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**WHAT WILL HAPPEN TO NPD IN YOUR COMPANY DURING THIS ECONOMIC TURNDOWN?**

**By Mary Drotar, Partner - Strategy 2 Market, Inc.**

In pursuit of cost savings, three major Chicagoland Fortune 500 companies have recently disbanded their innovation/new product development (NPD) groups. On a national level, companies are hunkering down to wait out the economic downturn, eliminating expenditures perceived as less than immediate contributors towards revenue generation. Unfortunately, because the impacts on revenue typically lag behind most NPD efforts, the abandonment of those NPD investments, even on a temporary basis, is often premature.

**Is this wise?**

Cutting out the NPD function is short-sighted and will have long-term impacts for your company. In the short term, it communicates to your workforce and the business community that innovation is not important. In the longer term, the impacts of ceasing NPD activities are more serious. These include the substantial costs and effort associated with re-implementing an innovation system. As a case in point, it took Whirlpool seven years to fully implement their innovation program, from start-up to value extraction. As and when economic conditions turn around, companies must face the challenge of quickly rehiring an equivalent group of talented and trained individuals. Of even greater concern though, is the challenge of reinstating the culture of innovation that has been lost.

*Continued on page 4*

## Upcoming Events



**PMI Global Congress  
North America**  
October 10-13, 2009

**PMI Global Congress  
Asia Pacific**  
February 2010

*Whatever we do must be in accord with human nature. We cannot drive people; we must direct their development... the general policy of the past has been to drive; but the era of force must give way to the era of knowledge, and the policy of the future will be to teach and lead, to the advantage of all concerned.*

*- Henry L. Gantt*

## LETTER FROM THE CHAIR

By Greg Githens, PMP - NPD SIG Chair

### Vision 2010

In 2010, the NPD SIG will be operating with a new structure that will be consistent with PMI's Virtual Community concept. We will still be a community of people interested in innovation and product development. What will change is that we will have more opportunities for networking and knowledge sharing at our disposal. You elected officers are working with me to make this transition.

As we move into the transition, it seems helpful to identify NPD and PM 'thought leaders.' I would like to get a short email from you. What does it mean to be a thought leader? Perhaps you have written an NPD book or article, spoken on a NPD topic in a public forum, or worked in an NPD-specific area for a period of time.

This issue of *PM Innovations* continues the NPD SIG's offering of value to our members. We have recently resumed webinars. All of these accomplishments are due to the efforts of our volunteer leadership. Thank you to everyone.

Greg Githens  
NPD SIG Chair  
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### We're Looking for Contributors to the NPD SIG Newsletter!

We're looking for individuals to contribute articles or news items to the NPD SIG newsletter **Project Management Innovations**:

- Write an article telling us about your experiences with NPD projects (PMPs can earn PDUs for articles they have written).
- Contribute an interesting article or news item that you have found.
- Share your knowledge and experiences with others by providing useful tips.
- Direct us to informative PM and NPD-related web sites.

If you would like to provide content for the September 2009 issue, please send an email by August 15, 2009 to Tathagat Varma, VC Communications, tathagat.varma@gmail.com.

## NPD SIG Now a LinkedIn Group!



The NPD SIG has created a LinkedIn Group. This is a new member benefit we are providing to increase networking and sharing of best practices. You need to be a current member of PMI in good standing to be accepted into the group.

**Current discussions taking place include the following:**

1. What is unique about New Product Development (NPD) project management?
2. NPD Tracking Metrics ... How to tie NPD team output to the bottom line?
3. Upper management and NPD
4. The Innovator's Toolbox from the Aberdeen Group (White Paper url link)
5. Good books on new product development

**Come join the conversation and be engaged!**

**To be a participating member of this group go to LinkedIn, search on Groups and type in PMI New Product Development.**

Please feel free to share any comments, questions, concerns you have about the Group or other topics to the following email address: [kajohnson@johnstech.com](mailto:kajohnson@johnstech.com).



### Committing to projects without proper resource planning is like building a House of Cards

Portfolio DecisionWare offers practical software solutions for actively managing skilled resource assignments to project work



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

## What Will Happen to NPD *CONTINUED FROM PAGE 1*

Everyone knows cost-cutting is necessary in this environment, but the question is how and where do you cut the costs associated with innovation and NPD, without losing what you have worked so hard to establish? To help you protect your company's long term NPD goals, we suggest the following three step NPD-proofing plan:

### 3 Steps to NPD-Proofing

Firstly, revisit your new product development strategy. Start by re-evaluating the competition, current market forces, and customer needs. If there have been changes, then determine if and how they will affect your strategic intent. You must also ensure that your product and investment commitments properly align with your strategic intent.

During this strategic evaluation be sure to understand where the money is coming from. Concentrate on products that respond to market needs that command a higher price—particularly your unique and innovative products. Ask yourself: Where have I had success in the past? What do my customers value, and what are they willing to pay for? Your chances of market success increase greatly when you focus your efforts on developing products that meet an important need—one that the customer recognizes and is eager to pay for.

Secondly, ensure that you know where the money is going. Eliminate waste within your innovation/NPD department, and use the many lean tools available that can drive efficiencies (think of freeze-gates, and 15-minute stand-up meetings). You should also evaluate your existing NPD process to determine where you can save expenses, including any efficiencies that reduce your time-to-market.

Thirdly, understand the risks attached to your innovation efforts. When you take on a new market or technology, you're adding risk to your project. Specific sources of risk could include: inadequate market acceptance of your new product; problems with technology; or the release of inferior products that results from inexperience. So, when you ask yourself whether you can afford to take on high risk projects at this time, don't leave it to chance. Take the time to understand the risks and resources needed to execute a new project.

By committing to the above three steps, you should find yourself better placed to re-evaluate and streamline your NPD function, while still providing value and maintaining the hard-won capabilities that you've built up over time.

#### About the Author

Mary Drotar, Partner and Co-founder of Strategy 2 Market, [strategy2market.com](http://strategy2market.com) is a strategic new product development professional with extensive industry and consulting experience in building sustainable new product development systems including; strategy, portfolio management, process, organizational structure and teams. She is also a co-founder of NPD Recruiting, a firm that specializes in recruiting NPD professionals; [npdrecruiting.com](http://npdrecruiting.com).

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# DEVELOPING A NEW EDUCATIONAL PRODUCT: PROJECT MANAGEMENT LESSONS IN HIGHER EDUCATION

By Diana F. Bartlett, PMP, Director of Corporate Partnerships - Keck Graduate Institute of Applied Life Sciences

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## Introduction

Intellectually, academic leaders grasp the basic tools of project management. In practice, implementation of these tools can be challenging. For example, project scope definition may more closely resemble organizational mission definition. Academic institutions typically work on very long lead times, and carry their own perspectives about budget management. Tracking expectations also differ from those in the corporate world.

New products and services are as important to an academic institution as they are to any organization, however. Project management – modified as necessary for the educational environment – is critical for supporting new product development (NPD).

This article will describe a current NPD effort to launch corporate education at a graduate institution. The project management lessons learned from this experience can be useful for anyone working in higher education or in any not-for-profit environment. Further, these insights and observations also can help inform the overall NPD/PM community of opportunities to more effectively collaborate with not-for-profit entities such as colleges and universities.

## Situation

Keck Graduate Institute of Applied Life Sciences (KGI), a member of the Claremont Colleges Consortium in California, educates graduate students for leadership roles in the life science sector. This industry (as opposed to strictly academic) end point is distinctive and infuses KGI with a positive, proactive attitude toward pharmaceutical, medical device, biotech, diagnostic, research tools, and agricultural/industrial bio companies.

In an effort to enhance its relationships with the life science industry – and to establish a new revenue stream – KGI elected to develop a line of classes targeting the working professional. These classes address topics that (a) frequently require updates (e.g., FDA regulations), (b) are often just ‘picked up on the job’ (such as business basics for scientists), and (c) are otherwise career-enhancing (e.g., leadership and decision-making).

Most of the classes last one day and cost \$500/registrant.

As are many project leaders, I was tasked with developing the project scope and supporting launch plan. Performing these activities provided an opportunity to modify many of the tools in the NPD project manager’s toolkit.

## Scope definition

In many companies, development of a new product – or even a new product family – is not an undertaking requiring board approval. But many educational and not-for-profit organizations tend to be cautious and seek board review of any new effort.

For our corporate education launch, drafting a scope document for board eyes and ears necessitated adoption of a broad perspective. The corporate education program scope needed to address not only typical new product development components (for example, timing, product breadth, and target audience), but also all the things in which boards might be expected to be interested - including fund-raising, admissions, alumni, faculty, and relationships with other institutes of higher learning.

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## DEVELOPING A NEW EDUCATIONAL PRODUCT *CONTINUED*

Some might regard this wide scope as being too broad to be implemented. And there is truth in this.

However, there are positive aspects to an expansive scope definition. For one thing, it forces consideration of resources that might otherwise have been overlooked. Fund raising, for example, may appear to be an extraneous element in a fee-based educational product. But the fundraising department's network and relationships can be invaluable in building awareness for the new initiative.

Another benefit of organization-encompassing scope is that it helps ensure attention from the more broadly defined community.

What are some of the takeaways about scope definition for those collaborating on projects with an academic institution?

- Recognize that the scope definition is as much an organizational document as a project team document.
- Anticipate that seemingly 'out of scope' elements (such as alumni involvement) will appear and that they should be understood and managed.
- Keep in mind that the scope definition within many not-for-profit settings is more a 'contract of blessing' than a definition of what the project will accomplish and how.
- Accept that the scope document may not be referenced as frequently – if at all – as in a traditional project.

- For specific purposes of new product work within a not-for-profit setting, incorporate the scope document into a traditional business plan. With the boundaries of pricing, product, target audience, and communications, the scope can be translated into a set of project team priorities and 'rules for the road'. This is what we did for the corporate education program at KGI. Parts of the scope statement went into the situation assessment and other parts became project objectives.

### **Schedule**

Academic institutions tend to adopt long time horizons. Fundraising campaigns can last for years, for example, generating a cascade of future decisions dependent on campaign results. Faculty may work on grant proposals for months, wait many more months before hearing a decision, and then wait even more months before dollars appear.

On a more tactical level, the basic unit of time is a semester. Think of it as a closed-end block of time. Many in higher education require a longer preparation ramp to begin consideration of a proposal, decision, or change. Once the semester begins, new decisions tend to be deferred until semester end. This large block of time must be taken all of a piece, closing out the chance to shave weeks or days off a schedule.

What's more, from an elapsed time perspective, a semester may more realistically be conceptualized as 'a month'. That is, elapsed time in months must typically be translated into semesters, such that a four month project may be perceived as a four semester project.

On some campuses, the entire academic year (September-May) can equate to an elapsed 'month'.

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## DEVELOPING A NEW EDUCATIONAL PRODUCT *CONTINUED*

Summer is a time period all its own. Sometimes work happens more quickly in the summer; sometimes, more slowly. Many resources are simply unavailable during June, July, and August.

This is not to imply that academic leaders do not appreciate the need for results within a reasonable time frame. As indicated in the introduction to this article, they intellectually understand the need for urgency, but have only limited time-driven operational frameworks.

What are the takeaways about timelines for those collaborating with academic institutions?

- Whenever possible, formulate the schedule into semester-long chunks. Thus, each term is a complete cycle with deliverables and critical path. As required, assemble semesters into longer-term timelines.
- Unless the project is critical to the institution's own goals, try to incorporate external resources as much as possible in order to meet deadlines. Our school was committed and supportive of corporate education; but corporate education was not critical to KGI's mission of superior graduate education. Because of this we elected to launch corporate education using outside resources (industry practitioners as instructors). With a longer lead time to product growth phase, we will be able to incorporate KGI faculty as educators.

### **Budget**

In this challenging economy, both not-for-profit and profit-making entities are financially stressed. However, not-for-profit organizations have far less experience in the specific context of new product development – and hence allocate far fewer dollars to this work.

Counterbalancing this is that institutions of higher education place relatively lighter emphasis on surplus (profit). Thus, a project can be regarded as very successful if it merely breaks even.

While this can appear to be straightforward, the lack of financial incentive can generate unanticipated viewpoints. Cost control may be regarded as the purview of the Business Office, and not a responsibility of individual cost centers. Given that most educational entities rely heavily on endowments for finances, there can be the expectation that fund raising will take care of shortfalls.

What are the key budgetary takeaways for those collaborating with not-for-profits?

- Be explicit about the financial arrangement and document it. Costs are costs, whether in a profit making or tax deferred organization.
- Recognize that if a surplus/profit is anticipated, this has to be clearly mandated and agreed-upon by all decision makers.
- To the extent possible, develop budgets congruent with the academic time line. Funds that flow between periods, or that are left at the end of an academic year may be re-directed to for other purposes.

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# DEVELOPING A NEW EDUCATIONAL PRODUCT *CONTINUED*

## Tracking

Institutions of higher learning have experience tracking aspects of their operations. But individual project tracking can be novel at some schools.

Thus, it is important to educate the educators about tracking tools!

I have found that a simple Gantt-type chart is helpful for reporting progress on a monthly basis – as long as the elements tracked have been justified and discussed with decision-makers in advance.

## Key takeaways?

Keep tracking simple.

- Explain what will happen if tracking indicates a problem – for example, if our corporate education launch fell behind schedule on instructor recruitment, we would stop the development of any new class ideas and focus our resources on identifying and securing teachers.
- Be consistent. If you expect monthly reports, always expect monthly reports.

## Conclusion

There are subtle and not-so-subtle differences between project management in for profit and not-for-profit environments. It is important to recognize these and to incorporate modifications into the overall project plan.

One of the best ways to highlight some of the key differences is to walk through project management tools and to ask academic colleagues to comment on them and how they might work in the higher education environment. Not only is this a worthwhile communications exercise, it can minimize headaches later.

## About the Author

Diana F. Bartlett is Director of Corporate Partnerships for Keck Graduate Institute of Applied Life Sciences, and is responsible for identifying and implementing productive collaborations with health care, pharmaceutical, medical device, biotech, and diagnostic companies. Prior to joining KGI in 2004, Ms. Bartlett was President of Sorelli B Inc., a health care consultancy that developed patient, provider, and payor training and education programs. As Director of Marketing and Customer Service for JCAHO and also as Director of Marketing for First Health PPO, Ms. Bartlett worked extensively with managed market customers. Prior to that, she served in product management, marketing, and sales leadership posts for Johnson & Johnson and GE. Ms. Bartlett has an MBA in marketing from the University of Chicago, and a BA in journalism from the University of Iowa. Co-author of *Structuring Provider Networks for the New Health Care Consumer* (McGraw-Hill), she was the creator of an early online consumer health care initiative, the Boomer Consumer Healthcare Attitudes & Usage Quarterly Tracker. Additionally, Ms. Bartlett has contributed dozens of articles to professional journals. She is a certified Project Management Professional.

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**Boston, Massachusetts, April 23, 2009** - New Standish Group report shows more project failing and less successful projects.

The Standish Group's just-released report, "CHAOS Summary 2009," "This year's results show a marked decrease in project success rates, with 32% of all projects succeeding which are delivered on time, on budget, with required features and functions" says Jim Johnson, chairman of The Standish Group, "44% were challenged which are late, over budget, and/or with less than the required features and functions and 24% failed which are cancelled prior to completion or delivered and never used."

"These numbers represent a downtick in the success rates from the previous study, as well as a significant increase in the number of failures", says Jim Crear, Standish Group CIO, "They are low point in the last five study periods. This year's results represent the highest failure rate in over a decade"

([http://www.standishgroup.com/newsroom/chaos\\_2009.php](http://www.standishgroup.com/newsroom/chaos_2009.php))

# PROJECT MANAGEMENT OF CARBON FIBER OXIDATION OVENS

By John Kelly

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## Introduction

The project focused on is a Custom Carbon Fiber Pilot Line Oxidation Oven used in the Oxidation Process of Carbon Fiber Pre-Production Process Development. The oven stated is a unique design specified through collaboration with the customer and the Oven Manufacturers Design Team. The final design is developed through using a baseline (standard) product and applying customization to accommodate the customer's performance criteria. The top challenges of the project are shortened schedule durations and cost adherence while maintaining scope creep due to customer requests throughout the build process. The project is studied by comparing to other capital equipment projects internal and external to the oven provider.

## Despatch Industries Overview

Despatch Industries builds standard and custom industrial heating solutions with focus in renewable energy markets. Despatch has three business segments (Carbon Fiber, Photovitalics, and Thermal) where it separates itself from the competition as a business that has over one hundred years of experience which offers the highest quality and technically advanced thermal solutions along with a full service support (Project Management, Field Service Technicians, and Innovation Center for process development of customer needs).

## Project Management Overview for Carbon Fiber Oxidation Ovens

A Carbon Fiber Production Line contains a small but critical number of processes that require heavy capital investment. A typical carbon fiber product line will require an approximate \$70M to \$100M investment for processing equipment, facilities, and ancillary equipment (utilities, generators, pumps, etc...).

Additional capital investment is needed if Pre-Carbon Fiber Processes and Post-Carbon Fiber Processes are implemented. Pre-Carbon Fiber Processes refers to the production of the raw material (Precursor) which is the base material that is heated and treated during the Carbon Fiber Production Process. Post-Carbon Fiber Processes refers to the processes applied to convert the carbon fiber thread (TOW) into the useable material (TOW refers to the quantity of Carbon Fiber Threads bundled together— Example: a 50K TOW would have fifty thousand Carbon Fibers bundled together). Despatch provides the full Carbon Fiber Production Line, with Carbon Fiber Oxidation Ovens and Surface Treatment/Sizing/Drying provided as Despatch OEM Equipment (Oxidation and Surface Treatment/Sizing/Drying are two of the processes contained in a Carbon Fiber Production Line).

Project Managing Despatch Industries Carbon Fiber Oxidation Ovens consist of a few key parameters (Customer, Design, Materials, Subcontracts, Manufacturing, Factory Test, Shipment, Install, Customer Site Testing and Acceptance). A standard lead-time for an Oxidation Oven is 6-9 months from the point of PO receipt, but customers often request shorter lead-times making schedule a high priority. Maintaining planned cost budget is critical to any business and Despatch is no exception. The combination of reduced schedule duration while maintaining a planned competitive margin is the main success driver in Project Managing a Despatch Oxidation Oven.

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# PM OF CARBON FIBER OXIDATION OVENS *CONTINUED*

## Project Lifecycle

The project lifecycle is ~12 months from initial concept discussions to acceptance of equipment. The critical milestones are Contract Negotiation, PO Receipt, Project Kickoff, Design Eng Start, Design Eng Completion, Long-Lead Procurement Start and Receipt, Build Start, Test Start, Ship Unit. The key decision point is the initial request for quote acceptance upon which the concept is agreed to bid. How changes are handled is dependent on the lifecycle stage. Changes during the concept stage are reviewed for cost ramifications to the proposal and incorporated if the customer agrees to move forward. Changes during and after the design phase are handled by cost proposals to the customers and if accepted, project cost and schedule baseline is modified. The unique aspect of the project is a balance between customer satisfaction and project cost containment. To achieve the balance, scope changes are weighed for impact to the project vs. receiving future projects by obtaining strong customer satisfaction.

## Customers

Despatch Oxidation Oven Customers are both domestic and global. Each region has general characteristics that require a broad understanding of the regions culture, negotiating techniques, expectations, and available equipment that is competing with Despatch. The Despatch Project Manager needs to have a general understanding of the region, but the key to managing all customers is prompt and concise response to all customer questions and requests while preventing scope creep. Preventing scope creep is approached by explaining options and cost impacts to out of scope equipment enhancements and services. Keeping the customer informed of project status assists to maintain customer confidence and reduces customer questions throughout the process.

## Design Process

Despatch has an Engineering Staff with extensive experience in Thermal Applications. The Despatch Oxidation Oven Design has patented airflow technology that is applied to each Customer Oxidation Oven with modifications for oven capacity needs and standard or customer process options. Due to the base technology existing, the oven design performance is not a high priority from a project management standpoint. The primary Project management focus during design is time and sequence of release. To insure a successful Oxidation Oven delivery, the project manager must expedite planning and communication by creating a Project Schedule and holding a project kickoff meeting with two weeks of receiving the PO. If these tasks are not performed within two weeks, the likelihood of the achieving the needed delivery without cost overruns is low.

At Despatch, the Project Manager is responsible for Managing the Design Release which includes the Data Entry into the ERP System. To reduce schedule duration, the design is released as Sub-Assemblies matching the sequence of build. During this process, the Project Manager manages the design team for needed releases to match the schedule need and is hands on with the ERP Data Entry. Project management attention to detail during this phase of the project is critical for success due to the criticality of releasing and ordering the correct components and assemblies.

The primary project management constraints during this phase is working with a recent implementation of a Design Software that forces manual withdrawal of released print sets and manual linking of material groups to ERP System. Opportunities for improvement are noted and tracked for future improvements to the process to further reduce cost and schedule. Documenting, tracking, implementing a continuous improvement plan is critical to stay competitive with the continuing demand for shortened equipment shipment lead-times.

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# PM OF CARBON FIBER OXIDATION OVENS *CONTINUED*

## Materials and Subcontracts

The majority of processes involved with the build of a Despatch Oxidation Oven are metal fabrication, welding, and assembly. Despatch has in-house manufacturing capabilities, along with a network of approved vendors that are capable of producing all of Despatch's internal processes, along with capital intensive processes that Despatch chooses to not perform in-house to reduce overhead and expenses.

During the project planning phase, the project manager works with the internal manufacturing team and the subcontracts management team to establish the sequence of build and what sub-assemblies will be contained as internal build and what will be outsourced. Due to the strong expertise in both the Manufacturing and Subcontracts Groups, a true Make/Buy Analysis is not needed. Instead the Make/Buy decisions are made real-time with no formal analysis. The informal process provides time savings and rough cost impacts which are immediately estimated.

Project management success during this phase is dependent on providing Design Release information to Materials Procurement and Subcontracts in a timely manner to meet the build schedule. During this phase, daily status meetings are needed with Design Engineering, Manufacturing, Materials Procurement, and Subcontracts Management. The focus of the daily meetings are to confirm the latest schedule for design releases, Subcontracts quoting, Subcontracts PO establishment, and Subcontracted Assembly estimated receipt dates. Any changes to the schedule materials delivery are discussed with manufacturing to evaluate impacts to the schedule. If the impacts cause the equipment ship date to occur, mitigations are evaluated and implemented to bring the delivery date back to baseline.

## Manufacturing Process

The Despatch Oxidation Oven Manufacturing Process start is dependent on the make/buy outcome, but in most cases in-house manufacturing starts with the receipt of the initial Subcontracted Materials Kit. A subcontracted materials kit typically consists of sheet metal and piping which is cut to needed size and length. Despatch utilizes the kits to start forming processes which changes the cut material to the needed shape to meet the designed component requirements. The following processes are welding and sub-assembly of the formed components to meet sub-assembly design requirements. The final build step is the assembly of the Sub-Assemblies and Final Assembly Commodity components into the final testable/shippable unit.

The primary factor to project success during the manufacturing phase is material flow. Due to the Oxidation Oven build process being labor driven process (vs equipment driven process), additional labor can be applied to the build process to reduce the build cycle. The labor applied needs to be planned in advance of the initial kit receipt, so keeping the material pipeline fed once the initial kit is received is critical from both a schedule and cost standpoint. If the material is not fed into manufacturing on or before the date needed, all planned labor stops being productive and cost overruns will be incurred.

During the manufacturing phase the project manager must maintain daily meetings to keep communication flowing along with statusing and mitigating all issues that impact material receipt. Preventing build stoppage must be the highest priority which is communicated to all stakeholders involved.

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# PM OF CARBON FIBER OXIDATION OVENS *CONTINUED*

## Testing Process

Prior to shipment, all Despatch Oxidation Ovens are tested to a Standard Testing Procedure, along with additional specific application testing agreed to by the customer. During this phase the customer can chose to be physically present or agree to accept the testing results to allow the unit to ship.

Testing typically consists of airflow and temperature repeatability, along with power up and control functionality verification. The process typically takes two to four days, excluding time for Engineering Changes. Due to each Oxidation being a custom application, it is nearly impossible to avoid Engineering Changes, although Despatch Engineering runs design simulations to provide a design that is near acceptable functionality without change. Adding for minimal Engineering Changes increases the standard test time to approximately two weeks.

The primary Project Management success driver during this phase is to hands-on manage the testing process and expedite changes to reduce testing completion time. If the customer chooses to attend the Testing Phase, strong planning and communication with the customer is also critical to coordinate the visit to occur at the final stages of testing.

## Shipment

Despatch customers are both domestic and global with domestic shipping being a much simpler process than international. Despatch Oxidation Ovens are considerably large (Up to 50' long, 10' wide, and 14' tall). Due to the large size, trucking and shipping considerations must be planned and evaluated. If the oven size is too large to ship on standard oversized trucks, increased cost will be incurred for special trucking. To avoid unplanned shipping costs, some oven disassembly may be required.

The key to project management success during this phase is detailed logistics planning (Especially for international shipments). Adding the detail into the schedule is critical as some shipping events need to be planned and booked months in advance of the actual shipment. Strong planning, attention to detail, and strong communication will determine success.

## Customer Install and Customer Site Training

Due to the complexity of the Oxidation Oven Install, Despatch includes the Oxidation Oven Install as part of the equipment contract. Despatch has experienced Field Technicians perform the Install and Customer Site Testing. Prior to install the customer prepares the facility for utility and foundation requirements.

The key driver in project success during this phase is early detailed planning, along with communication of the planning effort to all stakeholders (The customer being the primary stakeholder due to facility preparation that has long duration activities). If facility preparation is not closely managed by the Despatch Project Manager, install costs can greatly increase due to multiple customer site visits.

## Summary

Project Managing a Despatch Oxidation Oven Design, Materials Purchase, Subcontract Management, Build, Shipping, Install, and Acceptance is not a complicated process, but the basic rules apply. Paying attention to Contract Content, Requirements Definition, Detailed Planning, Schedule Management, Strong Communications, and attention to detail provide the basis for strong project success.

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## PM OF CARBON FIBER OXIDATION OVENS *CONTINUED*

The application of Project Management Practices assists to improve all aspects of company objectives which are increased future revenue, increased quality, lower cost, schedule adherence and reduction, and increased technical performance. Future revenues are increased by improved customer satisfaction through having one voice (Project Management) the customer can send and receive information. Quality is increased by the communication of the Project Manager to the Quality Team to list specific project issues. Cost is lowered by having an accountable person (Project Manager) manage cost control and reduction. Schedule adherence and reduction is achieved by having one accountable person (Project Manager) communicate and mitigate issues that may impact schedule. Technical performance is increased by having a direct communication link between the customer and Despatch to enhance current and future designs.

### About the Author

John Kelly has 19 years of experience in Engineering and Project Management applied in Electronics Contract Manufacturing, OEM Telecommunications Hardware, Government Contracting of High Complexity Electronics Systems, and Thermal Processing Equipment. John has lived in the Midwest throughout his career working for Eaton Controls, Benchmark Industries, Bergquist Company, ADC Telecommunications, General Dynamics, and Despatch Industries. John holds a BS Degree from the University of Wisconsin Stout with a Major in Manufacturing Engineering.

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### NPD SIG to Begin Offering Webinars in June!

On June 2, the NPD SIG resumed its webinar series with a presentation from Doug Peters titled "**Leading NPD Teams.**" It was a successful offering, with approximately 100 NPD SIG members in attendance.

Additional webinars are being planned for **August, October and December** with firm dates to follow. Your NPD SIG leaders have received consistent input that the webinars offered in the past were highly valued by the membership, so we hope everyone will consider participating and getting those PDUs. In addition, the webinars will be archived on the NPD SIG web site.

Hope to see you on-line!  
David Jamison, Vice Chair, Technical

## NPD SIG 2009 Board of Directors

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*Project Management Innovations* is published as a membership benefit by, and for, the members of the PMI NPD SIG. The purpose of this publication is to facilitate networking and information exchange.

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