

## PROJECT PROFILE

**Owner:**

Aradigm

**Project Name:**

Commercial Production Facility



**Project Location:**

Hayward, CA

**Technical Summary:**

Aradigm needed to design and build a clinical to commercial manufacturing facility for the Aseptic manufacturing of liquid inhaled insulin. This unique process required an equipment intensive process operating in a batch operation. The automation system would need to provide recipe management and facilitate large amounts of data collection for high volume batches. The system would also require integration with multiple vendor furnished equipment sets and a unique filling machine designed and built by a Aradigm contracted 3<sup>rd</sup> party. The filler/packager was an integral part of the process. The control system and HMI's is distributed throughout the manufacturing for ease of operator use and maintenance servicing.

**Scope Responsibility:**

Bay-Tec completed system design, S88 Batch programming, installation, and start up of a new Allen Bradley Control Logix PLC/ iFix Intellution system with nine display, control, or programming nodes. This system controlled compounding, product staging, WFI storage and distribution, Formulation, CIP, and SIP. Custom Visual Basic programming was completed to integrate ten vendor skids. Bay-Tec's scope of supply included: System Design and Configuration, Ethernet Network setup, Panel Design, Panel Fabrication, Instrument procurement, Instrument Installation, Control Conduit, Loop Checks, and system commissioning.