Crack spreads are the estimated difference between the selling price of a refined petroleum product and the cost of the crude oil used to produce it. This calculation is used to assess the profitability of refining operations.

Crude oil refiners have the option to sell their product as is or to process it further into different refined products. The cost of crude oil can fluctuate significantly, and refiners need to be able to react quickly to changes in the market.

Crack spreads can be influenced by a variety of factors, including changes in consumer demand, shifts in refinery output, and external market conditions. For example, during the COVID-19 pandemic, the demand for gasoline decreased significantly, resulting in a drop in crack spreads for that product.

Refineries must balance the need to produce gasoline, diesel, and other petroleum products to meet consumer demand with the goal of maximizing profits. They do this by adjusting their refinery operations to optimize their product slate, which is the mix of refined products produced.

The profitability of refining operations is heavily influenced by the cost of crude oil and the price of refined products. Refiners must continually evaluate the market environment and adjust their operations accordingly.

In summary, crack spreads are a useful tool for assessing the profitability of refining operations. They provide valuable information for refiners as they make decisions about how to allocate their inputs and output to maximize profits.