

# Heliosphere Trading and Services W.L.L

HELIOSPHERE TRADING AND SERVICES W.L.L., Qatar is a diversified company based in Qatar focused on trading ,engineering and services. With strategic partnerships, HELIOSPHERE offers engineering, consulting, project management , installation /Commissioning Services , skilled manpower services, as well as trading of electrical items, corporate gifts and personal protective equipment.



### **Diversified Services**



**Engineering, Consulting & Project Management Services** 



**HTC Digital** 



**Skilled Manpower & Installation Services** 



**Trading Solutions** 

HELIOSPHERE offers a comprehensive range of engineering & Consulting and Project Management services to meet diverse project needs. HTC Digital provides cuttingedge digital marketing solutions to help SMEs thrive in the online world. Our services include website design, SEO, social media management, email marketing, and more. We provide qualified and experienced manpower for power systems and industrial projects, ensuring safe, efficient, and high-quality installations. With a focus on timely execution and operational excellence, HELIOSPHERE trades in electrical items and personal protective equipment to meet client needs.

### From The CEO's Desk

Biswadeep Ghosh, CEO and Founder, holds an MBA from Cranfield School of Management, UK, and a B.Tech in Electrical and Electronics from M.I.T Manipal, India. He has received training in 'Transformational Leadership' at the London School of Economics, UK, and brings over 25+ years of experience in sales, marketing, and profit center management across diverse engineering sectors in India, U.A.E, UK and Qatar. He is also a certified PMP, Agile Scrum Master and ASQ-SSGB professional

### **CEO's Vision**

"At Heliosphere, we pride ourselves on delivering exceptional engineering services, trading solutions, consulting expertise, electromechanical services and skilled manpower supply. Our commitment to innovation, quality, and customer satisfaction drives us to exceed expectations in every project."



### **Board Of Directors**



Mahadevan Durairaj

Mahadevan Durairaj brings 21+ years of experience in the oil, gas, and power sectors. As the Managing Director of Apogee Engineering & Technical Services Co. WLL in Qatar, he provides strategic leadership with safety as a priority.

2003 Electrical Engineering graduate, he has built his career with industry leaders including **Reliance Industries** and **Qatar Gas ( QELNG )**, where he held Safety Professional and Lead Auditor roles.



**Purushothaman Managapathy** 

**Purushothaman Managapathy** offers 25+ years of global experience in electrical engineering, specializing in motors, pumps, and electrical systems. His international career includes significant contributions at **Mitas Generators Ltd.(Cyprus)** and **Reliance Engineering Associates**.

Since 2009, he has strengthened Qatar's infrastructure as Lead Engineer-Electrical at **Qatar Engineering and Construction Company** and currently serves as General Manager at **Apogee Engineering & Technical Services**.



Sharath Kadavnath

Sharath Kadavnath is an electrical engineer with 25+ years of experience in power systems, service management, and engineering leadership across the Middle East and India. As Service Manager at Eaton Corporation/Eaton Arabia for over 10+ years, he led service teams for power and industrial systems. His past roles include Senior Engineer at SEG Abu Dhabi, Plant Engineer at Kasaragod Power **Corporation**, and Assistant Engineer at Kerala State Electricity Board. His expertise covers MV/LV switchgear, transformers, drives, UPS systems, generator synchronization, and fire protection.



# **Engineering & Consulting Studies and Services Overview**

This document outlines a comprehensive range of engineering studies using specialized software and other engineering services. It covers various aspects including electrical analysis, real-time simulation, network control systems, and engineering services across multiple disciplines.



#### **Our Services: Design and Studies**

#### 1 Cutting-edge Technology

Leveraging cutting-edge technology and industry best practices, we provide robust design solutions.

#### 2 Thorough Studies

We conduct thorough studies to ensure project success.

#### **3 Innovative Solutions**

Our team is committed to delivering innovative and effective engineering solutions.

#### **Calculations and Consultancy Services**

#### **Complex Calculations**

Our team excels in performing complex calculations, ensuring accuracy and reliability in every aspect of your project.

#### **Expert Consultancy**

From project inception to completion, we offer expert consultancy services to guide you through every stage of the engineering process.



# **Our Team**

#### **Industry Veterans**

Our team comprises industry veterans and technical experts, bringing a wealth of knowledge and experience to every project.

#### **Commitment to Excellence Innovative Thinking**

With a commitment to excellence and a passion for innovation, our team is dedicated to delivering outstanding results that exceed expectations.

We bring a blend of technical expertise and innovative thinking to deliver tailored solutions that meet the unique requirements of each project.

# Our Multidisciplinary Expertise

At Helios, we pride ourselves on our extensive expertise across a wide range of engineering disciplines. From electrical and instrumentation to mechanical and piping, our team of seasoned professionals delivers comprehensive solutions to tackle the most complex challenges.

With specialized software, cutting-edge technology, and a deep understanding of industry best practices, we consistently provide innovative and reliable engineering services tailored to the unique needs of our clients.





### **ETAP Studies for Electrical Analysis**

#### Relay Coordination

Optimize relay coordination using ETAP software.

#### Short Circuit Analysis

Assess system performance under fault conditions.

#### Load Flow Analysis

Evaluate power system operation and efficiency.

#### Arc Flash Study

Ensure safety and compliance in electrical installations.

#### Harmonic Analysis

Mitigate the impact of harmonics on the electrical system.



# Advanced Software for Electrical Analysis

#### **HOMER Software**

Specialized software for comprehensive electrical analysis and system optimization.

#### I-HOGA Software

Advanced tool for hybrid renewable energy system design and analysis.

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#### **DigSilent Power Factory**

Powerful software for power system analysis and grid integration studies.

# **Real-Time Simulation and Control**



#### **Real-Time Simulators**

We employ advanced real-time simulators including: Opal-RT OP4510, Opal-RT OP4520, Opal-RT OP8662, PV Emulator, Wind (PMSM, DFIG) Emulator, Battery Inverter Emulator, and Grid Simulator.



#### **Control Logic Prototyping**

For control logic prototyping, we use: DSPACE ACE Microlab Box (1302T)



#### **Networked Control Systems**

Our capabilities include: Test bench with Distributed Network Analyzer, Static Relays and Static VAR Compensator

### **Specialized Engineering Software Studies**

#### **HVDC Tower Design**

Using PLS-CADD software for designing HVDC towers.

#### **Steam Network Stress Analysis**

Utilizing CAESAR II software for stress analysis in steam or hot water networks.

#### Water Network Surge Analysis

Employing Bentley Hammer Software for surge analysis in water networks.

#### **CFD Analysis**

Conducting Computational Fluid Dynamics analysis using ANSYS Fluent Software, COMSOL Multiphysics, and Open FOAM for 3D model analysis of ESP, cooling towers, pump forbays, and other systems.



### Additional Engineering Studies and Analyses

#### **1** Green Energy Cost Analysis

Solar, Wind, Water, Micro Nuclear reactor using Homar Software

**2** System Calculations

Pressure drop calculations and pipe sizing

#### **3** 3D Development

3D development of buildings, equipment, and P&ID-3D Full-scale model development

#### Specialized Studies

Feasibility studies and HACCP (Hazard Analysis and Critical Control Points)Study,HAZOP,SAFOP,CEMP Studies etc.



# **Engineering Services and Site Surveys**

#### Comprehensive Site Surveys

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Site surveys and report generation for Electrical, Process, Piping, Mechanical, HVDC, HVAC, and Instrumentation requirements

#### **2** Brownfield Projects

Expertise in delivering small-scale and limitedscope brownfield engineering projects across various disciplines

#### **Specialized Services**

Specialized services in Electrical & Instrumentation (E&I), Mechanical, Piping, High Voltage Direct Current (HVDC), and Heating, Ventilation, and Air Conditioning (HVAC)



# Our Projects: Oil and Gas, Petrochemicals, Power Generation, and Manufacturing



#### **Oil and Gas**

We have delivered innovative engineering solutions for complex oil and gas projects, leveraging our expertise in electrical, instrumentation, mechanical, and piping disciplines.



#### Petrochemicals

Our team has successfully executed projects in the petrochemicals sector, providing comprehensive engineering services to optimize processes and ensure safety and efficiency.



#### **Power Generation**

We have contributed to the development of power generation projects, leveraging our expertise in electrical, mechanical, and control systems to deliver reliable and sustainable solutions.



#### Manufacturing

Our engineering capabilities have enabled us to support various manufacturing industries, optimizing processes, improving productivity, and ensuring compliance with industry standards.

### **Core Engineering Team**

#### Dr. Nirmalendu Biswas Rabindranath Biswas

Dr. Nirmalendu Biswas is an Assistant Professor at Jadavpur University with over 10 years of experience in design, engineering, and R&D projects in the steel sector. He has a Ph.D. in Mechanical Engineering and has worked on a wide range of projects, from developing new steel alloys to optimizing manufacturing processes. Dr. Biswas is known for his innovative thinking and his ability to solve complex engineering problems. Rabindranath Biswas is an experienced Piping Design Engineer with over 30 years of experience in Engineering Plant System Design. He has worked on numerous projects in the petrochemical, power, and manufacturing industries, and is known for his attention to detail and his ability to deliver high-quality designs. Rabindranath has a deep understanding of piping systems and their role in the overall success of a project.

#### **Sanjoy Roy Gosthipaty**

Sanjoy Roy Gosthipaty is a seasoned piping engineer with 30 years of experience in various engineering fields, including power, chemicals, petrochemicals, and more. He is known for his expertise in designing and optimizing piping systems, and his ability to work collaboratively with other members of the engineering team. Sanjoy has a deep understanding of industry regulations and best practices, and is often called upon to provide guidance and mentorship to younger engineers.



# **EPIC Capabilities for Oil, Gas & Utility Projects**

We deliver comprehensive EPIC solutions with our expert team of 10+ years industry experience. Our integrated approach reduces project timelines by 30%.

We've completed 50+ OEM projects with 99.7% on-time delivery across critical infrastructure. Our turnkey solutions ensure seamless implementation.

- Full-spectrum service offering including Engineering, Procurement, Installation, and Commissioning
- Advanced project management methodologies with real-time tracking and reporting
- Certified quality control processes exceeding industry standards
- Dedicated safety protocols with zero LTI record for past 5 years
- Specialized teams for upstream, midstream, and downstream operations
- Custom fabrication capabilities with in-house testing facilities

# Electrical, Mechanical & Instrumentation Excellence





Substation design up to

systems, and advanced

SCADA integration.

400kV, power distribution

#### Mechanical

Process piping, equipment installation, and detailed 3D modelling with simulation capabilities.

#### Instrumentation

Advanced control systems, real-time monitoring, and predictive maintenance solutions.

Our cross-discipline integration reduces interface issues by 65%. We ensure seamless coordination.



# **Value Proposition for OEM Partners**



# **Trading Of Essential Personal Protective Equipment (PPE)**



**Steel Toed Safety Shoes** 

Robust footwear with reinforced toe caps to protect workers' feet from falling objects and heavy impacts on construction sites.





#### High-Visibility Vest & Coveralsafety Goggles

Brightly colored vests and coveralls with reflective strips enhance worker visibility, reducing collision risks on job sites. Protective eyewear shields the eyes from flying particles, dust, and other hazards encountered during construction activities.

Brightly colored vests with reflective strips ensure workers are easily seen by heavy machinery operators, reducing collision risks.

# **Electrical Items Trading**



#### MCBs, ELCBs, MCCBs, ACBs

We trade a wide range of essential electrical components like circuit breakers, relays, and panel accessories from reputed manufacturers.



#### **PLCs and VFDs**

Our trading portfolio also includes programmable logic controllers and variable frequency drives for advanced electrical systems and automation.



#### **Panel Accessories**

In addition to core electrical items, we also supply a comprehensive range of panel accessories to support the installation and maintenance of electrical systems.



# Unlock Your Digital Potential with HTC Digital

- HTC Digital is a comprehensive digital marketing agency committed to assisting businesses in harnessing the power of digital transformation.
- Our services include SEO, social media management, web design, and content creation, all aimed at improving your online presence and achieving your marketing objectives.
- With a focus on data-driven strategies, we enhance your digital campaigns for optimal performance. Beyond digital services,
- we also offer graphic design, printing, and traditional marketing solutions such as corporate gifts, banners, glow signs, and digital billboards.
- Team up with HTC Digital to unlock your full digital potential.

### **Comprehensive Digital Marketing Services**

#### **SEO**

Boost your search rankings and organic traffic with our data-driven SEO strategies.

#### **Social Media**

Engage your audience and build brand loyalty through targeted social media campaigns.



#### Web Design

Create stunning, user-friendly websites that convert visitors into customers.

#### **Content Creation** 000

Craft compelling content that resonates with your target audience and drives action.





#### **Data-Driven Approach for Maximum Impact**

1 Analyze

We dive deep into your data to understand your audience and market positioning.

#### 3 Implement

We execute campaigns across multiple channels for maximum reach and engagement.

#### 2 Strategize

Our experts develop tailored strategies aligned with your specific business goals.

#### 4 **Optimize**

Continuous monitoring and refinement ensure optimal performance and ROI.

# **Integrated Marketing Solutions**



#### **Multi-Channel Approach**

We understand the power of a multi-channel approach. Our team seamlessly integrates physical marketing solutions with your digital strategies.



#### **Compelling Visuals**

We leverage cutting-edge graphic design to create compelling visuals that capture attention and drive conversions.



#### **Cohesive Brand Experience**

From print advertising and billboards to social media campaigns and influencer partnerships, we strategically orchestrate a cohesive brand experience across all touchpoints.



#### Data-Driven Decision Making

This integrated approach ensures a consistent brand message, maximizes reach, and amplifies your overall marketing impact. We prioritize datadriven decision-making, analyzing campaign performance and tailoring our strategies for continuous improvement.

# **Integrated Marketing Solutions**



#### **Digital Marketing**

Comprehensive online strategies to boost your digital presence and drive growth.

- SEO and PPC
- Social media management
- Email marketing



#### **Graphic Design**

Eye-catching visuals that communicate your brand message effectively.

- Logo design
- Brand identity
- Marketing collateral



#### **Physical Marketing**

Innovative offline solutions to complement your digital efforts.

- Glow signs
- LED boards
- Digital billboards

### **Physical Marketing**



#### **Glow Signs**

Eye-catching glow signs draw attention and create a memorable brand experience.



LED boards offer dynamic, high-impact

messaging with clear, impactful visuals.

LED Boards



**Digital Billboards** 

Digital billboards offer dynamic and engaging advertising with captivating imagery.



#### **Flex Printing**

High-quality flex printing offers a costeffective and versatile solution for banners, posters, and signage.



### ACP Boards with Acrylic Letter Cutting

ACP boards provide a durable and visually appealing surface for signage, while acrylic letter cutting adds a sophisticated touch.



#### **Vinyl Printing**

Vinyl printing is a versatile option for decals, stickers, and signage, offering durability and vibrant colors.



#### **Brochure & Leaflet Printing**

High-quality brochure and leaflet printing for effective communication and brand promotion.

# Partner with HTC Digital for Success

#### Expertise

Our team of seasoned professionals brings years of experience across various industries.

#### Innovation

We stay ahead of the curve, leveraging the latest technologies and trends.

#### **Results-Driven**

Our focus is on delivering measurable outcomes that impact your bottom line.

#### Partnership

We work closely with you, becoming an extension of your team.



# **Our Esteemed Clients**

- 1. Kangaroo Kids International Preschool Topsia
- 2. Kangaroo Kids International Preschool Survey Park
- 3. Interglobe Facility Services ,Santoshpur
- 4. Z4 Dancing Network ,Hiland Park
- 5. Sanjeeva Garden Rajarhat
- 6. WAH Kolkata
- 7. Pizza Hut

### **Display Board**



# **Display Board**





### **Contact Us**



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