

Procter & Gamble

Procter & Gamble manufactures shampoo, conditioner and body wash products at numerous locations around the world. Differences in engineering philosophies coupled with climate variations created discrepancies in production that made new product rollouts inefficient. The objective of standardizing manufacturing processes was to increase global speed-to-market for new initiatives. This would be accomplished by standardizing the making equipment and controls functionality that affected critical processes.

JNE undertook a series of projects to define and implement the standard making system to be used globally.

Preliminary projects consisted of plant modifications and upgrades required to improve quality and bring identified products to market as quickly as possible, ahead of the full implementation of the new global system. The work included new vessels, pumps, heat exchangers, electrical hardware and electrical controls including new PLCs.

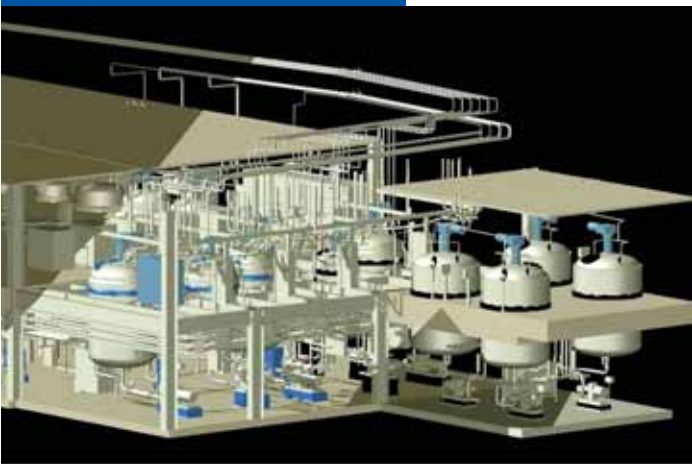
JNE designed this work for nine different plants and provided the following services on schedule and within budget:

- Conceptual design basis
- Equipment purchase specifications
- P&IDs, detailed layouts and piping isometrics
- Power and control design basis
- Appropriation grade cost estimate

JNE provided design and development expertise to define a standards-based control system for the new facilities including:

- Design and implementation of a PLC and PC-based distributed control system
- Incorporation of client standards for advanced batch control systems in system development
- Design and development of a barcode-based system for controlling and tracking manual additions in the making cycle

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Global Standard System cont

In the final stages, JNE provided complete engineering services to design and implement the global system. The main objective was to ensure consistent product quality, efficiency, reliability and rapid new product launch capability across all global manufacturing sites, including provisions for standard best-in-class strategies for material handling, processing equipment, controls, CIP/SIP systems and procedures.

JNE provided a full range of services from front-end engineering (conceptual and definition phases) to detailed process design and construction assistance.

Project Size: Nine Sites

Project Value: \$100M CDN

