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Argus Benzene Annual 2018

(Insight from the Argus Benzene Analytics Service)

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Petrochemicals
illuminating the markets

Market Reporting
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Summary

While China increased its benzene import needs by more than 1mn t from 2016 to 2017, South Korea continued as the largest exporter of benzene globally and shipped in excess of 2.6mn t in 2017 to world markets. Japan was the second largest exporter to China, and exported more than 400,000t of benzene for the second year in a row in 2017. The US and western Europe maintained large deficits of benzene of 1.4mn t and 1.2mn t, respectively. Despite the ongoing trade imbalance for benzene across the globe, pricing was at close parity or with very tight arbitrage windows among consuming regions. Benzene fob South Korea averaged \$822/t in 2017, compared to \$860/t for prompt US Gulf coast. Freight rates between both regions averaged \$40/t in 2017. The US and western Europe continued to trade benzene price leadership and averaged a price differential of just \$2/t for the year. Unplanned outages at styrene units caused an oversupply situation in the US during most of 1H 2017, allowing Europe to lead the world in pricing for most of that period as it attracted feedstock from the US and the Middle East to produce larger quantities of styrene as the region continued to export to world markets. The European market will remain short C6 molecules and will import either benzene or styrene as domestic operations dictate.

Major findings

- Because of declining supplies of extraction feeds, particularly in the US and western Europe, global operating rates for benzene are not expected to exceed 70pc of capacity through 2026. While benzene production in Asia-Pacific is expected to grow at a faster rate, large reformer and benzene from coal capacity additions will push operating rates into the mid-60pc and lower through 2022.
- As global paraxylene (PX) demand continues to grow and new capacity is added, particularly in Asia-Pacific and the Middle East, additional co-product benzene output will come from those units. But co-product benzene capacity may not grow at the same rate given a lower benzene/PX production ratio at new worldscale plants.
- Demand growth is expected to be greatest in the aniline/methylene diphenyl diisocyanate (MDI) and cumene/phenol segments at an approximate 3.1pc annual average growth rate (AAGR) through 2027. All other segments are forecast to grow below global gross domestic product (GDP) rates and net a 2.1pc AAGR for global benzene in the next 10 years. Announced styrene capacity additions in Asia will continue to struggle to start on time while feedstock ethylene supply remains constrained.

Key components

In addition to providing additional details and background on these key findings, this annual covers the period from 2013 through 2022 and includes the following components:

- A history and forecast of the supply and demand balance for each country that produces or consumes benzene.
- Detailed country maps, which illustrate key locations of benzene production and consumption.
- An overview of regional and world benzene markets, including demand analysis of all the major benzene derivatives.
- A history and forecast of benzene imports and exports by country.
- Analysis of capacity and market changes and trends by country and region.
- A useful technical overview that explains the production and conversion of benzene into its major derivatives.

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Appendix B: Argus benzene services

Argus serves its clients by assisting in developing solutions and opportunities to manage their day-to-day and longer term problems in the areas of marketing and planning. The company is composed of a group of consultants with direct industry experience, each of whom spends his or her full time analyzing the market for a specific product and its major derivatives. As an additional aid to the clients, each consultant writes a periodic newsletter which covers market trends and current product prices; makes product price forecasts; and compiles an annual report containing plant capacities, supply, demand, imports and exports. The following product areas are served by Argus: Benzene and Derivatives; Toluene, Xylenes and Isomers PET resin and fiber; Fuels and Octane Report; Ethylene; Propylene; C4s; Polymers; Methanol and Derivatives and Hydrocarbon Rosin Resins.

Daily pricing services – Argus provides daily price reporting service for benzene and toluene/xylenes pricing in Europe, Asia-Pacific and North America.

Weekly newsletter service – Argus provides weekly price reporting and analysis for benzene and toluene/xylenes activities in Europe, Asia-Pacific and North America.

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This annual represents only one portion of the Argus Benzene Service. This, and all we do, is intended to serve as an extension of your business arm. As we are constantly looking to improve our services, we are always open to any suggestions you feel would contribute to the service and promise to remain willing to change for the better.

Chuck Venezia

Chuck Venezia is Senior Vice President Petrochemicals Business Development at Argus in Houston, Texas. Chuck has more than 26 years of experience in the petrochemical industry. Prior to moving into the Business Development role, he led the Benzene & Derivatives service for Argus. Chuck joined DeWitt & Company in 2002 from CheMatch where he served as Executive Director, Latin America of the online trading platform for bulk petrochemicals. Before joining CheMatch, Chuck served as Area Manager, Latin America for Chevron Chemical Company. At Chevron, he managed the company's polymer export sales and other chemical sales into Mexico and South America. A native of upstate New York, Chuck holds an MBA and MA from Tulane University and a BA from Union College. He speaks Portuguese fluently and is proficient in Spanish.

Andy Nicholson

Andy Nicholson is Vice President of Aromatics EMEI (Europe, Middle East and India) with Argus. He has 34 years' experience in the petrochemicals and fibre intermediates' businesses, having worked in a variety of sales, marketing, trading and purchasing positions for ICI in the UK and Germany and for Rhone-Poulenc and Rhodia in France. During the 1990s he was extensively involved in restructuring and strategic work in Central Europe. He subsequently spent three years with ChemConnect, building a multi-national structure and developing new markets in Southern Europe, prior to joining DeWitt & Co Inc. at the beginning of 2004. Andy studied languages at the universities of Cambridge and Freiburg.

Tom Stevenson

Tom Stevenson is a Consultant to Argus Aromatics services in Europe, the Middle East, Africa and South Asia. He has more than 39 years' experience in the petrochemicals industry. He spent 22 years with Shell Chemicals where he fulfilled a variety of roles in its international polymers and industrial chemicals businesses, including product management, cost analysis, business planning and technical management. He joined DeWitt & Co. in 2003. Tom holds a BSc degree with first class honours and a PhD in Chemistry from Imperial College, London. He is a Chartered Chemist and Member of the Royal Society of Chemistry.

Paco Rangel

Paco Rangel is Argus Benzene and Derivatives Consultant, based in Houston. Paco has over 17 years of consulting experience in the energy and petrochemical industry. Areas of expertise include aromatics market and price analysis, single client studies, manufacturing economic analysis, fuels supply chain, NGL pipeline management, IT project management, business process design, implementation of market intelligence systems, and software selection and implementation of energy trading risk management systems. Single client work includes various topics in reforming, alkylation, pyrolysis gasoline, and economic competitiveness in both olefins and aromatics value chains. A native of Mexico, Paco earned an Industrial Engineering degree from Texas A&M University and a master's degree in business administration from Tulane University.

Mahua Chakravarty

Mahua Chakravarty is the Petrochemical Market Editor, Asia, based in Singapore. She covers the aromatics and methanol markets in Asia. Mahua has more than 18 years of experience as a journalist and editor with various publications in Singapore and India. She worked for HRM Asia and ICIS before joining Argus in 2013. Mahua holds a Bachelor of Arts degree in English Language and Literature from Presidency College and a Master's degree in English Literature (British and Commonwealth) from the University of Calcutta.

Kate Lee

Kate Lee is a reporter for Argus, based in Singapore. She mostly covers styrene monomer and ethylene, but has also reported on toluene and MTBE since joining Argus in 2014. Prior to that, Kate worked as an aromatics broker in 2006 and at a petrochemical trading company. Kate received a degree in business and marketing from Nanyang Technological University.

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