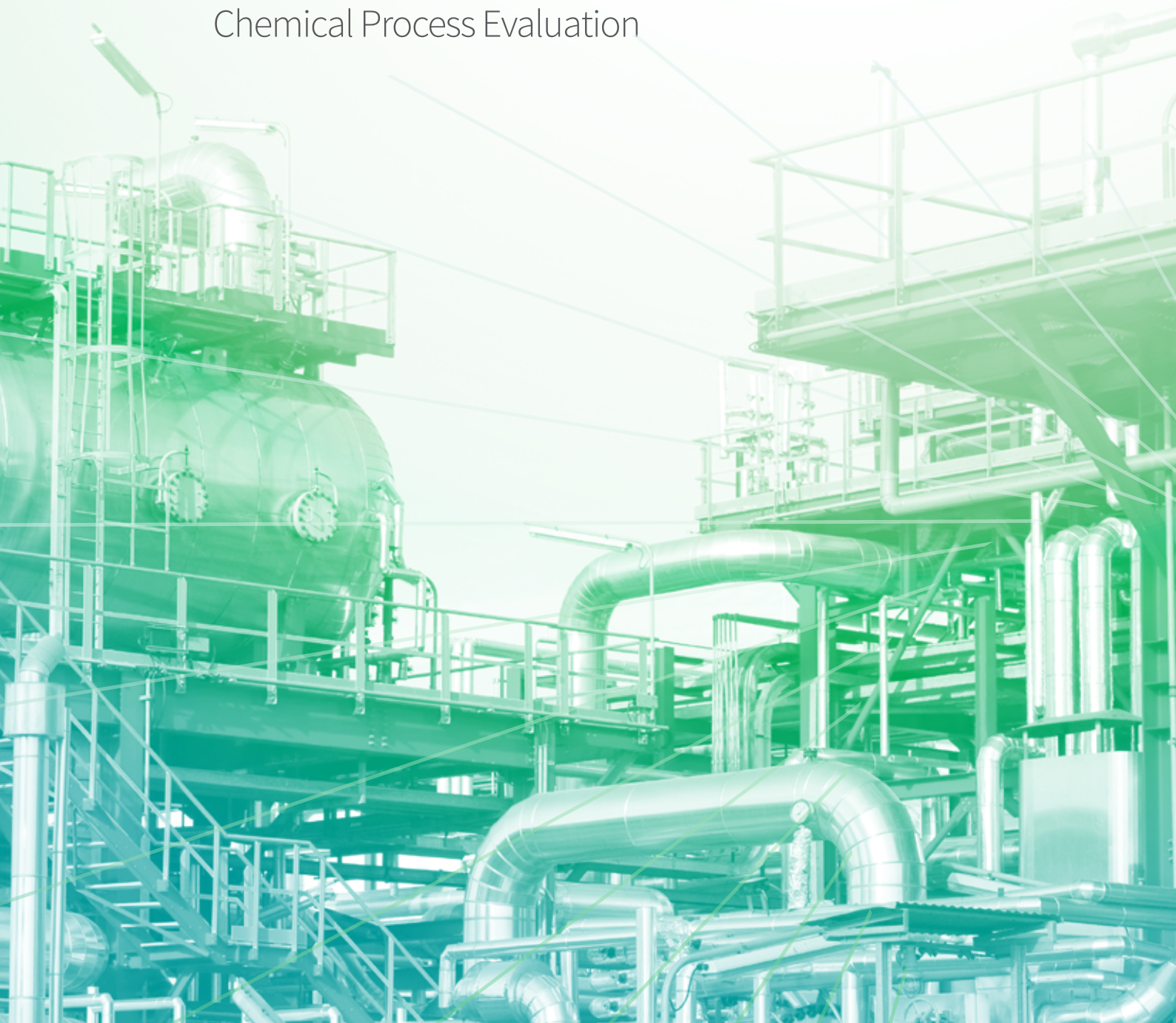




Chemical Process Economics Program

Chemical Process Evaluation



Process Economics Program (PEP)

The Process Economics Program (PEP) provides in-depth, independent technical and economic evaluation of both commercial and emerging technologies for the chemical, biochemical, and refining industries. PEP analyzes the impact of changes in processes, feedstocks, energy prices, and government regulations on chemical and fuel production economics for our clients. And with the celebration of the 50th anniversary of PEP, we enter a new era, offering new functionality and key report contents through interactive Excel data files that allow our clients to generate process economics tailored to their specific project needs.

Benefits

New technologies can either offer an opportunity or pose a threat. Prompt and thorough analyses of new developments are crucial to making the proper decision—whether you are exploiting a proprietary technology or responding rapidly to a competitor's move. PEP reduces the time and costs associated with collecting and interpreting the voluminous information needed to assess new technologies.

Clients make use of PEP's independent analyses—which draw on our experts' industry experience in process design, cost estimation, and R&D planning—to make informed decisions. Complementing that expertise are the program's extensive databases ongoing contacts with chemical companies worldwide.

PEP is a partnership

PEP is designed to be a problem-solving partnership, combining independent analysis with client needs. PEP experts stay up-to-date on issues affecting clients through on-going contacts with industry representatives, conference participation, and site visits. The insights gained from these activities are reflected each year in the topics suggested for research. Clients then vote on PEP's suggestions to ensure the selected topics reflect their areas of interest.

Inquiry Privileges

All PEP customers receive access to the experts to discuss information in the studies.

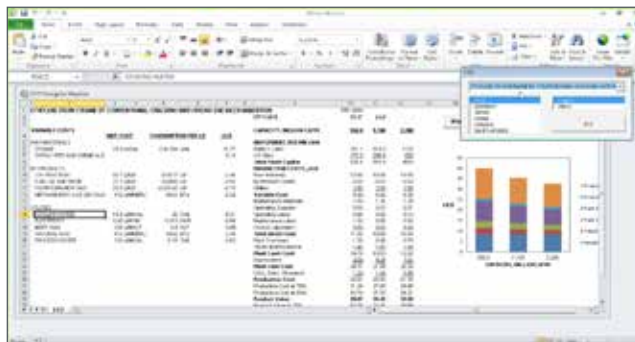
PEP Reports and Reviews

Our on-going subscription-based service delivers PEP Reports and PEP Reviews to our clients each year. Each Report covers three or more processes, while each Review covers one process or a specific topic. PEP subscriptions continue to be the only source for new process analysis. Available in print and online, PEP Reports and PEP Reviews are universally acknowledged as the industry standard for techno-economic evaluations of chemical process technologies.

PEP Reports emphasize commercially significant products and processes for which technology is rapidly changing. PEP experts develop and evaluate process designs using patent literature and licensor information, and they estimate capital and operating costs of world-scale production plants.

PEP Reviews provide timely analysis of “hot issues” affecting the industry—from process technology to industry restructuring.

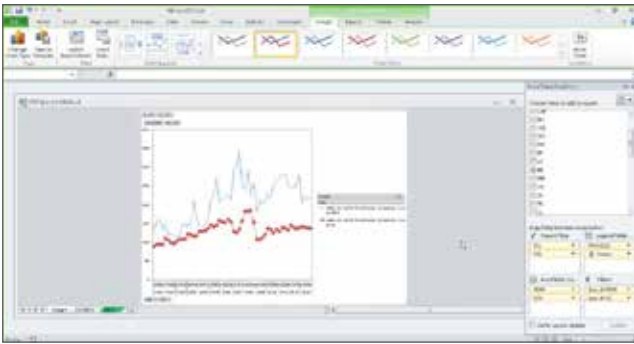
Included with the 2014 Reports and Reviews is an iPEP Navigator Excel-based interactive data module, which allows a user to quickly select a process and a region, and convert process economics between English and metric units. The iPEP Navigator interactive module also enables our customers to tailor the process economics to their specific project needs.



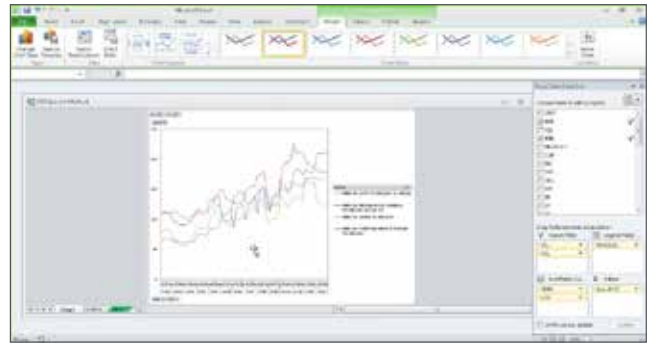
iPEP Navigator, select Process, Region, English or Metric

PEP Consolidated Reports

PEP Consolidated Reports provide a single and comprehensive report on a specific chemical that includes all competing processes, with the same detailed process design and economics as PEP Reports. Consolidated Reports also contain an iPEP Navigator module that allows a user to quickly select a process and a region, and convert process economics between English and metric units. To ensure the information in the Consolidated Reports remains relevant, we will update the process economics and industry review section of each report once a year. PEP Consolidated Reports are meant to serve technical managers and process engineers who are interested in understanding all competing processes in detail and keeping track of market conditions and production economics annually.



iPEP Spectra, compare margins to cost over time



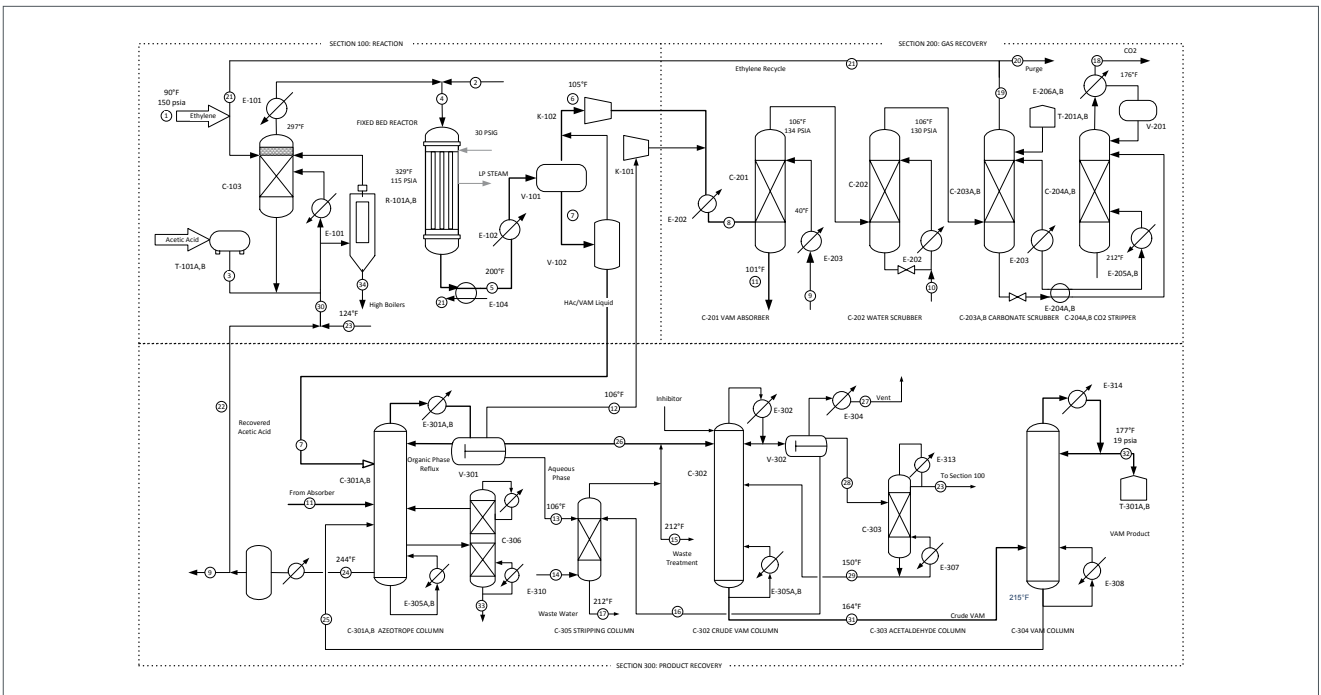
iPEP Spectra, compare cash costs

PEP Process Summaries

PEP Process Summaries offer a concise comparison of competing processes by capturing key differences in design features and process parameters. Process Summaries include an iPEP Spectra interactive data module prepared in an Excel pivot table where quarterly production economics of competing processes are easily compared over a period of 10 or more years. The iPEP Spectra data module will enable our customers to compare production economics of competing processes in various plant locations using a wide selection of economics metrics. Clients can also use the iPEP Spectra data module to tailor process economics to their specific project needs in the matter of minutes, saving days or weeks of work. The process summaries are meant to serve business and project managers who are interested in understanding competing processes' key differences at a high level but still need to closely track profitability.

PEP Yearbook

The PEP Yearbook is the world's largest online process economics database. Updated quarterly starting in 2014, it provides current production economic data for more than 1,400 processes used to manufacture over 600 chemical, polymer, refining, and biotech products. The database estimates raw material and utility requirements and demonstrates capital and production costs for three plant capacity levels, while an online application tool enables users to customize plant capacity for quick scaling analysis. Yearbook subscriptions provide cost information for the US Gulf Coast, Germany, Japan, and China, with limited process coverage for Canada and Saudi Arabia. All data are available in either English or metric units.



Typical Vapor Phase Process sections

International Focus

IHS Markit worldwide team is rich in its diversity of people, cultures and knowledge. In keeping with the increasingly interconnected nature of the global economy, this group of experts is on hand to provide global information and insight.

Thanks to our employees, we are constantly expanding our coverage, and our clients have benefited from the various cultural insights and perspectives of the societies in which we do business. To learn more about Chemical, please contact us using one of the appropriate email addresses below.

ihsmarkit.com

About IHS Markit

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

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