

## The World's Top 10 Super Refineries

*A shutdown and turnaround is the most important period in the lifespan of an oil refinery. If the TAR plan is well-executed, then thousands of man hours and potentially millions of dollars can be saved. If it goes badly, then there is a real potential for both monetary and physical disaster.*

*In this article, Oil & Gas iQ's Asdza Nadleehe takes a look at the new breed of "super refinery" that is becoming more prevalent across the world.*

### 1. Jamnagar Refinery



The Jamnagar Refinery Complex located in the Jamnagar Special Economic Zone (SEZ) is by far the largest oil refinery in on Earth and the de facto petroleum hub of the world.

With 1.24 million barrels per day of nominal crude processing capacity, the Jamnagar Complex outputs 1.6% of global capacity and one third of India's total oil consumption.

Location - Jamnagar, Gujarat, India

Owner/Operator - Reliance Industries Limited

Barrels per Day - 1,240,000

## 2. Paraguaná Refinery Complex



The Paraguaná Refinery Complex in North-western Venezuela was created as a result of the amalgamation of three extant refineries: Amuay, Bajo Grande and Cardón.

The complex currently holds 71% of the refining capacity of the oil-rich South American nation.

Location – Paraguaná, Falcón, Venezuela

Owner/Operator - Petróleos de Venezuela, S.A. (PDVSA)

Capacity - undisclosed

### 3. SK Energy Ulsan Refinery Complex



Opened in 1964, the Ulsan complex is the largest in South Korea and the second largest in Asia, housing 16 million barrels of oil in 34 large-scale crude oil storage tanks and producing LPG, Gasoline, Diesel, Jet Fuel and Asphalt for the foreign and domestic markets.

Location - Ulsan, South Korea

Owner/Operator - SK Energy

Capacity: 40.2 million tons/annum

Barrels per Day - 850,000

#### 4. GS-Caltex Yeosu Refinery



South Korea's second biggest refinery and Asia's third, the GS-Caltex Yeosu Complex is home to the world's largest vacuum distillation unit, completed in 2007 at a cost of \$1.5 billion,

Location - Yeosu, South Korea

Owner/Operator - GS-Caltex (50% Chevron/ 50% GS Holdings)

Capacity: 40 million tons/annum

Barrels per Day - 730,000

## 5. S Oil Ulsan Refinery



S Oil's Ulsan refinery complex is the South Korea's third largest refinery, and the second largest refining complex in Ulsan itself. The \$1.2 billion "Onsan Refinery Expansion Project" was completed in 2011, equipping the plant with an 89,000 bpd condensate splitter and petrochemical plants.

Location - Ulsan, South Korea

Owner/Operator - S Oil (Saudi Aramco and Hanjin Group)

Capacity: 33,5 million tons/annum

Barrels per Day - 669,000

## 6. Exxon Mobil Singapore Refinery



Coming on stream as the Jurong refinery in 1965, the complex has undergone several upgrades under the aegis of Mobil and Exxon Mobil, including the plan to construct a diesel hydrotreater at the complex, increasing the refinery's production capacity of ultra low sulphur diesel (ULSD) fuel.

Location – Jurong Island, Singapore

Owner/Operator – Exxon Mobil

Capacity: 30 million tons/annum

Barrels per Day - 605,000

## 7. Baytown Refinery



Opened in 1920, Exxon's Baytown refinery is the largest in the United States, the second largest in the Western hemisphere and also Exxon's second largest facility after its Singapore complex. The company recently completed a project to install Ultra-low-sulphur diesel (ULSD) units across 3 US refineries in the US at a cost of \$1 billion.

Location – Baytown, Texas, USA

Owner/Operator – Exxon Mobil

Capacity: 28.6 million tons/annum

Barrels per Day - 572,500

## 8. Ras Tanura Refinery



Ras Tanura is Saudi Aramco's largest refinery and the biggest in the Middle East. The complex processes both crude oil and gas condensates and has a natural gas liquids (NGL) processing facility and a crude stabilisation facility.

Location – Ras Tanura, Saudi Arabia

Owner/Operator – Saudi Aramco

Capacity: 27.5 million tons/annum

Barrels per Day - 550,000

## 9. Baton Rouge Refinery



Located in the capital city of Louisiana State, the Baton Rouge refinery is the second largest refinery in the United States and produces a wide range of petrochemical derivatives from motor and aviation fuel to petroleum coke and waxes.

Location – Baton Rouge, Louisiana, USA

Owner/Operator – Exxon Mobil

Capacity: 25.0 million tons/annum

Barrels per Day - 503,000

## 10. – BP Texas City



The British super major's largest refining complex and only entry in this top 10, Texas City is the third largest refinery in the USA and one of the most versatile, processing up to 54 different types of crude oil from oil over the world.

Location – Texas City, Texas, USA

Owner/Operator – BP

Capacity: 23.0 million tons/annum

Barrels per Day - 467,720

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*Oil & Gas IQ's Shutdowns & Turnarounds 2013 will take place from 18 - 20 February 2013 in Aberdeen, Scotland. For further information please visit [www.shutdownsandturnarounds.com](http://www.shutdownsandturnarounds.com), call +44 (0)207 036 1300 or email [enquire@oilandgasiq.com](mailto:enquire@oilandgasiq.com)*