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Fabrication market booming in region

The steel fabrication sector in the Gulf is surging due to robust construction activities and technological advancements, according to BlueWeave Consulting, which forecasts a market value of \$12.77 billion by 2030. This growth is driven by urbanisation and a preference for sustainable structures.

THE structural steel fabrication market in the Gulf region is expanding rapidly due to rapid urbanisation, infrastructure development, increasing construction activities, demand for sustainable and durable structures, and economic growth.

Based on its recent study, leading strategic consulting and market research firm BlueWeave Consulting anticipates that the value of the region's structural steel fabrication market – which stood at \$8.2 billion in 2023 – to grow at a CAGR (compound annual growth rate) of 6.53

per cent to reach a value of \$12.77 billion by 2030.

The GCC's structural steel fabrication market is primarily driven by robust infrastructure development initiatives, accelerated urbanisation and increasing construction activities in the region. Growing demand for commercial and residential spaces, coupled with government investments in major construction projects, propels the market, BlueWeave Consulting says.

Additionally, the expansion of the oil and gas industries further boosts demand for structural steel fabrication. Technological

advancements, enhanced efficiency, and sustainable construction practices contribute to the market growth. Rising awareness of the benefits of structural steel, such as durability and cost-effectiveness, also stimulates market expansion in the GCC region, it adds.

While the fabrication sector serves a number of sectors including construction, automotive, manufacturing, energy and power, and defence and aerospace, the construction sector accounts for the largest volume of business. This growth is driven by factors such as increased disposable income and urbanisation, a global construction boom, and government safety regulations. The high preference for steel in construction, owing to its sustainability and recyclability, further contributes to its dominance in various infrastructure projects, says the research firm.

TECH-DRIVEN TRANSFORMATION

The adoption of advanced technologies emerges as a pivotal growth driver for the steel market. Transformative advancements such as building information modelling (BIM), automation and precision engineering are revolutionising

The expansion of the oil and gas industries further boosts demand for structural steel fabrication.



Photo: CK1&C Saudi Arabia Branch.

Installation of the steel structure of a heavy maintenance hangar of King Abdulaziz International Airport.

the industry. Enhanced project efficiency, cost-effectiveness and superior structural integrity are catalysing market expansion, says the research firm.

As regional players increasingly integrate cutting-edge solutions, the industry is poised for sustained growth, attracting investors and stakeholders. This technological evolution not only streamlines operations but also positions the GCC market at the forefront of global steel fabrication, fostering a competitive edge in the ever-

evolving construction landscape, it adds.

IMPACT OF GEOPOLITICAL TENSIONS

According to the report, escalating geopolitical tensions significantly impacts the structural steel fabrication industry, disrupting the global supply chain and increasing production costs. Trade restrictions and sanctions hinder the flow of raw materials, such as steel, affecting fabrication processes. The 2018 United States steel tariffs and subsequent retaliatory measures exemplify this, leading to price volatility and supply chain uncertainties.

Geopolitical conflicts, like the Russia-

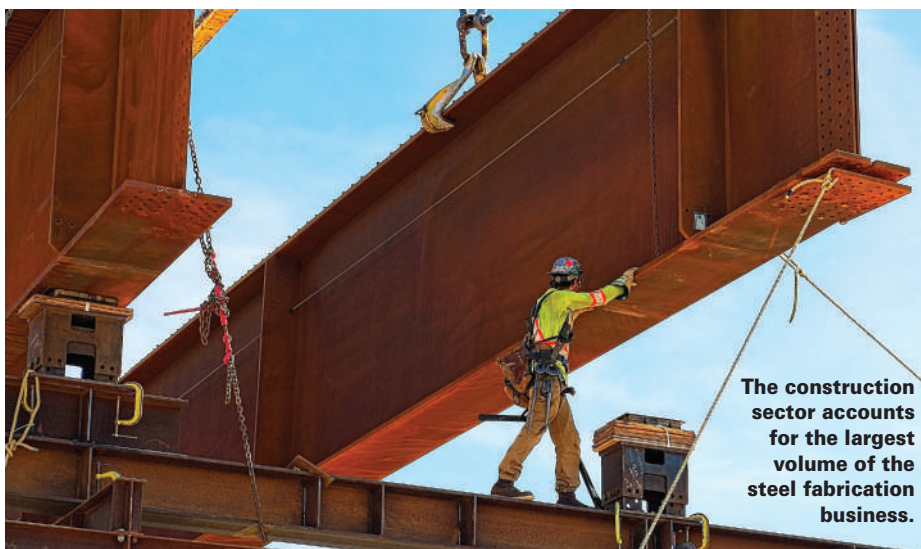
Ukraine crisis, also disrupt steel supply routes, impacting production schedules. Additionally, increased political instability can deter foreign investments, affecting the expansion and development of steel fabrication facilities. The report says geopolitical tensions create an atmosphere of uncertainty, challenging the structural steel fabrication sector with fluctuating costs, disrupted supply chains, and hindered growth prospects.

FABRICATION PROCESS

The region's structural steel fabrication industry can be categorised by the fabrication processes used, namely metal welding, forming, cutting, shearing, stamping, and rolling. The metal forming segment – which shapes raw materials into desired forms – stands out as significant, enjoying substantial demand in the fabrication of structural steel components for construction and infrastructure projects across the GCC.

COMPETITIVE LANDSCAPE

GCC's structural steel fabrication market is fiercely competitive. Major companies in the market use various strategies, including increasing investments in their R&D activities, mergers, and acquisitions, joint ventures, collaborations, licensing agreements, and new product and service releases to further strengthen their position in the market. ■



The construction sector accounts for the largest volume of the steel fabrication business.



NMI's diverse product portfolio caters to various sectors including oil and gas, petrochemicals, power generation and desalination.

Al Nafie Metal forges path to market leadership

SAUDI steel giant Al Nafie Metal Industries (NMI) is aiming for the top spot in the Middle East's steel fabrication sector, according to its General Manager Majed Suleiman Al Nafie.

"Our vision is to become the leader of the steel fabrication and erection industry in the Middle East and we want to participate actively in realising Saudi Arabia's Vision 2030," Al Nafie declares in an exclusive interview with *Gulf Construction's* Bina Goveas.

"Our aim is to serve the requirements of the numerous planned and ongoing construction projects in the Kingdom of Saudi Arabia, and the regional and international markets. The steel fabrication industry in the Gulf needs a continuous supply of products with the highest quality, and environmental compliance. Al Nafie Metal

Industries is ahead of its competitors in adopting industrial practices and serving customers with the highest quality, cost-competitive products," he emphasises.

NMI, which is working on landmark projects like the Shuaiba III desalination plant, the Riyadh Metro and the Saudi futuristic city Neom, is capitalising on the surge in Saudi Arabia's construction market, driven by the Vision 2030 programme.

"The demand for steel fabrication has witnessed a dramatic rise in recent years," Al Nafie remarks, highlighting the crucial role steel structures are playing in realis-

ing giga-projects like Neom and others in Riyadh and Jeddah.

"Since Saudi Arabia has won the rights to host the 2034 World Cup, demand for steel structures is going to rise to an all-time high in upcoming years," he adds.

To solidify this position, NMI is implementing a strategic expansion plan which encompasses increasing capacity and expanding its product portfolio to cater to the high-demand oil and gas and power generation sectors. This includes building capabilities to manufacture large-diameter storage tanks, heat recovery steam generators (HRSG) casings, and ducts for process and power plants.

Located in the Al-Khumrah area of Jeddah, NMI's current production capacity sits at an impressive 10,000 tonnes per month. The company has recently boosted the capabilities of its plant by acquiring cut-and-bend and straightening rebar machines, build-up assembly



Al Nafie ... demand is going to rise to an all-time high.

and straightening machines, high-speed drilling and CNC beam line machines, Al Nafie states.

NMI is positioning itself as a one-stop shop for steel fabrication needs across various industries. Its portfolio includes steel structures, storage tanks, pressure vessels, process and power piping and pipe spools, stacks, ducts, diverters, HRSG casings, silos and hoppers, catering to sectors like oil and gas, petrochemicals, power generation and desalination.

“We benchmark our processes against the best-in-class companies and practices. We rely on machine automation for mass production. And the latest software for design, nesting, cutting, welding and painting and delivery etc is one of our valuable assets,” he says.

NMI strives for performance excellence in operations and customer satisfaction. It has ASME U, PP, S and NBIC R and NB certificates. The company credits its success to a team of highly trained engineers, project managers, and quality control specialists. Al Nafie underscores NMI's unwavering commitment to quality and operational excellence. The company prioritises obtaining certifications like ISO 9001 and continuously invests in cutting-edge machinery to streamline production processes.

A stringent quality control process is in place to ensure the high quality and reliability of its fabrication, according to Al Nafie. “Our quality control/assurance team ensures that the production process runs smoothly without any major defect



A storage tank fabricated by NMI.

and deficiencies. Process control measures at each stage of production (fit up, welding, surface treatment) is implemented and monitored. Defects and variations in process are analysed and Root Cause Analysis (RCA) is performed to minimise such defects in future. Each process of the factory is measured for KPIs at set intervals and continual improvements are made to the same,” he explains.

NMI recognises the importance of environmental stewardship and integrates sustainable practices into its fabrication processes. The company prioritises material efficiency through optimised cutting techniques and implements a comprehen-



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sive waste management plan that focuses on minimising waste generation, reusing materials wherever possible, and responsibly recycling scrap metal. NMI adheres to environmental management standards. It also has certifications for its Occupational Health and Safety (OH&S) Management System (ISO 45001-2018) and Environment Management System (EMS ISO 14001:2015), he adds.

NMI boasts an impressive portfolio that



A stringent quality control process is in place to ensure the high quality and reliability of NMI's fabrication.

Firth deal eyes green facade solution

SWEDISH steelmaker SSAB and British manufacturer Firth Steels said they have signed a long-term deal for the supply of SSAB's virtually fossil-free steel, the world's first commercially available product of its kind.

The partnership will see Firth Steels, a leading producer of steel profiles for walls and roofs, incorporate SSAB Zero – steel made with recycled materials and fossil-free electricity and biogas – into its new Protex Voyage line, a low-carbon building envelope solution.

“We are absolutely thrilled to have been selected by SSAB to embark on this great journey in reducing carbon emissions in all aspects of our steel process. As a UK-based roll-former of steel profiles, Scope 3 emissions represent the largest portion of our carbon footprint. By forming strategic partnerships with the world's leading mills, we can significantly reduce these



Firth (left) and Williams ... key partnership agreement.

emissions and forge a sustainable future for our planet from the outset, not offset,” says James Firth, Managing Director, Firth Steels.

Scope 3 emissions refer to a company's indirect greenhouse gas emissions from its value chain.

The companies have a long-running collaboration and are now expanding their partnership to include SSAB's fossil-free products.

“We are happy to add fossil-free steel to our collaboration with Firth Steels, which already uses our bio-based GreenCoat colour coated steel in their prod-

ucts. By cutting our own carbon emissions, we can help our customers reduce their indirect emissions from the materials they use – it's a win-win,” says Dave Williams, Managing Director, SSAB Swedish Steel.

Traditional steel production represents a significant source of global CO₂ emissions, with both virgin and recycled steel production contributing to emissions. By changing the way steel is produced, SSAB wants to cut emissions and create a fossil-free value chain with customers and partners regardless of whether the raw

material is scrap or iron ore.

The company offers two near-zero emission steel products: SSAB Zero and SSAB Fossil-free.

SSAB fossil-free steel is produced using hydrogen derived from fossil-free electricity, replacing coal in the iron ore reduction process. This technology, called Hybrit, was jointly developed by SSAB, mining company LKAB and energy company Vattenfall. Pilot volumes of SSAB Fossil-free are currently available to select partners, with wider availability expected soon.

Firth Steels, in addition to its focus on Scope 3 emissions, also implements sustainability initiatives to reduce its operational footprint (Scope 1 and 2 emissions). These include on-site solar arrays and battery storage for off-grid electricity generation. The company is also certified by Planet Mark, a sustainability certification body.

underscores its vast experience and technical capabilities. The company has played a key role in landmark projects like the Shuaiba III desalination plant, a critical component of Saudi Arabia's water security strategy. NMI also contributed to the Riyadh Metro, a central element of the kingdom's public transport infrastructure development. Its involvement in Neom projects (piled jetty and storage tanks) and the Formula 1 Jeddah circuit further highlights its ability to handle complex and high-profile undertakings. Other projects include storage tanks for Marafiq and Ma'aden, Saudi Mall and Jawhrat Mall.

The company's prestigious clientele includes Siemens, Saudi Aramco, SSEM, Doosan, Acwa Power, MAN, Saudi Electricity Company, Sabic, and Neom, a tes-



Mall of Saudi ... a key project for NMI.

tament to its reputation for quality and reliability.

Looking ahead, Al Nafie emphasises the importance of collaboration. “We welcome business partnerships, fostering

long-term relationships built on sustainability, reliability, efficiency, and quality,” he says, extending an invitation to industry leaders to join forces in shaping the future of the region's industrial landscape. ■



Al-Bairaq Roundabout ... Al-Usaimi provided design, fabrication, blasting, painting and installation services for high-quality steel components.

Al-Usaimi expands; set for new challenges

AL-USAIMI Steel Group, a major player in Saudi Arabia's construction sector, is aiming to solidify its position as a leader in steel structure construction by expanding into new areas and taking on new challenges while capitalising on the kingdom's ambitious Vision 2030 development plan.

The group boasts a 50-year track record of providing comprehensive steel solutions, from design and engineering to supply and construction. Its portfolio includes projects across various sectors, from real estate and industrial to landmark developments and beautification initiatives. Al-Usaimi's expertise extends to specialised services like steel structure fabrication, galvanisation, and transportation services.

This vertically integrated approach has positioned Al-Usaimi to meet the evolving demands of the industry, aligning with the kingdom's Vision 2030 goals for a manufacturing revolution.

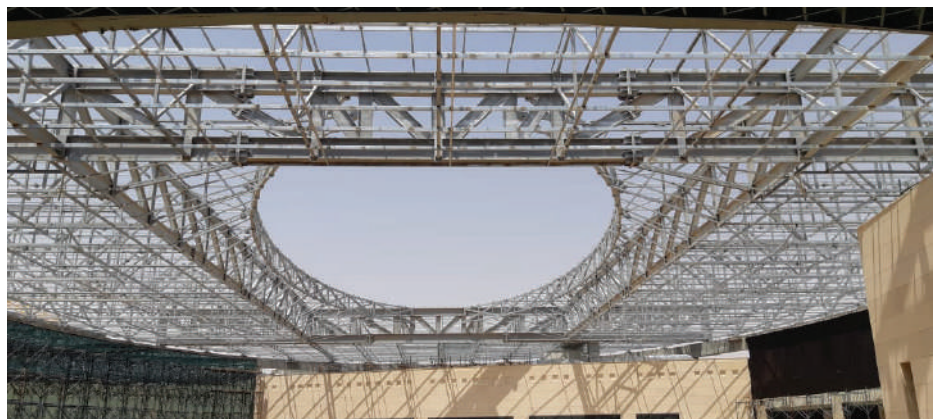
Al-Usaimi Steel Group has established itself as a key player in Saudi Arabia's con-

struction sector, driven by a commitment to quality, innovation, and sustainability. It has applied its innovative approach to ensure the successful completion of various projects with a focus on timeliness.

The group has honed its comprehensive construction services as a pioneer in the steel industry, with six factories in Dammam's Second Industrial City. Its vision

for growth is reflected in its network of over 50 branches across the GCC region, ensuring accessibility and responsiveness to client needs. Al-Usaimi Steel Group's commitment to quality is further underscored by its adherence to international standards like ASTM, SSPC, SAES-H-001, and APCS for coating and painting processes, ensuring client confidence in its projects, a spokeswoman for the group tells *Gulf Construction*.

Al-Usaimi Steel Group has emerged as a powerhouse in the construction industry, leaving an indelible mark on the landscape with its exemplary projects. Recent projects that showcase its capabilities include:



Al-Usaimi designed, fabricated, and installed the steel structures for the truss shade for Prince Sattam Bin Abdulaziz University.

- **VIP Cinema (Shorofat Park) located in Al-Rakah, Eastern Province of Saudi Arabia:** The group provided high-quality steel products and solutions for this entertainment complex, contributing to its architectural design.
- **Chamber of Commerce Tower in Al Khobar:** This prestigious high-rise building project demanded precision and expertise in the construction of its podium level, 23rd floor and roof, says the spokeswoman. Al-Ussaimi Steel Group rose to the occasion, designing and supplying structural steel, thus facilitating the development of this building, which is one of the largest of its kind in the Middle East.
- **Red Sea Gate Terminal (RSGT) Super Gates at Jeddah Islamic Port:** The company played a vital role in designing, fabricating, galvanising, and erecting steel components for two crucial super gate stations at the port.
- **King Fahd Military Medical Complex (KFMMC) in Dhahran:** Al-Ussaimi designed and supplied high-strength steel for the complex's accommodation and warehouse buildings.
- **Saudi National Flag (Roundabout) or Al-Bairaq Roundabout in Al Khobar:** The group provided comprehensive services, including design, fabrication, blasting, painting and installation of high-quality steel components, which were instrumental in constructing this symbolic landmark.
- **Prince Sattam Bin Abdulaziz University (truss shade) in Hotat Bin Tamim:**



Tasis Roundabout in Al Khobar ... a striking landmark project by Al-Ussaimi.

Al-Ussaimi Steel Group designed, fabricated, and installed the steel structures for the truss shade over the multifunctional university.

- **Sky Anan roundabout in Al Khobar:** The roundabout features a design resembling a large-scale sculpture, with twisting and curving metallic elements that seem to defy gravity. This project exemplifies Al-Ussaimi's capabilities, where the group provided design, fabrication, galvanisation, painting and installation of high-strength steel for this unique, architecturally striking roundabout.

"The roundabout is a testament to modern engineering and artistic creativity, showcasing the potential for urban spaces to become more than mere intersections

but rather focal points of beauty and innovation. Al-Ussaimi Steel Group's went all out with this project," she says.

She adds that these projects represent a fraction of Al-Ussaimi Steel Group's extensive portfolio, highlighting its versatility, reliability, and expertise in meeting the diverse needs of the construction industry.

"As a trusted partner in major ventures, the group continues to redefine excellence and set new benchmarks for quality and innovation in construction," the spokeswoman concludes. ■



Sky Anan Roundabout in Al Khobar resembles a large-scale sculpture.



Al-Ussaimi fabricated and erected two super gate stations of the Red Sea Gate Terminal at Jeddah Islamic Port.

EBS supplied part of the steel structure of the Al Habtoor City Tower.



EBS buoyed by strategic regional orders

EMIRATES Building Systems (EBS), a wholly owned subsidiary of Dubai Investments, and one of the leading manufacturers of steel structures in the Middle East, has announced that it has secured major contracts valued at over AED225 million (\$61.25 million), underscoring its position as a trusted partner in the region's steel manufacturing and construction industry.

Among its significant new projects are two key orders from Saudi Arabia – the Advanced Manufacturing Plant (AMP-2) for Lucid Motor in King Faisal Abdullah Economic City and the catering central building and laundry building for Catrion

– a premier provider of hospitality and catering services in the region – at the Red Sea Project.

In the UAE, it is working on Adnoc's gas processing facilities and Habshan CO₂ recovery units in Abu Dhabi, and part of the steel structure for the 82-storey Habtoor Tower in Dubai.

These prestigious contracts add to EBS's extensive portfolio of ongoing projects, which includes the calcined petroleum coke plant in Sohar, Oman, two aircraft hangars for Etihad Engineering at Abu Dhabi International Airport, and various factories and logistics centres across the region.

"The steel manufacturing industry in

the Middle East is undergoing a paradigm shift, driven by rapid technological advancements and a heightened focus on sustainability," says Joseph Chidiac, General Manager of EBS.

Citing recent reports by the World Steel Association, he says, steel demand in the Middle East and North Africa is expected to grow significantly, with forecasts predicting a 3.2 per cent increase in 2024. This surge is largely due to expansive infrastructure projects and the region's economic resilience.



The steel manufacturing industry in the Middle East is undergoing a paradigm shift, driven by rapid technological advancements and a heightened focus on sustainability

"At EBS, we are stepping up our efforts to meet this growing demand by expanding our capabilities and embracing cutting-edge technologies. Our commitment to delivering high-quality steel solutions across various industries – be it advanced manufacturing, oil and gas, or high-rise residential projects – positions us at the forefront of this industrial evolution. We remain dedicated to not only meeting but also exceeding the expectations of our clients and contributing to the sustainable growth of the steel industry in the region," says Chidiac.

In response to the increased demand, EBS has expanded its workforce to ensure timely and high-quality project execution. The company says it maintains stringent quality management standards across its internal systems and processes and its commitment to quality and environmental standards has been recognised with ISO 9001:2015, ISO 14001: 2015, ISO 45001:2018 and CE marking certificate.

EBS is also in negotiations for several major projects with values exceeding hundreds of millions of dirhams, signalling a promising future for the company. ■