PEP Review 2016-15

Nitric Acid KBR Weatherly Single-Pressure Process

Dipti Dave, Senior Analyst II

Abstract

Nitric acid consumption in the United States in 2016 was roughly 8.0 million metric tons/year on a 100% nitric acid basis, and was expected to grow at an average annual rate of 2.8% during 2013–18. In this review, we look at the production of 60 wt% concentration nitric acid on a 100% basis by Kellogg Brown & Root (KBR) Weatherly process technology.

Our prior work on nitric acid production was presented in IHS Chemical (formerly SRI Consulting) Process Economics Program (PEP) Review 82-3-3 Concentrated Nitric Acid (Espindesa Technology), published in May 1983.

The focus of this report includes capital and production costs for 658 metric tons/day of 60 wt% concentration nitric acid (100% basis) product. Lastly, an interactive module is included—the iPEP Navigator for nitric acid, which provides a snapshot of the process economics and allows the user to select the units and global region of interest.
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IHS Customer Care:
Americas: +1 800 IHS CARE (+1 800 447 2273); CustomerCare@ihs.com
Europe, Middle East, and Africa: +44 (0) 1344 328 300; Customer.Support@ihs.com
Asia and the Pacific Rim: +604 291 3600; SupportAPAC@ihs.com