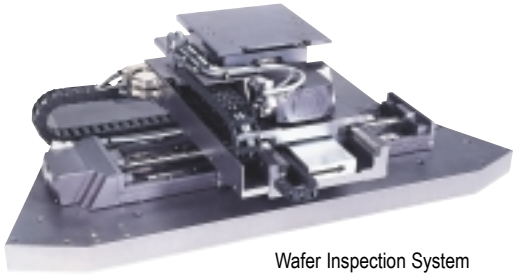
Engineered Solutions

- Clean Room
- Vacuum Rating
- Sub Micron Precision
- Short Move & Settle Time
- High Natural Frequency
- High Band Width
- Linear Motor Drives

Resources & Capabilities

A Commitment for Excellence

Bayside's Engineered Solution Group is a uniquely qualified team of application, design and manufacturing engineers committed to provide its valued customers, innovative, reliable and cost effective positioning system solutions for their manufacturing processes.



Wafer Inspection System

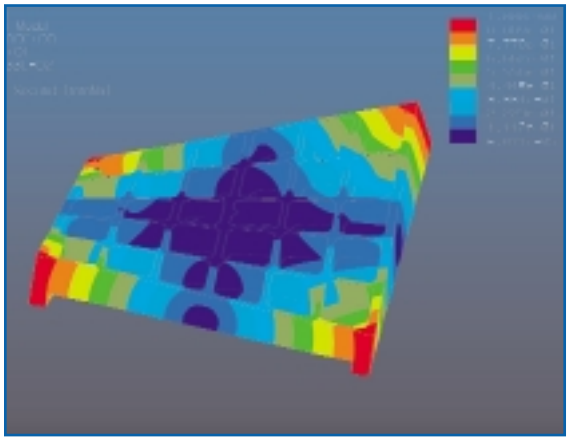
Ideal Infrastructure

Bayside's Engineered Solution team is supported by an effective, broad base corporate infrastructure. From one location Bayside designs and manufactures a wide range of motion control products, including, positioning slides and stages, rails, gearheads, motors, amplifiers and controllers. These products provide an ideal infrastructure for cost effective engineered solutions, since they all can be modified, as may be needed, and integrated at relatively ease into a single robust system.

Electronic Chassis

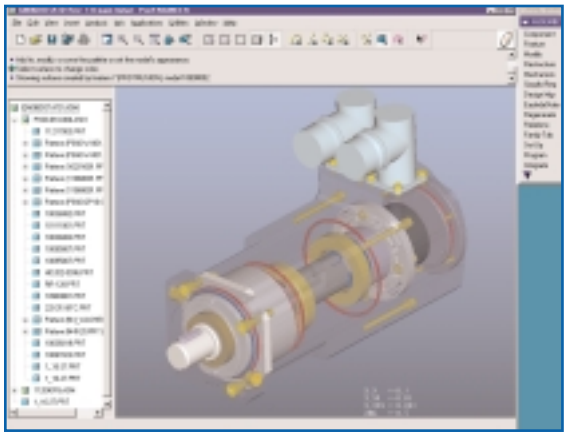
Professional Capabilities

Bayside's Systems Solution Group strives to become your dependable motion control positioning solution provider, and play a strategic role in achieving your new system development objectives. We follow your needs from the very early stages of conceptual ideas, through



"FEA" Simulation

a rigorous definition of system requirements, which in many cases we assist in developing. As partners, we may conduct various feasibility testing for verification of new ideas to meet challenging environmental conditions such as high vacuum, low magnetic field, tight space, high temperature and ground vibrations. These testing are done to assist us in providing you with our best possible recommended solution.



Pro / ENGINEER CAD Platform

Strategic Partnership

Bayside's Engineered Solution Group objective therefore is to turn mutual ideas related to your automated manufacturing processes and our motion control positioning technology expertise into a cost effective solutions for your needs. Bayside is looking forward to establish a long term strategic relationship with your project development team.

Bayside's Six Step Project Process

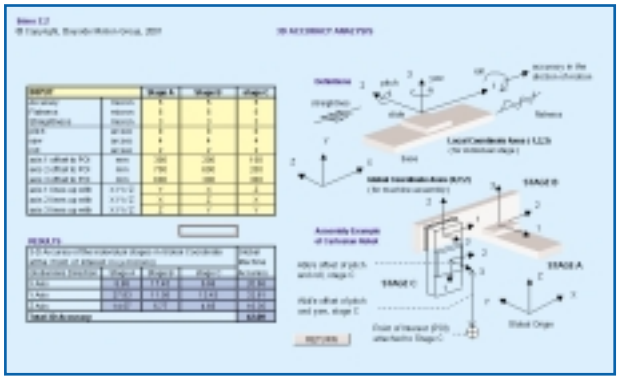
❶ Understanding the Need

Whether your project is related to building semiconductor wafer processing machines or high precision general manufacturing equipment, Bayside's first objective is to understand your engineering needs.

Our Industry Specialists review your positioning specifications for completeness, clarity, consistency and feasibility; as well as the value that each required specification has towards the desired manufacturing process.

❷ System Analysis

Once an engineered system and its requirements have been reviewed and defined, Bayside's engineering team uses a proprietary software (BIMO) to gain a better qualitative understanding of the proposed system value as well as a quantitative understanding of optimal component sizing.



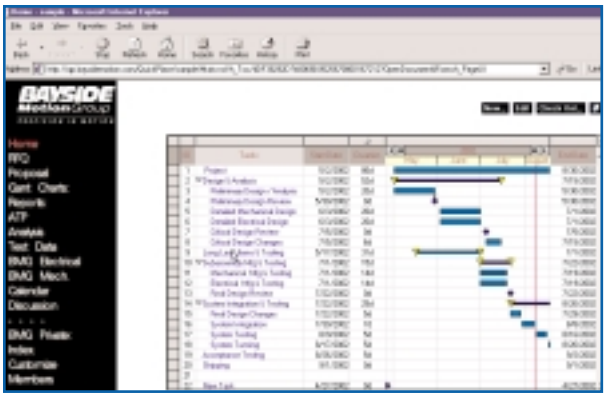
BIMO Analysis Tool

❸ Solution Proposal

Equipped with an in-depth understanding of the need and a proposed solution, our system application engineers prepare a detailed document which highlights the requirements, cost effectiveness of various solution options, recommended configuration, selected components, price quotation, and delivery schedule.

❹ Project Management

Each engineered system is assigned and led by a Project Manager who is responsible for ensuring that the projects process is begun and completed in a smooth, orderly and precise manner. To ensure accurate, up-to-date communication, the Project Manager utilizes a secured, web-based communication tool (QuickPlace) to keep all involved parties apprised of the project progress and details. The detail kept in the quickplace includes: Project Members, RFQ, Proposal, ATP, Gantt Charts, Tasks, Reports, System Analysis, Test results, Electrical Engineering, Mechanical Engineering and Discussion History.



View of QuickPlace

❺ Acceptance Test

The Acceptance Test Procedure (ATP) is a mutually agreed upon document, which outlines the procedures, tools and methods used to verify that all project performances meet desired specifications. The acceptance test procedure is prepared well in advance to allow for the customer representatives to review it prior to their presence in this stage of the project.

❻ After Sales Support

When the engineered system has been accepted by the customer, a Bayside engineer is assigned to follow up the delivery at the customer's site. The engineer inspects the machine and powers it up, training is also provided to the customer on site to assure proper readiness to start operation and maintain the machine.

Throughout the life cycle of the machine, Bayside continuously monitors the status of the project and provides quick support when needed.

Acceptance Testing