



**Putting science to work**  
**OPERATIONAL EXCELLENCE**

## OPERATIONAL EXCELLENCE DELIVERED

If you want to gain a competitive advantage through Operational Excellence, talk to DuPont. We enable businesses to significantly improve their operational effectiveness through integrated management systems. During our many years of consulting, we have provided thousands of clients across a variety of industries with customized solutions that lead to measurable and sustainable results.

Our worldwide network of more than 1,000 consultants integrates the owneroperator experience, best-in-class management capabilities and proven DuPont technology to transfer our knowledge to your organization. We also provide collaborative implementation assistance to help you create a culture of operational discipline.



## Operational Discipline

### The Key to Global Business Competitiveness

A study by the Board of Manufacturing and Engineering Design (formerly the Manufacturing Studies Board) of the U.S. National Research Council showed that companies that effectively integrated world-class manufacturing systems/processes with disciplined practices achieved tremendous improvements in asset productivity performance.

At DuPont, we have experienced the same levels of impressive, measurable results. At the core of this success has been a focused integration of the best practices for asset productivity, risk management and capital effectiveness to create a sustainable model for Operational Excellence.

With over 200 sites in 70 countries producing 2,400 products for 25,000 customers, the application of Operational Excellence best practices has given us the discipline to achieve outstanding performance in not only globally effective and competitive facilities operations but low-cost risk management—**over seven times better than the industry average**—and in overall capital effectiveness—a **10 to 15 percent lower cost than industry average**.

#### **Transferring Knowledge. Transforming Companies.**

- Increase in product quality 100–400%
- Increase in manufacturing productivity 40–70%
- Increase in manufacturing capacity 15–25%
- Reduction in in-process inventory 30–60%
- Reduction in overall product introduction time 30–60%

## The DuPont approach to Operational Excellence: DOES™

To help you achieve Operational Excellence, we combine the best management processes, globally recognized technologies and technologists, Six Sigma methodology, and a proven culture-change model to provide an integrated solution. Our DOES™ integrated management system process gives a company the benefits of lower costs, increased efficiencies, fewer injuries, maximum sustainable returns on operating assets, and an enhanced competitive position.

**DOES™ can be applied to existing or new facilities (including acquisitions), expansions, and consolidations. Our process gives an organization these advantages:**

- Strategic clarity about your mission, objectives, and organizational expectations;
- A culture of Operational Excellence;
- Best practices in advantageous architecture and processes;
- A well-orchestrated improvement journey;
- Superior organizational alignment and execution.

Taking the journey toward achieving Operational Excellence typically begins with making an initial step-change improvement, followed by a continuum of incremental enhancements, and resulting in a significant, sustained competitive advantage. Our approach has helped client companies face, assess and respond to challenges in the global marketplace that were undermining their ability to compete effectively. Let us help your organization achieve similar results.

**Operationally excellent companies outperform the market by a factor of three. Among the attributes they share are:**

- A clear vision among senior managers of the role of operations and its impact on business results.
- Super responsiveness to ever-changing market dynamics.
- A dogged committed to implement new strategies that add value for existing customers and potential markets.
- Streamlined levels of cost, quality and schedule.
- Superior knowledge and performance management.
- An impressive level of ownership and productivity among the workforce.

You can raise your business performance and improve your competitive position by applying the DuPont integrated management system process to Operational Excellence –DOES™, a powerful combination of DuPont technology, process knowledge and extensive operating experience –built on a foundation of world-class safety excellence.



## Integrated Management Systems that Drive Productivity



DuPont Operational Excellence Systems (DOES™) is an integrated management system process that drives operational productivity by applying proven practices and procedures in three “foundation blocks” – Asset Productivity, Capital Effectiveness, and Operations Risk Management.

Our unique understanding of strategy application, integrated systems, managing processes and technology first helps benchmark your organization against other leading companies and discover the causal factors preventing superior performance.

### **At the end of our initial diagnostic analysis, your organization will clearly understand:**

- The sources of competitive advantage.
- The changes in business and operational strategies required to meet market needs and bring lasting change.
- How to exploit your core capabilities, stretch goal setting and determine performance metrics.
- Where to apply “lean” practices that drive out waste and increase productivity.

Having defined areas of improvement, we then work with you to develop and implement integrated solutions customized to your industry and operational infrastructure. Our Six Sigma compatible methodology for realizing sustainable business driven results addresses work management practices, people/culture and technology.

## OPERATIONAL EXCELLENCE INTEGRATED MANAGEMENT SYSTEMS

### Organization - Roles and Responsibilities Guidelines - Practices - Procedures - Audits

#### Asset Productivity

- Maintenance and Reliability Systems
- Manufacturing Capacity
- Energy Optimization
- Facilities Infrastructure
- Mechanical Integrity
- Product Quality and Process Control

#### Capital Effectiveness

- Business Planning
- Facility Planning
- Project Planning
- Project Implementation
- Start-up and Initial Operations
- Value-improving Practices
- Contractor Effectiveness
- Shutdown /Turnaround and Planning

#### Operations Risk Management

- Technology and Facility Safety Systems
- Electrical
- Fire and Explosion
- Environmental
- Product Stewardship
- Distribution
- Occupational Health and Industrial Hygiene



## The DOES™ Delivery Model

Here's how DOES™ — DuPont Operational Excellence Systems —delivers sustainable results for your company.

Do I need to change? ▶ Create a view of a future state ▶ Create the plan for change ▶ Secure and sustain the benefits of change ▶

Assessing ▶ Visioning ▶ Planning ▶ Implementation ▶

Project Management ▶

Communications ▶

## Asset Productivity

Asset Productivity is a process for extracting the maximum value from a manufacturing asset base (people, materials, and investment), resulting in increased fixed-cost productivity.

Our clients increase their asset efficiencies and realize increased profitability through our proven change processes and by implementing our world-class work-management processes, results-oriented key performance indicators, and industry-recognized best practices/standards.

Asset Productivity projects typically last 12 to 18 months depending on size and complexity. Typical improvements include:

- 10-20 percent reduction in fixed costs (for every \$10m saved in fixed costs we can save you \$40m in variable costs).
- Uptime improvements of 2 to 4 times the fixed cost benefits.

These Asset Productivity continuous-improvement processes have given DuPont an envious competitive advantage —a **3% to 5% yearly increase in fixed cost productivity globally over the past 10 years.**

## Capital Effectiveness

Capital Effectiveness minimizes risk and saves money by making sure people, technology and investment associated with capital projects are appropriately assigned and managed. DuPont has consistently demonstrated that Capital Effectiveness can reduce annual capital budgets by 10% to 15%, and/or increase yield from existing capital budgets by 10% or greater.

To help you maximize return on investment by increasing productivity and profitability of your capital expenditures globally, we have:

- Developed a well-defined Facilities Engineering Process;
- Identified Critical Success Factors;
- Created best practices to enable and benchmark a successful execution of capital projects;
- Developed assessment tools to measure how well those steps have been managed and implemented.

With 150 facilities worldwide, DuPont generates superior returns on investment from dramatically improved capital productivity. These include a **12% reduction in capital expenditures vs. the industry average**; and a **productivity increase of 77% in the past decade**.

## Operations Risk Management

Understanding and controlling risks can provide substantial benefits to the well-being of a company's employees, contractors, finances, and public image: fewer injuries, lower emissions, and reduced claims expenditures. Conversely, failure to properly manage risks can have severe negative consequences.

Operations Risk Management qualitatively and quantitatively assesses the variety of risks (labor and financial) faced by operations. Our offering is an integrated management system that expands on our proven safety-management model to encompass Process-Safety Management (PSM) and behavioral safety. It helps clients implement sustainable continuous-improvement processes to manage risk in each of seven key areas through assessing, envisioning and managing, planning and implementation.

### **Our system will help:**

- Significantly reduce injury/incident frequency rate.
- Assign \$\$ to risk consequence and frequency.
- Significantly reduce business interruptions.
- Mitigate, eliminate or transfer each problem or risk.

We are uniquely qualified to offer consulting services in the area of risk management. DuPont integrated systems have made us the leader in managing risk, with costs at seven times below industry averages.



### Why partner with DuPont? Ask us.

#### There are five main reasons to partner with DuPont:

1. We are an owner/operator company with global operations and clients.
2. We have systems and processes that drive a culture of operational discipline.
3. We have world-class technology and science capabilities.
4. We have a broad applications experience base.
5. We use our extensive resource base to transfer knowledge and improve your capabilities and performance through DOES™.

Your organization can turn obstacles into competitive advantage by leveraging DuPont technical expertise, advanced methodologies and culture of safety and innovation.

Our 200 years of manufacturing experience and proven expertise in Operational Excellence, 100 years of engineering technology center innovation and systems integration, and many years of experience in providing commercial safety consulting and training services are available to help your company maximize long-term productivity and profitability globally.

*Disclaimer:*

*This information is based upon technical data that DuPont believes to be reliable. It is intended for use by persons having technical skill, at their own risk. Because conditions of use are beyond our control, we make no warranties, expressed or implied and assume no liability in connection with any use of this information. This information is not intended as a licence to operate under or a recommendation to infringe any patent or technical information of DuPont or other persons covering any material or its use.*

**Contact your DuPont Oil & Gas Representative at:**

**Egypt**

DuPont Products S.A.  
48 Nasr St.  
New Maadi – Cairo, Egypt  
Phone: +202 7546580  
Telefax: +202 7546583

**Hungary**

DuPont Hungary Ltd.  
Neumann J. u. 1.  
H-2040 Budaörs, Hungary  
Phone: +36 23 509400  
Telefax: +36 23 509419

**Poland**

DuPont Poland Sp. z o.o.  
44c, Powązkowska Street  
01-797 Warsaw, Poland  
Phone: +48 22 3200900  
Telefax: +48 22 3200901

**Russia**

DuPont Russia LLC  
Ul. Krylatskaya, 17/3  
121614 Moscow, Russia  
Phone: +7 495 797 2200  
Telefax: +7 495 797 2201

**Saudi Arabia**

DuPont Products S.A.  
Eastern Cement Tower  
Dammam – Khobar Highway  
PO Box 1761  
31952 Dammam, Saudi Arabia  
Phone: +966 3 8812243  
Telefax: +966 3 8812234

**South Africa**

DuPont de Nemours  
4th Floor Outspan House  
1006 Lenchen Avenue North  
Centurion, 0046 South Africa  
Phone: +27 12 683 5600  
Telefax: +27 12 683 5660

**Turkey**

DuPont Products S.A.  
Büyükdere Cad. No: 122  
Özsezen Is Merkezi A Blok Kat:3  
Esentepe, TR – 34394 Turkey  
Phone: +90 212 3400400  
Telefax: +90 212 3400420

**United Arab Emirates**

DuPont Products S.A.  
Block B248, Emarat Atrium  
P.O. Box 33718, Dubai  
United Arab Emirates  
Phone: +971 4 3211532  
Telefax: +971 4 3211533

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



*The miracles of science™*