



Client Hyland's
Location Los Angeles, CA

New Modular Manufacturing Space Provides Flexible Environment to Produce Homeopathic Medicines

Oral Solid Dosage & Oral Liquids Products Processed More Efficiently in Modern cGMP Space to Meet Demand of High Growth Business

Situation

Today Hyland's continues to be based in the Los Angeles area in a single manufacturing facility. In the last decade they have experienced significant growth as they have expanded both product lines and sales volume. As business has expanded over the last several years, the company found that their growth was repeatedly limited by the space, utility capacity, and layout constraints imposed by their current facility. In addition, equipment in place in many of the key process and packaging operations needed to be replaced with higher capacity equipment that would reduce manual labor and provide the greater throughput their rapidly expanding business required. The company explored other available manufacturing/warehousing space in the Los Angeles area and settled on a newer facility not far from their existing location. It was at this point that they asked FW Biokinetics to provide both an assessment of their current facility against

Background

Hyland's is a Los Angeles-based manufacturer of homeopathic medications that has grown to be one of the largest producers of natural remedies in the US and Canada. With a total catalog of over 100 primary products, Hyland's produces a broad range of tablet, liquid, and powder-based natural medicines for a wide variety of ailments. Hyland's has been in business for over 100 years, originally founded as a small pharmacy in LA. They have since grown to a business with a national distribution across all major pharmacy product and many large retail chains.

projected manufacturing levels and a preliminary design and pricing of a replacement manufacturing facility.

The design included a complete facility architectural design, an assessment of current OSD (oral solid dosage) capacity versus future requirements, the relocation of existing equipment and the purchase of





Client Hyland's
Location Los Angeles, CA

“When we first began the project, Hyland’s had only a very conceptual plan for the manufacturing space with which they were not satisfied. It was prepared by an independent consultant that did not specialize in the life sciences. They were not happy with concept design as it did not address many of the issues they faced in their facility”, stated Walt Schmid, Senior Bioprocess Specialist at Foster Wheeler Biokinetics. “Our design provided them with the solutions they were looking for and alleviated their concerns over clean utilities, equipment capacity, material and personnel flows, and overall operating efficiency. When we finished our design they were very pleased, particularly that we were able to consolidate all of their varied operations, provide higher capacity equipment, improve the flows within the operation, and, using modular design, provide them with a facility that met all their needs for their business going forward.”

new equipment to meet anticipated production. The design of high purity water and other clean and dirty utility systems were included as part of this effort.

Key to the design included fitting the existing operation within the building space Hyland’s had identified as their new manufacturing facility, providing improvements to material and personnel flows, fitting out the facility as a cGMP manufacturing space, and providing specifications for new equipment to improve throughput and quality for their OSD products and powdered products. The building was a high bay warehouse space with electrical power and city water as the only available utilities. In addition, the roof structure was capable of supporting only minimal additional structural loads, requiring that most or all of the manufacturing space walls, ceilings and equipment be floor-supported.

In addition, Hyland’s required that the new facility be fully ready to receive equipment prior to the shutdown of operations at the current facility and the relocation

of equipment to the new facility. The ability to quickly install, commission, and validate the operation to permit them to resume production was a critical requirement of the project.

Results

The new facility chosen by Hyland’s as their new manufacturing space was designed to incorporate the entire production process including formulation/blending, granulation, specialized active ingredient processes, tablet compression, granulation, and filling/packaging as well as finished product storage.

In order to fit out the open, warehouse space in the most cost- and schedule-efficient manner, the use of modular cleanroom space was specified. The use of modular space provided a self-supporting room structure within the high bay warehouse that could be constructed of cGMP materials with the appropriate finishes. This methodology allowed for a quick installation and did not require any type of structural retrofit of the high bay warehouse space.



Client Hyland's
Location Los Angeles, CA

These modular rooms were designed to be load supporting so that many of the supporting utilities and required HVAC/ductwork could be located above and supported by the modular rooms, eliminating the need for support from the building columns or ceiling. The design of this facility provided for new equipment to replace obsolete or undersized equipment in use at the existing facility. All process and filling packaging lines in the existing facility were reviewed against the planned production requirements and product forms as well as planned increases in staffing for additional production shifts. In this analysis, equipment that proved to be undersized or incapable of meeting future requirements was recommended for replacement and new equipment specified. Flows of materials, waste, and personnel were designed to segregate powder based processes, tableting, drying, oral liquid formulation, and filling/packaging while providing efficient access to product raw material and packaging material storage.

The new facility was outfitted with critical and non-critical utilities including RO/DI USP water, clean compressed air, CIP skids, and plant/clean steam generation with a separate utility area created within the facility. Separate laboratory space for in-process quality control, incoming material inspection, and final product analysis was provided. A separate vault for flammable solvent storage was designed for construction adjoining the manufacturing space; space on the rear side of the facility. The modular manufacturing spaces coupled with the architectural design of this facility provided Hyland's with a flexible manufacturing environment that is easy to

maintain, operate, and clean. Higher speed, flexible equipment permits them to process, tablet, and fill/package a broader range of oral solid dose and oral liquid products more efficiently with less labor in a modern, cGMP setting. The overall design of this facility provides Hyland's with a manufacturing center from which they have the ability to provide higher levels of production as demanded by their high-growth business while meeting their own stringent quality expectations as well as the increasing requirements of regulatory agencies on the natural homeopathic remedy industry.

Contact Information

Email: info@fwbiok.com

Website: www.fwbiok.com

Philadelphia, PA: (215) 656 2500

Emeryville, CA: (510) 594 3000
