COMPANY PROFILE 2023



HEXA LINE ENGINEERING CONSULTANTS
RIYADH - SAUDI ARABIA

WATER AND ENVIRONMENT

WHO WE ARE

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Welcome From Us

HEXA LINE Engineering Consultants, located in Riyadh city, is a dynamic and innovative engineering firm founded in 2021. With a strong commitment to excellence and expertise in various engineering disciplines, HEXA LINE offers a comprehensive service of design and consultation studies in the area of water and environment to government and industrial clients. The company name (HEXA LINE) represents our six core concepts namely, project management, environment and sustainability, engineered processes, knowledge transfer and training, engineering arbitration, and business development. We are committed in providing a truly remarkable masterpiece for each client.

At HEXA LINE, we understand that successful projects require more than just technical expertise. We place a strong emphasis on collaboration, innovation, and delivering sustainable solutions that align with the needs of the present and future. Our team of experienced professionals combines technical proficiency with creative problem-solving to deliver outstanding results.

Since HEXA LINE® Engineering Consultants inception in 2021, our aim was always to use our creativity, versatility and imagination to solve problems and make our design an extraordinary experience on all of our projects we perform.



Dr. Omar Alrehaili and Dr. Amr Fenais, esteemed civil engineers, established HEXA LINE Engineering Consultants in 2021. As the Principal Civil Engineers, they hold the responsibility of managing and overseeing significant, cutting-edge, and experimental projects.

The founders of HEXA LINE Engineering Consultants are deeply committed to intuition and quality, which serve as the hallmark of the firm's methodology. With their expertise and dedication, they have successfully completed a multitude of consultation studies, contracting, and engineering and architectural designs ventures in Saudi Arabia. The tangible outcomes of these projects stand as a testament to their exceptional workmanship and proficiency.

Mission & Vision

Mission:

Our mission at Hexa Line is to deliver innovative engineering solutions that cater to our clients' unique needs while upholding the highest standards of quality, sustainability, and professionalism. We strive to be a trusted and reliable partner, providing exceptional services that exceed expectations and contribute to the success of our clients' projects.

We aim to deliver high quality workmanship starting from design, which would generate an overall satisfaction and inspiration to work for the best; while realizing excellence in every step benefiting all the stakeholders, including our dedicated staff, loyal clients & the company's owners. To achieve this, we contend to be respected and responsible, managed by professionally qualified well-trained staff.

Vision:

HEXA LINE consulting Engineers emphasizing on innovation within established traditions and a fresh look at each and every project; we form our highest priorities to be our clients' satisfaction paralleled with highest standards of design practice. We bring our clients' visions together with our resources and experience.

Hexa Line aims to become a leading engineering consultancy firm in Saudi Arabia, renowned for its expertise, integrity, and commitment to excellence. We envision ourselves as a catalyst for sustainable development, working towards a future where engineering solutions promote environmental preservation and societal progress.

Our Values

Integrity:

we establish and maintain the highest standards of professional performance & ethical practice.

Team work:

our culturally diverse team come together to bring about challenging project solutions and innovative ideas.

Collaboration:

We foster a collaborative environment, promoting teamwork, mutual respect, and effective communication to achieve collective success.

Innovation:

we work closely with our clients to provide them with innovative solutions and rigorous details, bringing their ambitions to life.

Policies:

comply with quality policy, Health & safety Policy, Environmental policy, business conduct policy and sustainability policy

Client service:

our clients are our raison deter. We deliver world-class services that surpass our clients; expectation within the agreed timeframe and budget.

Sustainability:

sustainability is well integrated in our corporates, policies, design practices, office management procedures, as well as, embedded in our everyday core business routine

Our Message

At HEXA LINE Engineering Consultants, our message is clear:

We are dedicated to transforming challenges into opportunities through innovative and sustainable engineering solutions. We believe in the power of collaboration, excellence, and integrity to deliver exceptional results for our clients. Our team of experts is committed to providing personalized services that not only meet the highest standards of quality but also contribute to the betterment of society and the environment. Together, let's build a future where engineering excellence drives progress and sustainability.



Environmental Studies and Design

HEXA LINE provides comprehensive environmental studies aimed at promoting sustainable practices and addressing environmental challenges. Our team of environmental scientists, engineers, and specialists are equipped with the knowledge and expertise to tackle a wide range of environmental issues. We offer a diverse range of services to support water treatment, wastewater reuse, water quality monitoring, environmental impact assessment, solid waste management, and air quality control. We provide sustainable solutions and assist clients in achieving compliance with environmental regulations.



Our Services

1- Water Treatment:

We provide expertise in designing and implementing efficient and effective water treatment systems. Our team assesses water sources, analyzes water quality parameters, and develops tailored treatment solutions to ensure the provision of safe and clean water for various purposes.

2- Water and Wastewater Network Design:

We have extensive expertise in designing water supply and wastewater collection systems. Our team considers factors such as population growth, water availability, and environmental impact to develop comprehensive and resilient networks. We focus on optimizing water distribution, ensuring adequate capacity, and implementing effective wastewater management strategies.



3- Wastewater Reuse Studies:

HEXA LINE offers solutions for wastewater reuse, promoting sustainable water management practices. Our experts evaluate the feasibility of wastewater treatment and reuse schemes, considering factors such as treated water quality, potential end uses, and regulatory requirements. We design customized wastewater treatment systems to meet specific reuse objectives, helping clients maximize the utilization of this valuable resource.

4- Water Quality Monitoring:

We conduct comprehensive water quality monitoring programs to assess the condition of water bodies, identify pollution sources, and monitor compliance with regulatory standards. Our team collects and analyzes water samples, measures physical and chemical parameters, and assesses the ecological health of aquatic ecosystems. By providing accurate and up-to-date information, we enable effective decision-making for water resource management and pollution control.



5- Environmental Impact Assessment (EIA):

HEXA LINE specializes in conducting Environmental Impact Assessments (EIAs) to evaluate the potential environmental consequences of proposed projects. Our experts assess the project's impacts on air quality, water resources, ecosystems, noise levels, and socio-economic aspects. We identify mitigation measures and develop monitoring plans to minimize adverse effects and promote sustainable development.

6- Solid Waste Management:

We offer comprehensive solutions for solid waste management, focusing on waste reduction, recycling, and proper disposal. Our team assesses waste generation patterns, designs waste management infrastructure, and develops strategies to promote recycling and waste diversion. We assist clients in implementing efficient waste management practices that minimize environmental impacts and comply with regulatory requirements.



7- Air Quality Control:

HEXA LINE provides services to monitor and manage air quality, ensuring compliance with air pollution regulations and promoting healthier environments. We conduct air quality assesments, monitor pollutant emissions, and develop strategies to minimize air pollution from industrial processes, transportation, and other sources. Our team assists clients in implementing emission control technologies and developing air quality management plans.

Water Resource Management

At HEXA LINE, we recognize the importance of sustainable water resource management. Our experienced professionals employ innovative strategies to optimize water usage, address water scarcity challenges, and design efficient water management systems that meet environmental regulations.

HEXA LINE Engineering Consultants specializes in providing comprehensive hydrological studies to address the complex challenges associated with water resources management and planning. Our team of hydrologists, engineers, and environmental specialists utilize advanced methodologies and cutting-edge tools to assess and analyze various aspects of water systems. Through our hydrological studies, we aim to enhance understanding, optimize resource utilization, and develop sustainable solutions for water-related issues.

Our Services

1- Watershed Analysis:

We conduct detailed watershed analyses to evaluate the hydrological characteristics of a specific area. By studying factors such as land use, topography, soil properties, and climate patterns, we assess the water balance, runoff potential, and overall hydrological behavior of the watershed. This information is crucial for effective water resources management, flood risk assessment, and land use planning.

2- Rainfall-Runoff Modeling:

Using sophisticated hydrological modeling techniques, we simulate the transformation of rainfall into runoff within a given catchment area. Our experts analyze rainfall data, land cover information, and soil properties to develop accurate runoff models. These models aid in predicting runoff volumes, flow patterns, and hydrological response under different scenarios, enabling informed decision-making for flood management, reservoir operation, and water supply planning.



3- Risk Assessments:

HEXA LINE conducts flood risk assessments to evaluate the vulnerability and potential impacts of flooding on communities, infrastructure, and the environment. By integrating hydrological data, terrain analysis, and hydraulic modeling, we identify flood-prone areas, assess flood depths and velocities, and propose mitigation measures to reduce risks. Our flood risk assessments assist in the development of flood management strategies, urban planning, and emergency response planning.

4- Water Availability Studies:

We perform water availability studies to assess the quantity and quality of available water resources within a region. Our experts analyze factors such as precipitation patterns, evapotranspiration rates, groundwater recharge, and surface water flows to quantify water availability and estimate sustainable yields. These studies are essential for water supply planning, drought management, and ensuring the long-term sustainability of water resources.

5- Risk Assessment and Climate Adaptation Strategies

HEXA LINE recognizes that water resources are vulnerable to a multitude of risks, including climate change, extreme weather events, infrastructural vulnerabilities, and increasing water demands. We conduct detailed risk assessments to identify, evaluate, and prioritize risks, enabling informed decision-making and the development of effective mitigation strategies.

6- Climate Change Impact Assessments

Recognizing the profound influence of climate change on hydrological systems, HEXA LINE conducts thorough assessments to evaluate the potential impacts on water resources. Through climate projections, hydrological modeling, and scenario analysis, our experts gain insights into changes in rainfall patterns, temperature, and water availability. These studies empower stakeholders to adapt to changing conditions, develop resilient water management strategies, and safeguard against future uncertainties.

7- Remote Sensing

HEXA LINE harnesses the power of remote sensing technology to collect and analyze geospatial data, providing valuable insights into hydrological processes and water resources management. By employing satellite imagery and aerial photography, our experts can map land use patterns, assess vegetation cover, monitor water quality, and track changes in water bodies over time. This information proves invaluable for a wide range of applications, including flood mapping, drought monitoring, and irrigation management.



© +966 56 027 6042 +966 54 183 0030

hexaline.sa

☑ HL@hexaline.sa

Contact us