

USCCG

When It Comes to
Maintenance, We Can
Keep You in a State
of Good Repair.

M A I N T E N A N C E

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*USC Consulting Group,
an experienced and
valuable professional
resource for maintenance
operations of all types.*

Introduction

Companies turn to outside consultants for many different reasons, but they all have one thing in common: They want value for their consulting dollar. For over thirty years USC Consulting Group has reliably met, if not exceeded, our clients' expectations. Given a chance, we'll be pleased to provide one or more of the following benefits to your company:

Increase productivity	Improve competitiveness
Reduce cycle time	Purchase more economically
Reduce labor and materials costs	Optimize inventory
Improve responsiveness	Improve ROA
Reduce waste	Improve yield
Reduce space requirements	Increase throughput
Improve quality	Improve reputation
Improve workforce skills	Increase market share
Reduce downtime	Create EVA
Improve service	Reduce process variation
Improve asset utilization	Drive continuous improvement
Reduce overhead	Leverage existing resources
Improve distribution effectiveness	Reduce operating costs
Optimize supply chain	

USC offers a full range of consulting services designed to address critical stages of a client's production cycle, starting long before a customer order is ever taken and extending to after the product is delivered. We'd like to help your company improve in any or all of the following areas.

Capacity planning	Manufacturing
Consolidation & rationalization	Purchasing
Distribution	Quality management
Engineering	Resource development & training
Inventory management	Sales & operations planning
Maintenance	Supply chain management



Our Background

Established in 1968, USC is a mid-sized consulting firm specializing in the area of operational effectiveness. We are best known for increasing productivity, improving customer satisfaction, reducing cost, eliminating waste, and raising quality.

Our Mission

We are a "hands on," results-driven company, with broad industry experience. We pride ourselves on the value we consistently deliver to our clients and, in return, on the confidence they continue to have in us. This is evidenced by some of the highest client satisfaction ratings in our industry and the fact that over two-thirds of our business is an outgrowth from existing client relationships.

Our Methods

We are not publishers but practitioners because we believe that actions speak louder than words. And our results



prove it. For this same reason we do not favor any one particular methodology over another but prefer to develop and deliver solutions drawn from the best of all available methodologies, customized to meet the unique needs of individual clients.

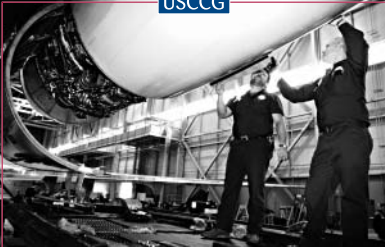
Our Expertise

We excel at improving our clients' bottom lines by improving their operations. We are also frequently engaged to improve front- and back-end processes

such as resource and demand planning, sales and operations planning, and warehouse and inventory management.

Our No Nonsense Approach

Clients engage us because of our no nonsense approach to business. We roll up our sleeves, go to work, deliver superior results, and then transfer knowledge and skills to leave behind a legacy of continuous improvement. This is our heritage and it is our mandate: First we make it work. Then we make it last.



Maintenance Experience

USC has been actively engaged in maintenance operations for many years. During that time we've helped many well-known and highly regarded companies to:

- Reduce direct costs
- Improve reliability of operating units
- Improve predictability of the maintenance cycle
- Define and improve the role of operations in maintaining production units
- Upgrade reporting tools used throughout the operation
- Optimize existing maintenance system/capability

Processes Worked

We've improved nearly every process including:

- Preventive maintenance
- Predictive maintenance

- Routine maintenance
- Turnaround maintenance

Totally Customized Approach

Our approach is totally customized for each client and situation but will typically include some or all of the following components and/or methodologies:

- Needs assessment
- MRO inventory
- Contract review and administration
- Functional requirements definition of maintenance software
- Overtime reduction
- Scheduling
- Maintenance crewing
- Parameter analysis
- Outsourcing
- Shop floor controls
- Project management

Client Benefits

These tools and techniques enable

us to deliver a wide range of benefits to our clients:

- Reduced cycle times
- Decreased labor/contractor costs
- Reduced material expediting expense
- Reduced maintenance labor and overtime
- Increased throughput
- Reduced inventory levels and carrying costs
- More consistent reporting package

Our Work

Let's take a look at some of our work with airlines, chemical refiners, and pulp and paper mills. Each of the following solutions was totally customized and implemented by USC professionals, using proprietary techniques and methodologies, to meet the unique needs of individual clients. Here are some highlights from three real engagements.



Case History #1

Major air carrier wanted to become operationally more competitive to attract third party engine overhaul customers.

Our Assignment:

Improve labor productivity, work flow and resource utilization to reduce turnaround time for engine maintenance and overhaul.

Our Approach:

1. Conducted two-week feasibility study to identify and quantify potential areas for improvement.
2. Interviewed all levels of employees, supervisors and management to obtain input for process improvement.
3. Completed process map of existing systems and operations.

4. Developed and tested improvement prototypes.
5. Developed and installed detailed work plans for the events of specific engine types.
6. Improved inventory, bin stocks and vendor work.
7. Provided better planning support for production.
8. Developed a training program to improve team leaders' managerial skills.

The Results:

1. Turnaround time reduced 27% on CFM56 engine types.
2. Turnaround time reduced 13% on JT8D engine types.
3. Turnaround time reduced 18% across all engine types.

Case History #2

Large producer of aromatics and olefins for other petrochemical companies wanted to reduce contract labor costs.

Our Assignment:

Improve coordination and cooperation between maintenance and production operations to improve uptime while reducing labor expense.

Our Approach:

1. Conducted two-week feasibility study to identify and quantify benefits of potential improvements.
2. Obtained input from personnel at all levels in the organization to help develop improvement prototypes.
3. Improved planning and scheduling techniques to reduce overtime in mechanical and instrumentation & electrical (I & E) groups.

4. Implemented maintenance management system.

The Results:

1. Mechanical maintenance labor overtime reduced 30%
2. I & E maintenance labor overtime reduced 30%
3. Contract maintenance labor reduced 30-40%

Case History #3

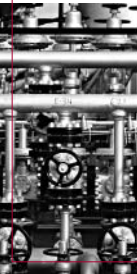
Pulp producer for dissolving and specialty markets wanted to improve mill efficiency and reduce maintenance costs.

Our Assignment:

Bring their maintenance operation up to world class standards.

Our Approach:

1. Conducted two-week feasibility study to identify and quantify benefits of potential improvements.



Our Three-Phase Process

These and other companies have clearly benefited from working with us, but what would it be like for your company? Here's what a typical engagement looks like.

Phase I - Discovery

In this phase we get to know one another. We visit your site and meet with the chief executive and the management team to gain a better understanding of your vision and the issues you face. You talk to some of our current or former clients to get a better understanding of our professional capabilities and what we're like to work with.

Phase II - Feasibility Study

In this phase we spend up to two weeks on site analyzing systems and process flows, observing operations real time and reviewing trends. At the end of this period we'll identify areas of opportunity illustrated with specific examples, outline project deliverables, establish a preliminary project schedule, summarize the benefits and provide preliminary financial projections. We'll also demonstrate our capabilities and the methodologies and processes we'll use to accomplish any assigned task.

2. Obtained input from personnel at all levels in the organization to help develop improvement prototypes.
3. Developed and installed maintenance management program.
4. Set up operational analysis process in production.
5. Redefined all operating roles and responsibilities.
6. Trained supervisors to improve managerial skills.

The Results:

1. Reduced production losses due to maintenance by 54%
2. Reduced maintenance overtime by 11% and total maintenance by 9%
3. Increased bleached tons produced by 10%
4. Increased paper machine efficiency by 8%

5. Decreased chemical usage by 10%
6. Reduced rejected tons by 3%

These results are fairly typical of what we've been able to accomplish in the maintenance field. You can review other case histories by visiting our web site at <http://www.usccg.com>.





Phase III - Implementation

In this phase we conduct formal systems, process and organizational reviews and a value analysis. We develop performance metrics and goals, prototype and install world class operational techniques, educate, train and facilitate supervisory personnel in adopting the continuous improvement process.

At the end of a project we continue to monitor performance to insure that skills and knowledge have been successfully transferred and that our clients reap the benefits of the engagement long after we are gone.

When to Consider Going Outside for Assistance

How do you know if you even need a consultant, let alone which one might be best for you? The answers to these questions will vary widely

with individual circumstances, but most companies will have telltale signs that may suggest a need to go outside for help. The following list is not meant to be comprehensive but simply to pose the obvious questions for you to answer honestly

Have you optimized shareholder value?

Are you the low-cost producer in your industry?

Could you be earning a better return on investment?

Does your company run as smoothly and efficiently as you'd like?

Would you describe your culture as one of continuous improvement?

Are your competitors outperforming you?

Is your organization as lean as you'd like?

Is your company capable of meeting its day-to-day business challenges and managing significant long-term improvement initiatives concurrently?

Is your organization capable of objectively looking at its current processes?

Are current cost reduction initiatives producing satisfactory results?

An Invitation

Depending on how you answered these questions, you may want to call USC, without obligation, for an initial consultation. We'll be happy to lend you an experienced ear and after that, if we mutually agree to go forward, a helping hand. So call us at (800) 621-6943 or visit our web site at <http://www.usccg.com>.

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