

New Honeywell Naphtha technology set to boost energy efficiency

Honeywell has unveiled a groundbreaking new naphtha to ethane and propane process, poised to revolutionise light olefin production globally and reduce CO2 emissions per metric tonne of olefin produced.

Ethane and propane serve as optimal feedstocks for the production of ethylene and propylene, key petrochemicals essential in various industries, including chemicals, plastics, and fibres. This innovation underscores Honeywell's strategic alignment with significant megatrends, including the energy transition.

The NEP technology facilitates the production of ethane and propane from naphtha and/or LPG feedstocks. In a typical NEP-based olefin production complex, ethane is directed to an ethane steam cracking unit, while propane is allocated to a propane dehydrogenation unit. This approach enhances the generation of high-value ethylene and propylene while curbing the production of lower-value byproducts compared to conventional mixed-feed steam cracking units. Consequently, this novel approach yields substantial net cash margin increases ranging from 15 to 50 percent.

Moreover, an NEP-based olefins complex significantly reduces CO2 intensity per metric tonne of light olefins produced by 5 to 50 percent compared to traditional mixed-feed steam crackers. This advancement underscores Honeywell's commitment to developing sustainable solutions amid growing demand for efficient petrochemical solutions.

Matt Spalding, vice president and general manager of Honeywell Energy and Sustainability Solutions in MENA, highlighted the significance of the technology, stating, "Our technology helps to enable more efficient production of ethylene and propylene, two chemicals which are in high demand, while also helping our customers lower their carbon emissions."

This pioneering solution is a pivotal component of Honeywell's Integrated Olefin Suite technology portfolio, representing a pioneering initiative in the industry to enhance light olefin production.

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