

SULZER

GT-BTX™ Technology Licensing

Capturing aromatic value from process streams

Experience the transformative power of GT-BTX in your refinery, petrochemical plant, or coke oven operation. Achieve increased efficiency, reduced costs, with a reduced environmental impact. Trust GT-BTX to redefine your aromatics extraction process, enabling you to reach new heights of performance and productivity.





Embrace the future of aromatics extraction

GT-BTX: Exceptional aromatics recovery

Discover GT-BTX, the cutting-edge aromatics extraction technology that utilizes extractive distillation to efficiently remove benzene, toluene, and xylenes (BTX) from refinery, petrochemical, or coke oven aromatics streams such as catalytic reformat, pyrolysis gasoline, or coke oven light oil (COLO).

Whether it's a grassroots design, revamps, or debottleneck, GT-BTX is the ultimate solution, surpassing traditional liquid-liquid extraction and other extractive distillation processes in terms of performance, cost-effectiveness, and operational simplicity. GT-BTX can also improve performance metrics like utility reduction, better product purity and recovery of existing aromatic extraction units.



High efficiency:

GT-BTX reduces both capital and operating expenses, making it a financially viable choice with quick return on investment. Through its remarkable extraction efficiency, GT-BTX optimizes the separation process, ensuring maximum productivity and cost savings.



Superior solvent formulation:

Its proprietary Techtiv™ solvent delivers superior performance compared to conventional solvents. This is a special blend of solvents that outperforms all other single-component solvents on the market. This environmentally friendly, non-nitrogen formulation ensures high extraction efficiency while prioritizing sustainability.



Versatility and flexibility:

GT-BTX accommodates a wide range of feedstocks, allowing for greater operational flexibility. With no special feed preparation requirements this technology is capable of handling a wide-range (BTX) feedstock while producing very high aromatics purities (99.9 + wt %) at high recoveries (>99.9%).



State-of-the-art design:

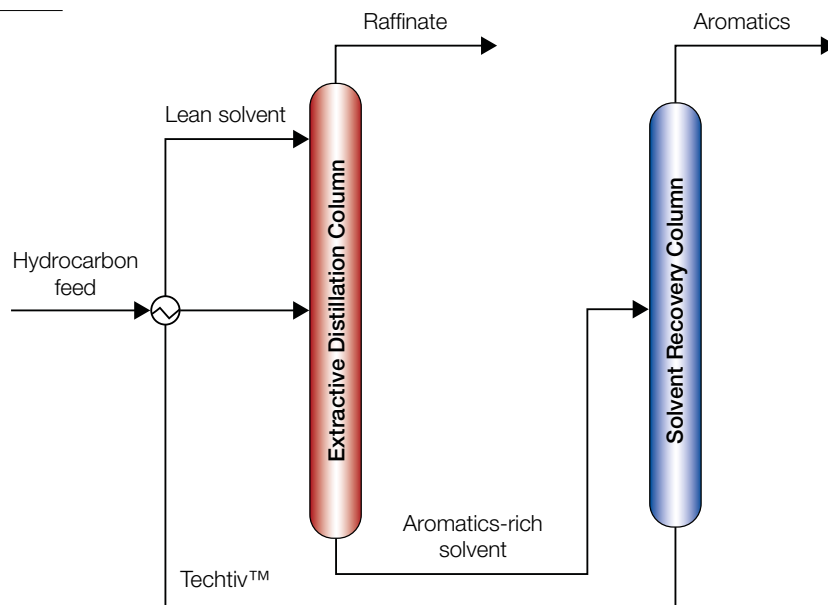
Complemented by the latest extraction tray and packing design, with this innovative system, you can achieve the most stringent quality standards for aromatic products, meeting the demands of any downstream application.



Sulzer Chemtech technology

GT-BTX

An aromatic-rich stream is fed to the Extractive Distillation Column (EDC) in the GT-BTX unit. Non-aromatics are separated and leave the top of the EDC as raffinate. Aromatics are extracted in rich solvent and sent to the Solvent Recovery Column (SRC). Lean solvent from the SRC bottom is recirculated back to the EDC. Extract from the SRC overhead is sent to the fractionation section to produce high-purity benzene, toluene and xylenes. High-performance Techtiv™ solvent is used in this extractive distillation system.



Process advantages

Discover the outstanding benefits of extractive distillation, amplified by the advanced GT-BTX technology:

1. Lower capital & operational cost
 - Simple two-column extractive distillation system which requires 30-40 percent lower capital cost than conventional liquid-liquid extraction systems
 - Smaller equipment and higher extraction efficiency than other extractive distillation system
 - Carbon steel construction throughout
 - Smaller plot requirement than other system
2. Innovative solvent technology
 - Lower solvent inventory that further reduces investment requirement
 - Proprietary Techtiv solvent exhibits highest selectivity among all other solvents in commercial use. Solvent properties allow wide boiling range materials (C5-C9) to be fed into unit, with varying aromatics content

Economic analysis

Basis

**12'000 BPSD reformat
or pygas**

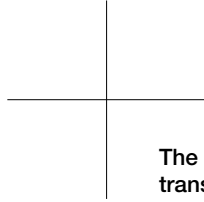
Erected cost

\$ 15MM (ISBL, 2023 U.S. Gulf Coast Basis)

3. Improved environmental impact
 - Lowest specific energy consumption (20-30 percent less than others)
 - Low solvent consumption and circulation rates
 - Higher product purity and aromatic recovery
 - Low solvent degradation rate
 - The benzene product from GT-BTX is nitrogen free. Unlike some competing solvents, GTC's solvent is free of basic nitrogen containing components, which permanently poison the catalyst in some downstream benzene applications.

We make chemistry happen

To learn more about Sulzer Chemtech's leading-edge technology solutions and the many ways we can help improve your operations and profitability sulzer.com/chemtech



The Chemtech division is the global market leader in innovative mass transfer, static mixing and polymer solutions for petrochemicals, refining and LNG.

Chemtech is also leading the way in ecological solutions such as biopolymers as well as textile and plastic recycling, contributing to a circular economy. Our product offering ranges from technology licensing to process components all the way to complete separation process plants. Customer support ranges from engineering and field services to tray and packing installation, tower maintenance, welding and plant turnaround projects – ensuring minimal downtime.

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