

Sadara

World's largest petrochemical complex ever built in a single phase



Sadara represents a unique alliance between Saudi Aramco and The Dow Chemical Company who came together through shared values and a dedicated vision to develop and serve the Middle East market with chemical products, never before produced in the region. The project aim is to enable Kingdom of Saudi Arabia to become self-sufficient, reduce imports and boost exports within GCC (Gulf Cooperation Council) and wider Gulf region.

The facts

Sadara will support Saudi Arabia's industrial and social diversification by extending key value chains downstream and generating thousands of employment opportunities, both through the complex and through the adjoining PlasChem Park. Sadara's unique product portfolio, employing state-of-the-art technologies, will add downstream value chains to expand and transform the Kingdom's existing chemicals landscape. Sadara will introduce many new products to the Kingdom, e.g., the first isocyanates and polyols (polyurethane) plants, enabling many industries that either do not currently exist in the Kingdom or only exist through imports of raw materials.

Project Overview	
Project value	\$20 Billion
Manufacturing plants	26
Number of EPCs involved	15
Annual output	3 million metric tons

ABB is central to the success of Sadara

The complete automation and electrical system for Sadara is very complex and is central to the success of the whole facility. ABB being Main Automation Contractor (MAC) touches all levels of the project from concept through long lifecycle of the plant. With its unique combination of domain and digital expertise ABB facilitates much better economies of scale, while delivering cutting-edge optimization that helps keep costs in line without sacrificing innovation. Also, at the heart of everything is ensuring zero accidents and injuries, despite the scale and size of the project.

Building by numbers	
Control systems	18
Input/Output (I/O) devices	150000
Redundant controllers	260
Servers	450
Workstations	210
Operator consoles across 5 control operator buildings	70