



Amiantit Fiberglass, Saudi Arabia

Key Facts

Company: Amiantit Fiberglass

Website: www.amiantit.com/en

Industry: Petrochemical

Country: Saudi Arabia

Products Used:

- CAESAR II®

Amiantit Fiberglass Enhances Productivity Using CAESAR II® on YANSAB Project

Established in 1977 in Dammam City, Saudi Arabia, Amiantit Fiberglass Industries Ltd (Amiantit Fiberglass) is part of the Amiantit Group, a worldwide company comprised of 30 pipe system manufacturing plants, six technology companies, four materials suppliers and eight supply and engineering subsidiaries located around the globe and serving customers in more than 70 countries.

Amiantit Fiberglass is one of the world's largest thermosetting fiberglass reinforced plastic (FRP) pipe manufacturers, having produced more than 10 million meters (32.8 million feet) of FRP piping to date for customers in Asia, the Middle East, northern Africa and the Pacific region. It uses the Flowtite® FRP pipe production technology that offers high production efficiencies.

YANSAB Project

Yanbu National Petrochemical Company (YANSAB) is the largest petrochemical complex in Saudi Basic Industries Corporation's (SABIC) affiliate in Yanbu city, Saudi Arabia. Upon completion, the eight plants will add a total annual capacity of more than 4 million metric tons of petrochemical products, including ethylene, propylene, polyethylene (LLDPE, HDPE), polypropylene, ethylene glycol, benzene, xylene, toluene, butane 1, butane 2 and MTBE.

The Amiantit Fiberglass project for YANSAB involved design, engineering, manufacturing and fabrication, inspections and testing, marking and packing of the FRP piping system for seawater and cooling water piping systems in the petrochemical complex, including elbows, tees, nozzles, reducers and flanges.

The project included developing spooled isometrics and shop fabrication drawings; designing FRP pipes, fittings and flanges; and performing stress analysis and finite element analysis calculations.

Project Challenges

Amiantit Fiberglass identified two major project challenges. One was the detailed stress analysis calculations required for huge seawater and cooling water piping systems and the other was the strict and tight schedule for manufacturing and fabricating the FRP piping. To solve these project challenges, it chose the CAESAR II Pipe Stress Analysis software, citing its ease of use and wide acceptance.

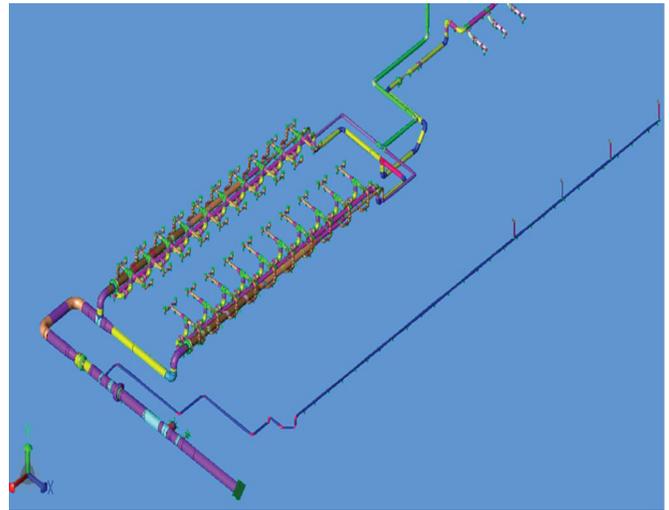
Benefits from Choosing CAESAR II

Among the many positives that the team reported with CAESAR II, one was the software's built-in capabilities for FRP macro level analysis that proved a great help in simulation and analysis. "We also appreciated the superb graphical user interface that really simplified visualization and the excellent CAESAR II technical support," said Farrukh Shaikh, senior design engineer at Amiantit Fiberglass. "They resolved our challenges in the modeling and simulation of FRP piping systems, which kept us productive" Shaikh explained.

At completion, Amiantit Fiberglass supplied around 20,000 meters (65.61 thousand feet) of FRP piping including elbows, tees, nozzles, reducers and flanges. Piping diameters ranged from DN100 mm to diameter 4000 mm.

Saving Time and Achieving Overall Productivity Enhancement

"With CAESAR II for piping analysis, we solved our project challenges, avoided confusion and increased our accuracy in integrating FRP piping with interconnecting metallic piping in the seawater and cooling water systems," added Shaikh. "The technical reference of CAESAR II and its wide usage combined with quick and comprehensive support saved us time and enhanced our overall productivity."



About Hexagon

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.9bn EUR. Learn more at [hexagon.com](https://www.hexagon.com) and follow us @HexagonAB.