The Chemical Process Industries

All major segments of the CPI use the same types of equipment and services



Every process plant in the CPI starts with raw materials.

Chemical Conversions

Pretreated materials are then run through a reactor - a cracker, digester, fermenter, kiln, smelter, or some other unit- where chemical changes takeplace.

Finished **Products**

Chemical Engineering subscribers produce a myriad of finished products covering major industry segments within the CPI market.

Pretreating **Unit Operations**

The raw materials are pretreated by a variety of unit operations.













HANDLING

Environmental, Health. Safety and Security

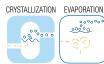
Throughout the process, the CPI must ensure the health and safety of its workers and their surroundings.

The CPI apply diverse equipment and techniques to manage and treat the waste that they generate and to achieve more sustainable processes.

Meanwhile, they also specify a range of safety tools for personnel and processes.

Separation & Purification **Unit Operations**

Whether a semi-finished product or intermediate, the materials need to be separated from other wastes or byproducts and purified.













Software. **Automation** and Control

This technology sustains the entire operation, supporting safety and efficiency:

- Process simulation
- Computer-aided modeling
- Computer-aided design
- Enterprise resource planning
- Supply chain management
- Analyzers
- Instrumentation and controls
- Diagnostics
- Data recording and transmission
- Automation and control systems



Chemical Engineering guarantees the broadest reach for your advertising dollars. In each issue, Chemical Engineering editorial covers a wide range of topics, allowing readers to find in-depth articles that are relevant and valuable to their area of the industry. Topics relate to the full CPI and not just one particular area in the market.

The CPI Market Defined

The CPI includes all industry segments that take raw materials, such as minerals, petroleum or even air

apply chemical, thermal or mechanical processes to them. such as oxidation. polymerization, distillation or filtration

and produce end products, such as plastics, paper, paint, pharmaceuticals, soap. gasoline or fertilizers for commercial or consumer use.

Major Industry Segments

Chemicals & Petrochemicals

- Inorganic Chemicals
- Plastics Materials & Synthetic Resins
- Pharmaceuticals
- Soaps & Detergents
- Paints & Allied Products
- Organic Chemicals
- Fertilizers & Agrichemicals
- Adhesives & Sealants

Petroleum Refining Nonferrous Metals

Stone, Clay, Glass & Ceramics

Pulp & Paper

Food & Beverages

Rubber & Miscellaneous Other Manufacturing