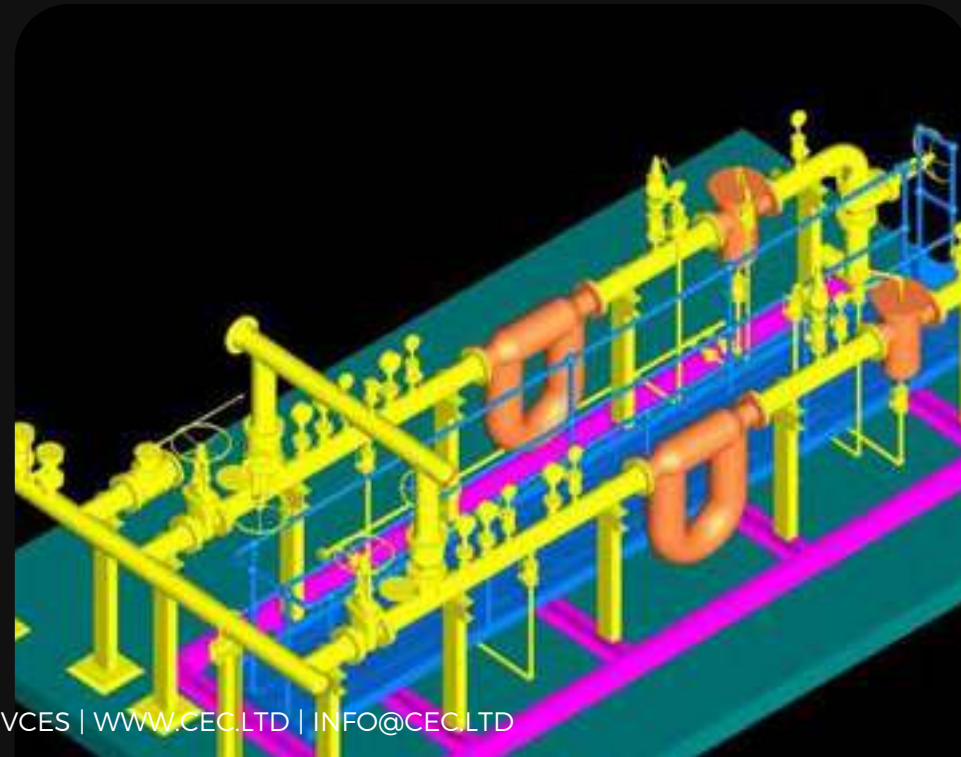
# CITADEL ENGINEERING COMPANY: EMPOWERING SUCCESS THROUGH STRONG CLIENT RELATIONSHIPS



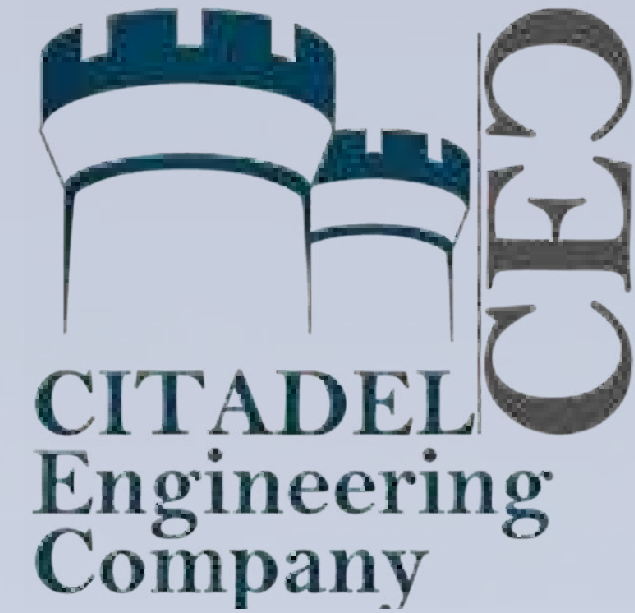




**CITADEL ENGINEERING COMPANY**







*Thank  
You*

## **YOU CAN CONTACT US**

US: +1 (385) 265 1707

UK: +44 1 224 01 2914



**INFO@CEC.LTD**  
**WWW.CEC.LTD**