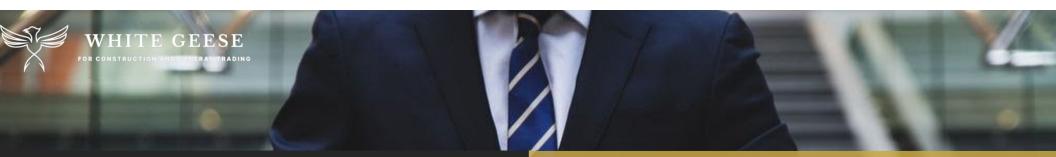
FOR CONSTRUACTION AND GENERAL TRADING





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#### Welcome message

Thank you for your interest in our esteemed company. We deeply appreciate the opportunity to acquaint you with the myriad activities we are involved in. Additionally, we take immense pleasure in presenting a concise overview of our exceptional capabilities and abundant resources, which are poised to support your ongoing and future projects.

We hold firm belief that this submission will capture your interest, and should you require any further information, we encourage you to reach out to us without any hesitation. We eagerly look forward to a fruitful collaboration in the near future.





### About Our History

We are a highly independent company, allowing us to form partnerships with numerous prestigious companies that excel in their respective fields of the industry since 2004. WGC is a versatile construction company with expertise in multiple disciplines, serving a wide range of clients across all aspects of MEP works, including commercial projects and heavy industrial communications systems.



### **Our Mission And Vision**

#### **Mission**

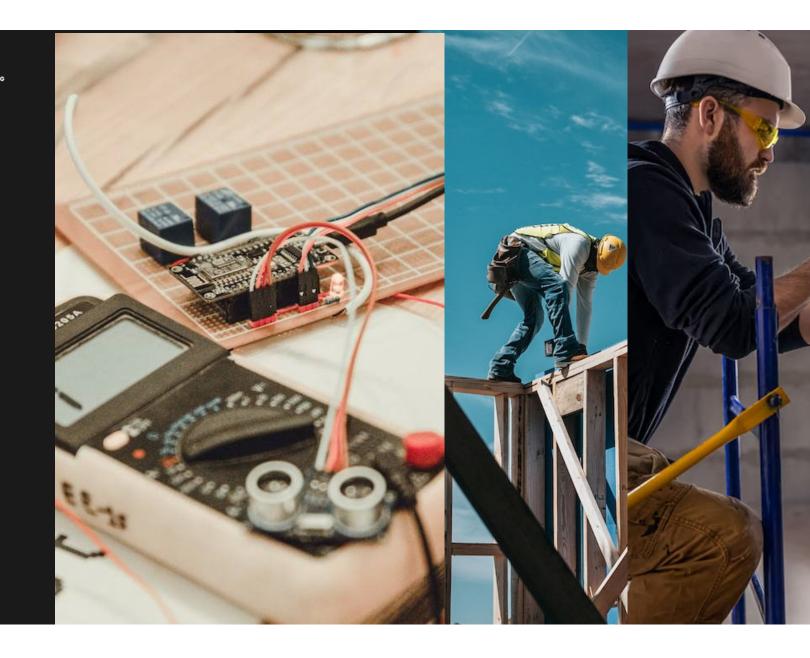
Our mission is to provide quality – driven, cost-effective construction, maintenance, and supplies of materials and services, to achieve customer satisfaction.

#### **Vision**

To be the most leading contractor in civil works, road development, residential and commercial construction and importing and exporting of consumables, building materials, foodstuff and supply of consumables, building in the region.



### Services





### **Construction Services**

### Mechanical Works

- Installation of various rotating equipment such as gas turbine generators, compressors, pumps, electrical cranes, and chemical injection units.
   Installation of stationary equipment including vessels, drums, columns, heat exchangers, and filters.
  - Fabrication and installation of storage tanks.
    - Installation of firefighting systems.
    - Insulation of stationary equipment, pipelines, and piping systems.
    - Chemical cleaning for process and stationary systems.





### **Construction Services**

### • Mechanical Works

WGC has extensive experience in designing and managing onshore pipeline and piping projects in Iraq. We have successfully completed projects in challenging locations, earning respect for our expertise.
We specialize in designing pipelines for the transportation of crude oil, natural gas, refined petroleum products, LPG, LNG, NGL, condensates, water, slurries, and various chemicals. Our pipelines have a diameter ranging from 3 inches to 48 inches.



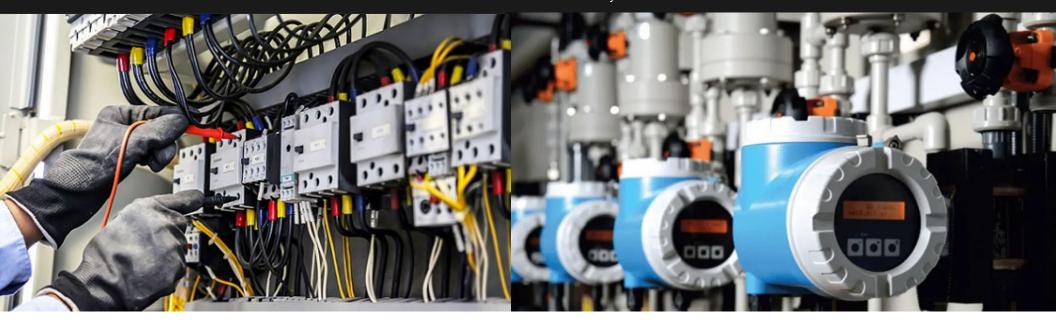
### E&I Electrical And Instrumentation

#### • Electrical Works

Installation and commissioning of a diesel generator set, power transformers of various voltages, EHV GIS panel, dummy panel, LV power distribution panel, LV switchgear and MCC panel, MV switchgear panel, NGR and VSD panel, power capacitor system, power monitoring system, SCADA PMS/ECS, bus duct systems (indoor and outdoor), power system (cable tray, cable pulling LV & HV, glanding and termination), installation of fiber optic cables, CCTV systems, communication systems (paging, P/A, wireless radio), grounding system, fire alarm system, telephone system, and lighting system.

#### Instrumentation

- Panel installation
- Cable laying and testing
  Junction box installation
- Junction box installation
   Oil in Water Analyzers
- Flow Meters
- Piping, Manifolds and
- Valves
- Level Sensors
- Temperature and Pressure Instrumentation
- Sensors and systems
  Flare Tip Ignition
- Mass Meters
- Installation of all types of SS tubes
- Installation of all types of control valves along with converters





### **Civil Work**

WGC has designed and managed most of the civil works related to oil and gas process facilities, as well as pipe lines. They have experience in fabricating all types of steel structures, executing concrete footing, slabs, and piles, fabricating and installing steel pipe supports, conducting soil investigations, and handling earthing works and road paving.

### **Engineering Services**

#### • process

- pressure vessels
- rotating equipment
- instrumentation
- electrical facilities
- computing
- piping, civil works
- cost control and scheduling.

All these types of engineering studies are covered and fully managed within WGC.





### • Basic Engineering Design (BED)

involves conducting conceptual process studies, such as material balances and process flowsheets, along with creating preliminary plot plans. It also includes developing preliminary Piping and Instrument Diagrams, defining and sizing main equipment to meet process specifications, specifying effluent requirements, and identifying control and safety devices. Overall, these studies form the foundation for a comprehensive Basic Engineering Design Package (BEDP), which contains all the necessary data for a competent contractor to perform the Detail Engineering. These basic engineering studies may also involve consolidating a Process Package initiated by an external process licensor.



### Detail Engineering

- Purchasing of main and bulk equipment.
- Thermal rating of heat exchangers.
- Development of Piping and Instrument Diagrams for construction.
- Development of detailed piping drawings, including isometrics and stress calculations.
- Development of detailed drawings for instrumentation, electrical facilities, and civil works.
- Management of vendor drawing
- Cost and schedule control.
- Start-up procedu/es.



### **Supply Chain Management**

A key element in any project's execution, procurement at WGC is managed by approximately 422 individuals assigned to project task forces. They are responsible for sourcing new suppliers, purchasing, expediting orders, inspecting equipment and bulk material manufacturing, and organizing delivery and logistics.

Each project team is responsible for its budget and delivery and is supported by the expertise and processes of the WGC operating center it is attached to. All project teams adhere to common Group policies and a code of ethics.

> WGC competitively sources worldwide and offers dedicated procurement services to clients.



The mission of WGC Iraq's Global Procurement Organization is to develop and implement procurement strategies to enhance competitiveness. This includes owning and maintaining WGC's list of approved suppliers, expanding the supplier base by sourcing and qualifying new suppliers and products, with a particular emphasis on high-value procurement countries. Additionally, the organization is responsible for cultivating and managing longterm relationships and partnerships with WGC's top suppliers, as well as promoting design-to-cost solutions. Gathering and reporting essential operational information, enforcing the Group's procurement policies, and keeping a worldwide eprocurement tool open to suppliers are also part of their responsibilities



**WHITE GEESE** FOR CONSTRUCTION AND GENERAL TRADING

### Startup, Commissioning & Operations

To successfully start up complex process units and power plants, thorough planning and preparation of both the plant equipment and operating organization are necessary. Each task must be meticulously planned and carried out in the correct order to avoid costly delays during commissioning and initial operation.

WGC has extensive experience in precommissioning, mechanical completion checkout, commissioning, startup, and initial operating activities. We can provide the expertise, procedures, and personnel needed to ensure a smooth startup for each unit.





Our commissioning experts are involved in all stages of the project, from proposal development and risk assessment to final performance testing. Key commissioning site activities include: - Coordinating with the construction team and accepting completed systems - Conducting pre-commissioning activities - Training and qualifying customer O&M personnel - Preparing detailed operating/technical manuals - Carrying out commissioning activities - Assisting the customer with startup activities - Demonstrating the operation of all personnel safety devices - Participating in ramp-up, optimization, and

 Participating in ramp-up, optimization, and performance testing
 Providing operating services during the warranty period At WGC, we strive to deliver a safe and high-performing facility that meets our customers' expectations in terms of uptime, product quality, and operating costs. Our commissioning teams are dedicated to surpassing these expectations on every project.



WHITE GEESE FOR CONSTRUCTION AND GENERAL TRADING

### Project Management

WGC has successfully managed industrial projects of various types and sizes worldwide for the past 19 years. Our project management experience encompasses a wide range of services and contracts, including consultancy services and various contractual relationships.

Gun

The WGC Approach to Project Management One key factor in WGC's consistent success is our project management approach, which begins even before winning the contract, during the bidding phase. WGC is highly selective in choosing projects to bid on, evaluating each project on its own merits without being driven by market share or asset utilization targets. Once a project is awarded, the Project Director assumes full authority and accountability throughout all project phases.

Senior Management closely monitors projects through monthly reviews. As a major player in large-scale project implementation, WGC has developed comprehensive expertise in project management, which adds value to our clients regardless of contract size. WGC's risk management process covers the entire project lifecycle, starting from pre-bid reviews of the invitation to bid (ITB) and continuing until all contractual obligations are fulfilled. This process evaluates various aspects such as commercial strategy, financial assets, contracts, technical details, safety, and environmental considerations with regards to project uncertainties or risks for the Project, Client, and WGC. Effective risk management requires the active involvement of the entire project team. Therefore, all key members of the project team possess a clear understanding of the project baseline, anticipated risks, and planned mitigation measures. White Geese's Project Management teams are well-prepared and actively engaged in meeting this requirement.



# Maintenance & Modifications

WGC offers comprehensive maintenance and modification services that complement engineering, procurement, and construction. We work closely with industrial and power customers to enhance reliability, productivity, planning, and work processes. Our aim is to establish full-service, cost-effective partnerships with the highest safety standards integrated into all work functions.

In Iraq, WGC is a leading provider of power and industrial plant services. We provide maintenance, fullservice plant engineering, reliability, turnaround, outage, and other services globally. Our clients come from various industries including energy, petrochemical, specialty chemicals, oil and gas, manufacturing, and refining. Power maintenance is another key aspect of WGC's services. We provide ongoing support, long-term services, and engineering solutions to the power industry. Our focus is on delivering safe, innovative, and efficient solutions.

At WGC, we understand the importance of reliability in reducing business unit costs and increasing overall production capacity. With our expertise, we can assist customers in meeting their reliability objectives.



#### WGC also performs supply and maintenance on transformers

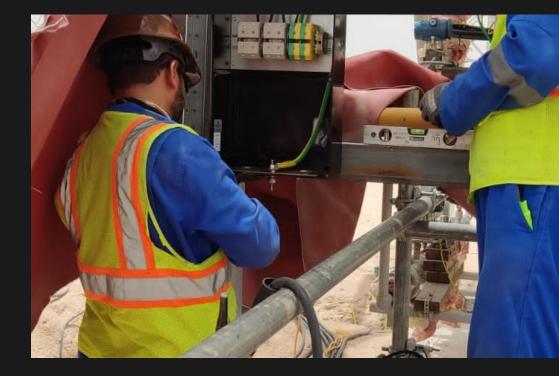
Transformer maintenance is essential for ensuring optimal performance and long functional life. Power transformers are the most costly and essential equipment of an electrical transformer, requiring different maintenance activities, including measurements and testing of various parameters. There are two types of transformer maintenance: routine and emergency. Routine maintenance is performed on a regular basis, while emergency maintenance is performed as needed. Regular maintenance is crucial for ensuring smooth performance and may eliminate the need for emergency maintenance.





# Electrical Testing & Commissioning Services

WGC is an Iraqi-based company that provides electrical system testing services, including pre-commissioning, commissioning, and maintenance. We are dedicated to serving the industrial sector, as well as academic and government institutions, by addressing modern scientific and engineering problems related to quality and material testing. Our focus is on the development of cost-effective technologies, the optimal selection of new and emerging methods, and the implementation of efficient and cost-saving applications.





#### 1.2 Grid & SWGR Test

Switches are one part of the electrical power system. Our company provides the experience and testing equipment necessary to conduct the following required tests for GIS & AIS Grid, MV & LV SWGR:

- CT & VT test
- Circuit Breaker (C.B) test
- Insulation Resistance (IR) test
- High potential (Hi.pot) test
- CRM (Customer Relationship Management) check
- Partial Discharge test
- Functional & interlock check
- Protection Relay test
- Additional Partial Discharge test.

#### Earth System Tes

Earth system is the first Protective line for Human beings & Electrical Equipment. The soil resistive measurement During Design any project due to fault calculation & Earth system specification .The soil resistivity &earth system measurement has been tested by our company for many project by use a modern method(Bird's Eye Method & 62 % method )

#### C.B – Circuit Breaker

Gas Isolated Circuit Breaker (GI C.B), Air Circuit Breaker (ACB), oil isolated Circuit breaker & Vacuum Circuit Breaker (VCB) are the Main Switches in the Electrical Power System .For Protect the Grid & Reliability, Many testing performed on the C.B at site During Pre commissioning, Commissioning & Maintenance as following Tests:

Conductivity Resistance Measurement

- IR test
- Hi. Pot Test
- On-off Timing test
- VIDAR test(VCB only )
   Interlock check



VT – Voltage Transformer Test

VT is one of the Metering, Protection & Isolation Instrument device in the Electrical System. For reliability & Conformity many testing performed on the VT at site During Pre commissioning, Commissioning & Maintenance as following Tests:

Ratio Test
Winding Resistance Measurement
IR test
Burden Measurement
Polarity Check

#### **CT–Current Transformer**

CT with the VT are one of the Metering, Protection & Isolation Instrument device in the Electrical System. For reliability & Conformity many testing performed on the CT at site During Pre commissioning, Commissioning & Maintenance as following Tests:

- Ratio Test
- Winding Resistance Measurement
- IR test
- Burden Measurement
- Polarity Check
- point

#### SECONDARY TESTING

Secondary testing is Most Important testing for the Protective Device (Protection, Metering Relay, Transducer, AVR relay, PLC) by Dealing Direct with the Protection device without use CT, VT & other Instrument

#### ADVANCED TEST

WGC offers experience, expertise, and equipment for third-party engineering, inspection, electrical equipment testing, and quality assurance/control.

Advanced Secondary Test

We utilize Omicron GMBH CMC356 & CMC256 with the Secondary Injection Kit for Testing Advice Distance Relays, Advanced Differential Relays, and Generator Protection Relays. One of the Best Secondary Injection Kits available, it enables us to effectively deal with the GOOSE Grid.

Advanced Primary Test

We employ Omicron GMBH CPC 100 and its associated Accessories with the Primary Injection Kit for testing the primary side of electrical equipment such as transformers, switchgears, current transformers (CT), voltage transformers (VT), and circuit breakers (CB).



WGC is your comprehensive service provider for all your electrical testing needs.

- Primary Testing
- Secondary Testing
- Functional Testing

Our team of specialists will conduct electrical system tests in compliance with international and national standards, such as IEC, IEEE, NEMA, and NEC. They are certified experts in their field and possess the necessary equipment to handle a wide range of reliability programs

### Primary Testing

BOLAR PANEL

#### 1.1 Transformer Test

A transformer is a vital piece of equipment in an electrical system. Our company provides the experience and testing equipment required to conduct the main transformer tests:

- Turn Ratio (Per Tap)
- Winding Resistance (Per Tap)
- Vector Group
- Insulation Resistance
- Power Factor (CH, CL, CH-CL)
- Oil Breakdown Test
- BDV (ASTM & IEC)
- Cooling System Test
- Protective Devices Testing
- Stability Test
- Tap Changer (AVR Test)
- Functional & Interlock Check
- Bushing CT Test (BCT)
- VT Test.



# TESTING & CALIBRATION

• Radiographic Testing (RT) can be used for the detection of hidden flaws in solid objects and requires either x-rays or gamma rays. One of these sources of ionising radiation is positioned on one side of the item to be inspected and a photographic film is placed in proximity on the other side. The radiation is partly absorbed during transmission and differences in material thickness or absorption qualities are recorded on the film giving a full size image showing internal detail.

X-ray radiography is generated electrically by means of a high voltage x-ray tube. Gamma rays are produced by the natural disintegration on nuclei in a radioactive isotope. The main benefit of radiography is that it provides a non-destructive method of detecting hidden flaws and provides a permanent record in the form of a radiograph. Services on offer from WGC: 4 meter x 4 meter radiographic exposure bay. X-ray cabinet with Phillips 200kv set (for smaller items).

300kv directional x-ray set.

Tech-ops 660 / 680 containers, selenium 75, iridium 192 and cobalt 60.

Portable darkrooms' for fast results on-site.

Comprehensive 24hr in-house and on-site service.

Approved procedures for control checks.

Approved procedures to specific industry standard. Inspectors fully qualified to PCN & SNT.

Approved Method Statements, Risk Assessments and COSHH Assessments including confined space entry.

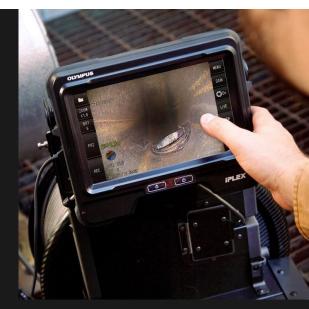




• Visual Testing (VT) also know as Visual Inspection, is an NDT method used extensively to evaluate the condition or the quality of an item. It is easily carried out, inexpensive and usually doesn't require any special equipment. Visual Testing may be carried out by eye alone or can be enhanced by the use of optical systems such as magnifiers and microscopes.

A variety of equipment is available to the inspector, including mirrors, gauges, bore scopes, endoscopes, and video/computer enhancement systems.

Visual Testing is a vital part of the in-service inspection and can identify fatigue cracks, creep failure, corrosion, erosion, abrasion, mechanical damage, wear and tear, distortion, and poor workmanship.









• Dye Penetrant Inspection (DPI) also known as Penetrant Testing (PT) or Liquid Penetrant Inspection (LPI), is used to detect surface-breaking flaws in non-porous ferrous and nonferrous materials of all sizes, such as metals, plastics, and ceramics.

Typical applications include forged, cast, or welded products that are susceptible to cracking and other surface flaws. This method is used when Magnetic Particle Inspection is impractical due to material type or complex geometry. A visible or fluorescent dye, either solvent or water-based, can be applied to the surface of the item being tested through various methods such as spraying, brushing, dipping, or immersion. During the penetration time (known as dwell time), the dye penetrates any surface-breaking flaws through capillary action. Once the dwell time is complete, the excess dye is removed from the surface, leaving no visible dye. A developing agent is then applied, which draws the dye out of any surface-breaking flaws through reverse capillary action, clearly revealing these areas to the operator.

#### Services offered by WGC include:

- Fluorescent penetrant line for small and mediumsized components.
- Fluorescent penetrant system for larger components.
- Site services offering color contrast and fluorescent techniques.
- Portable quick assembly tents of various sizes for onsite fluorescent penetrant inspection.
- Comprehensive 24-hour in-house and on-site service.
- Approved procedures for control checks.
- Approved procedures according to industry standards.
- Inspectors fully qualified to PCN & SNT.
- Approved Method Statements, Risk Assessments, and COSHH Assessments, including confined space





#### PHASED ARRAY UT

The OmniScan family includes innovative phased array and eddy current array test units, as well as eddy current and conventional ultrasound modules.

The OmniScan MX offers a high acquisition rate and powerful software features in a portable, modular mainframe to efficiently perform manual and automated inspections

#### **Typical Applications:**

- Girth Weld Inspection
- Pressure Vessel Weld Inspection
- Scribe Marks Inspection with No Paint Removal
- Aircraft Fuselage Inspection

• Oil analysis is a valuable preventive maintenance tool that allows you to detect and address potential issues in your equipment before they escalate into catastrophic failures. By analyzing oil samples, you can identify minuscule wear particles and debris that may be causing damage. This process not only reduces unscheduled downtime but also enhances equipment reliability, productivity, and profitability.





# Oil analysis with WGC offers the following benefits:

- 1. Extended oil drain intervals: By monitoring the condition of the oil, you can potentially extend the time between oil changes, saving you time and resources.
- 2. Prolonged equipment life: By identifying problems early on, you can take corrective actions to prevent further damage and prolong the overall lifespan of your equipment.
- 3. Early problem identification: Oil analysis allows you to proactively identify issues before they lead to equipment failure. This allows for timely maintenance and prevents costly repairs.



### OILFIELD TRUCKING

Reliable and safe oilfield trucking

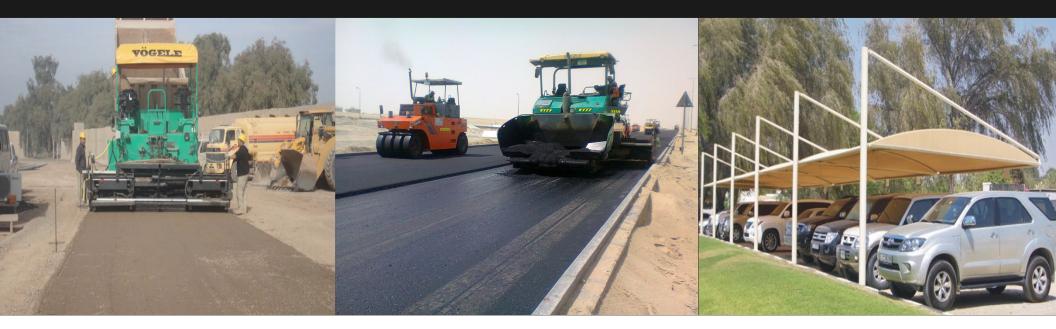
At WGC, we have worked with oilfield trucking for many years, which has allowed us to understand the best, fastest, and most reliable way to transport fuel across Iraq. Ship oil with us. We specialize in providing custom transport of oilfield equipment and machinery for companies within the Oil Industry. At WGC, we provide door-todoor transport of your heavy haul of over-dimensional oil and gas machinery to the destination you choose within a timeframe that suits your business needs.





#### Roads Construction & parking areas

Sustainability, Innovation, Client Satisfaction and Safety WGC Construction & Roads is a leading construction company specializing in infrastructure development and road construction projects. With a strong track record and decades of experience in the industry, the company has earned a reputation for delivering high-quality construction solutions. WGC is dedicated to shaping the infrastructure of communities and regions, contributing to economic growth and improved transportation networks. With a commitment to excellence, innovation, and safety, they continue to be a trusted partner in construction and road development projects.





### Why WGC?

#### <u>You Talk, We Listen</u>

At WGC , we prioritize understanding our clients' comfort needs. Every decision we make is guided by those needs. A management service is meaningless if it fails to meet your requirements. We truly value your input and take the time to listen to your feedback. Additionally, we go above and beyond by offering numerous ideas for improvement.

#### We Value Integrity

Integrity is at the core of our business values. We believe in conducting business with honesty, integrity, and a genuine concern for others. We never push unnecessary products or services onto our clients. Our commitment is to treat you with kindness, respect, and transparency. Unfortunately, this level of integrity is not always the norm in the industry.

#### We Know The Industry

With a combined experience of over a decade in the contracting industry, we possess extensive expertise relevant to your project. Our knowledge and skills allow us to approach any project with confidence and utilize the best tools and technologies available.

## We Will Be Better Tomorrow Than We Are Today

Continuous improvement is a core value at WGC. Our goal is to achieve zero defects in all our endeavors while always honoring our promises. We never compromise on quality or take shortcuts. Our unwavering commitment is to exceed customer expectations regarding value and quality.



# Safety, Quality & Productivity

#### Safety

WGC's safety performance surpasses that of our competitors and is recognized as an industry standard setter.

One reason for this is our strong emphasis on good work practices to reduce inherent risks and prevent hazardous behavior. We achieve outstanding performance by consistently reinforcing this message throughour effective and ongoing safety of the campaign. This campaign remains our employees to remain vigilant, as injuries can occur suddenly without warning.

#### Quality

WGC's Operating Companies work together to exchange information about successful new products and processes. Our publications spread this knowledge by describing the product or process, highlighting safety, quality, and productivity advantages, and discussing investment and return aspects.

#### • Productivity

At WGC Iraq, being productive means creating the right environment for tasks to be finished on time or even ahead of schedule. This involves proper planning, preparation, employing skilled workers with suitable tools and equipment, and providing the right amount of guidance and supervision.

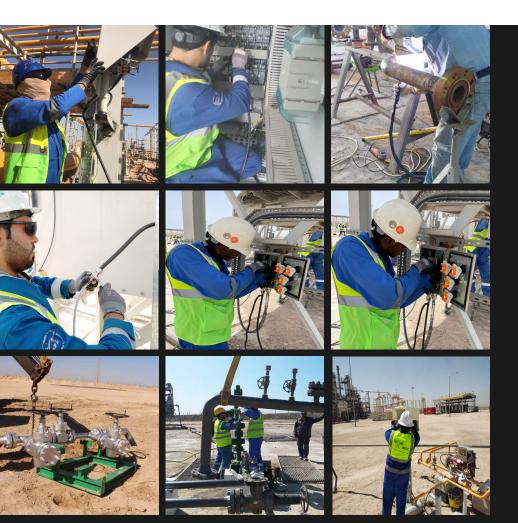
By combining safety, quality, and productivity, WGC has managed to decrease injuries and associated costs while enhancing quality and efficiency. This makes WGC one of the safest and most effective specialty contractors globally – making them the ideal choice for your upcoming commercial construction and facilities services projects.



















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