Petroleum refining processes are the chemical engineering processes and other facilities used in petroleum refineries (also referred to as oil refineries) to transform crude oil into useful products such as liquefied petroleum gas (LPG), gasoline or petrol, kerosene, jet fuel, diesel oil and fuel oils.. Refineries are very large industrial complexes that involve many different processes.

What is LPG? - LPG Gas Explained at Elgas Blog During petroleum production, storage and transportation, refining and processing, as well as spills and discharges of petroleum hydrocarbons often occur as a result of blowout accidents during oilfield development, leakage from oil pipelines and storage tanks, oil tanker and tanker leakage accidents, oil well waxing, and during overhauls of


Fractional distillation - Wikipedia Fractional distillation is the separation of a mixture into its component parts, or fractions. Chemical compounds are separated by heating them to a temperature at which one or more
fractio in the mixture will vaporize. It uses distillation to fractionate. Generally the component parts have boiling points that differ by less than 25 °C (45 °F) from each other under a

Frontiers | Petroleum Hydrocarbon-Degrading Bacteria for Commercial hydrogen producers and petroleum refineries use steam-methane reforming to separate hydrogen atoms from carbon atoms in methane (CH4). In steam-methane reforming, high-temperature steam (1,300 °F to 1,800 °F) under 3–25 bar pressure (1 bar = 14.5 pounds per square inch) reacts with methane in the presence of a catalyst to produce

Aromatic Hydrocarbons | FSC 432: Petroleum Refining The hydrocarbon chains that constitute petroleum fuel products are a family of hydrocarbons called alkanes, or paraffins, depending on their size. Alkanes are hydrocarbon chains with the chemical formula Cn +H 2n+2. Alkanes are stable but versatile, making them safe for use and storage as a range of fuel products.

Petroleum refining processes - Wikipedia Hydrogen Production and Distribution. Although abundant on earth as an element, hydrogen is almost always found as part of another compound, such as water (H 2 O) or methane (CH 4), and it must be separated into pure hydrogen (H 2) for use in fuel cell electric vehicles. Hydrogen fuel combines with oxygen from the air through a fuel cell, creating electricity and water through an

Alternative Fuels Data Center: Hydrogen Production and Jan 28, 2013 · Coking is a refinery unit operation that upgrades material called bottoms from the atmospheric or vacuum distillation column into higher-value products and, as the name implies, produces petroleum coke—a coal-like material. Exports of petroleum coke accounted for about 19% of the nation’s finished petroleum product exports through October 2012 with most going

5.1 Petroleum Refining - US EPA Jul 21, 2021 · 1. LPG (or LP Gas) is the acronym for Liquefied Petroleum Gas or Liquid Petroleum Gas. 2. LPG products are made up of a group of flammable hydrocarbon gases that are liquefied through pressurisation and commonly used as fuel. 3. LPG comes from natural gas processing and petroleum refining. 4.

Coking is a refinery process that produces 19% of finished Aromatic
hydrocarbons are an important series of hydrocarbons found in almost every petroleum mixture from any part of the world. Aromatics are cyclic but unsaturated hydrocarbons with alternating double bonds (Figure 1.12). The simplest aromatic hydrocarbon is benzene (C₆H₆). The name "aromatic" refers to the fact that such hydrocarbons

Production of hydrogen - U.S. Energy Information The application of management systems to ensure the safety of petroleum refinery processes. Process Safety Performance Indicators. Measurements of the refinery's activities and events that are used to evaluate the performance of process safety systems. and 2. required or recommended for the petroleum refining industry and related industrial