



**adaptive**<sup>sm</sup>

*Applied Science. Advanced Control.*

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- SYSTEMS INTEGRATION
  - PROCESS CONSULTING
  - ADVANCED CONTROLS



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## THE CONTROL PYRAMID

Building Complete Process Automation and Control Solutions

Adaptive provides a range of solutions and a unique combination of technology and expertise for managing processes. More than systems integrators or software engineers, we provide the consulting and design services to minimize process variability and yield better quality and less power usage or waste.

Adaptive provides a four-tier system for complete process control design and integration.

1. Field Instrument Selection and Validation
2. Systems Integration
3. Advanced Controls loops in the PLC
4. QuickStudy Model-based Predictive Controls

We navigate every step of the way with you, providing the expertise, advice and technical support you need.

## ADAPTIVE: COMPLETE PROCESS AUTOMATION AND CONTROL

### SYSTEMS INTEGRATION

Advanced Designs Lead to Simplified Operations

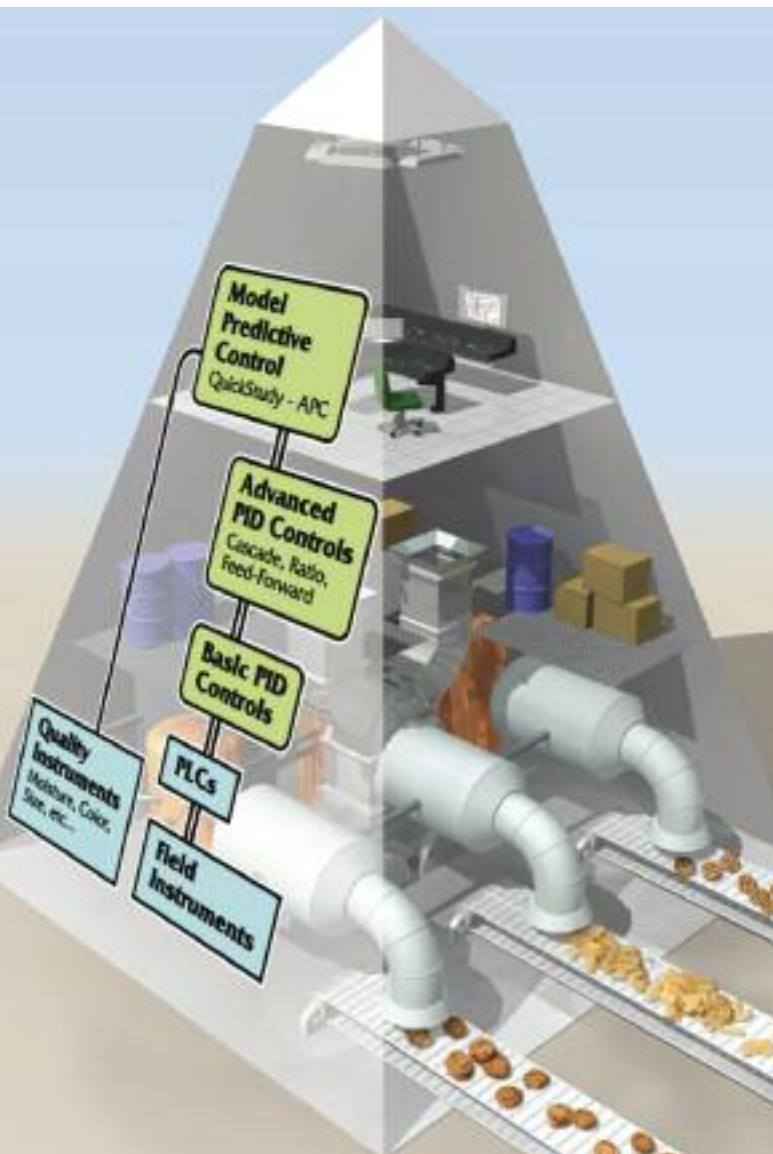


Systems integration isn't just about the technology. It's about understanding the process and applying the principles of physics, chemistry, metallurgy and engineering to that process. Adaptive is unique because we have the domain knowledge of the processes used in the industries we serve.

We understand the fundamental processes of these industries because we've developed the modeling tools and technology to gain insight into the base issues of each process. That means we have the data, and more importantly the experience to understand the data, and apply it to develop better control strategies.

With our domain experience, our software tools, and custom built panels, we are more than integrators. We are a partner in advancing the process to obtain minimum variance and maximum results.

ADAPTIVE RESOURCES IS THE PROVIDER OF CHOICE FOR CONTROLS, CONSULTING AND DESIGN.



## PROCESS CONTROLS CONSULTING

Expert Knowledge Applied to Difficult Problems



Adaptive's Process Consulting service to the Manufacturing Industry is unique. While most Process Consultants focus on Business Processes or 6-sigma or similar techniques that approach process design from a statistical perspective, Adaptive approaches Process Design from a controls perspective. We focus on:

*How can the process and instrumentation be designed to yield better control of the key process parameters?*

The answer leads to better process design, better selection of instrumentation for the process and ultimately better control strategies. The result is the variability in the Key Process parameters can be greatly reduced. Once process variability is reduced, better quality, reduced waste, higher efficiency, lower energy usage, and higher productivity can be achieved.

Process Consulting and Design services include:

- High level process design evaluation
- Total Process Material Balance
- Instrumentation and Controls selection
- Control Strategy development
- Process Simulation
- Process Feasibility Study
- Yield Improvement Study
- Alternative Energy Study
- Energy and Utilities Recycling strategies

## ADVANCED CONTROLS: QUICKSTUDY™

Powerful but Accessible Multi-Variate Controls



QuickStudy APC is Adaptive's proprietary Windows-based Control Software that is simple to implement and easy to support. QuickStudy creates process models quickly and accurately by studying your existing process as it operates. It doesn't need costly step tests, long set-up times or high-level expertise. The result is improvements in productivity, efficiency and quality.

**QuickStudy™ Advantages:**

- Reduces process variability, improving product quality and consistency
- Minimizes transition times for product change-overs and line start-ups
- Allows lines to be run at higher rates, increasing throughput
- Tighter control of process decreases raw materials and energy used
- Increase product quality on existing equipment, increasing profits and reducing capital expenditures
- Improve plant safety as process variability is reduced resulting in fewer alarm trips, equipment adjustments and shut-downs

*Ask us about past projects and case studies.*



[www.adaptiveresources.com](http://www.adaptiveresources.com)



## APPLIED SCIENCE. ADVANCED CONTROL.

Since 1992, Adaptive Resources has applied scientific principle to advance process control. From their QuickStudy™ suite of advanced control technology solutions to process consulting and systems integration, Adaptive has always focused on delivering the information and tools needed to manage the most complex manufacturing processes.

Advanced Process Control Software, Consulting and Integration for:

- Food
- Power
- Metals
- Manufacturing

*For more information or a demonstration, visit [www.AdaptiveResources.com](http://www.AdaptiveResources.com) or contact one of our regional offices.*

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