



Since 1955 | Redefining what's possible

Strategic. Smart.  
Sustainable.





## Dover: Strategic. Smart. Sustainable.

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Our Dover companies are involved in diverse lines of work. We are one of the world's leading producers of energy efficient refrigeration equipment, in addition to creators of sophisticated printing and identification systems as well as developers of efficient energy production solutions that help power the world.

While the work itself is diverse, everything we do at Dover is deeply rooted in innovation. But innovation for the sake of newness will never drive real change in any of the many industries touched by Dover brands. We strive for innovation with purpose. Advances that drive progress. While there is certainly more to be accomplished, we continually innovate new products to improve and render more sustainable lives for the countless people around the world touched daily by our Dover brand products.

Offering closed refrigeration cases that reduce energy use and prevent food waste in supermarkets and convenience stores is one important step toward sustainability. Using technology to improve the effectiveness and efficiency of garbage trucks running on compressed natural gas is another innovation moving us closer to a cleaner, more productive tomorrow. We believe our strategic business decisions to develop smart, sustainable technologies will help us turn these incremental, individual steps into a purposeful march toward a brighter future and a more livable world.

At Dover, we have a responsibility to our shareholders and to the values that have sustained our business since our company's founding in 1955. Sustainability-driven innovation is a win for our shareholders, the industries in which our operating companies work and the customers their products reach. We know that sustainable business ensures our own continued growth in addition to providing energy- and cost-saving products, resulting in a safer, healthier and more efficient world.

This is a long journey, but we are committed to staying the course. Industry-advancing solutions are not created overnight, but our operating companies are hard at work bringing to life these big ideas in the industries in which our companies operate and on which their customers depend.

I believe I speak for all of us at Dover when I say, we are truly excited for the future.

Sincerely,

A handwritten signature in black ink that reads "Robert Livingston". The signature is fluid and cursive, with the first name "Robert" being larger and more prominent than the last name "Livingston".

**Robert A. Livingston**

*President and CEO | Dover*

**Our brands and areas of operation may be diverse, but our operating companies share the same commitment to making our planet a better place for future generations to live, work and prosper.**

All Dover brands share several important, fundamental qualities – qualities we proactively seek out in our acquisitions. Ⓣ

## The Dover advantage

Intense customer focus coupled with innovative products

## Entrepreneurial business model

Encourages and fosters deep customer engagement

## Building on our strengths

Industry-leading expertise guides product development

## Leveraging our scale

Sharing expertise across Dover companies to optimize productivity

**We are producers of superbly engineered, value-added components and systems**



**Since 1955, Dover has acquired dozens of innovative, entrepreneurial companies known for being pioneers in industrial manufacturing.**

Dover by the numbers Ⓣ

**We are committed to strong customer focus and service**



**We are intensely proud of our proprietary technology and intellectual property**



**We deliver premium products and services that are highly valued by customers**



## Sustainable innovation is our uncommon denominator.

Dover is a diversified global manufacturer delivering innovative equipment and components, specialty systems and support services through four major operating segments. ↻



**est. 1955**

Strategic, smart, agile acquisitions



Operating Companies

Annual revenues of approximately  
**\$7 billion**

## Our Segments ↴

### Energy

Dover's Energy Segment drives solutions and services for the efficient production and processing of oil and gas. Dover develops equipment, including artificial lifts, pumps, sensors and monitoring solutions for use in drilling and production.

### Engineered Systems

Dover's Engineered Systems Segment collaborates with customers in printing, identification, vehicle services, components and waste handling to provide equipment that improves production speed and accuracy. Dover offers effective and efficient solutions for design, manufacture and service of key equipment.

### Fluids

Dover's Fluids Segment focuses on the safe handling of critical fluids from oil and gas to retail fueling to chemical, hygienic and industrial end markets. Dover produces and delivers specialized equipment to safely transfer and dispense fuels and fluids.

### Refrigeration & Food Equipment

Dover's Refrigeration & Food Equipment Segment is the leading provider of energy efficient refrigeration systems, electrical equipment, heating and cooling and food and beverage packaging serving the commercial refrigeration and food service industries. Dover works to improve sustainability and our innovative systems help customers increase efficiency while decreasing costs.

**EXAMPLE: REFRIGERATION & FOOD EQUIPMENT**

**Unified Brands: A Higher Standard of Cool**



A focus for Unified Brands is to create unparalleled sustainability solutions

for commercial kitchen equipment in terms of energy management, food safety and ergonomic excellence. As a direct result of setting and pursuing government standards, Unified Brands has successfully developed three distinctive “green” products.

The Intek Connectionless Steamer has an efficiency of 93% and far exceeds the Energy Star criteria of being 50% efficient for electric and greater than 38% efficient for gas. The company’s FX Series refrigerated solutions are among the top performers for energy savings of equivalent-sized products. Finally, EcoArch ventilation systems can deliver annual energy savings exceeding 50% and help ensure fewer pollutants reach the environment, making them among the cleanest and most energy efficient systems on the market.

**EXAMPLE: REFRIGERATION & FOOD EQUIPMENT**

**Hillphoenix: Combating the Big Chill**



Many of us can remember going to the grocery store and nearly freezing

upon entering the frozen foods section. Why? Because the freezers and coolers were open, inefficiently emitting cool air into the aisles. In some places, this is still the case.

As the leader in innovative refrigeration technologies, Hillphoenix is committed to making those memories a thing of the past. With Hillphoenix Close-The-Case technology, consumers experience a more pleasant shopping environment and, as a result, spend more time in the store aisles.

The overall result goes beyond simply experiencing a more comfortable consumer shopping experience – it also adds up to significant energy savings, helping grocers worldwide improve margins and further reduce their carbon footprint. Consistent closed-case temperatures preserve food freshness and reduce food loss due to spoilage. Leading retailers nationwide, right now, are assessing Close-The-Case technology or have already made the conversion.

**Dover Sustainability**

**At Dover, we are committed to pursuing green business. As testimony to our commitment, our Sustainability Program has grown into a way of doing business today – a full-scale collaborative sustainability program across all of our facilities.**

**EXAMPLE: REFRIGERATION & FOOD EQUIPMENT**

**SWEP: Think Small to Save Big**



Heating and cooling systems utilizing heat exchange technology help enhance the quality of life

for hundreds of millions of people around the world every day.

Heat exchangers transfer heat from one media to another, causing the desired temperature change. But in this process, some of the energy can be wasted – the exact amount depends, in large part, upon the type of exchanger used. Brazed plate heat exchangers (BPHEs) by SWEP are specifically designed to maximize heating and cooling performance while simultaneously minimizing energy loss. In addition, BPHEs have a smaller carbon footprint, are up to 90% smaller and lighter than older technologies such as shell and tube and, more importantly, are more efficient. Because of their unique construction, 95% of the materials in SWEP products are used to transfer heat.

SWEP’s mission is to challenge efficiency in everything they do. Their total commitment to sustainable solutions is helping customers optimize their systems, resulting in lower operating costs and less waste.



Sustainable innovation creates more economic value for our shareholders and customers.

#### EXAMPLE: ENGINEERED SYSTEMS

### JK Group: Making Green Part of the Fabric of Our World



JK Group is revolutionizing the world of environmentally friendly dye sublimation and pigment ink technologies for the fast growing digital textile printing industry. From its innovative J-Teck3 inks that contain no harmful chemical components, to being an active participant in the European Chemical Agency (ECHA) REACH initiative – JK Group embraces a sustainable business approach for all of its ink manufacturing facilities, enabling their customers to build more sustainable businesses.

JK's environmentally friendly water-based digital ink products help lower environmental impact, reduce dye and chemical waste and enhance customer print-on-demand response times on short-run and mid-run digital fabric print production runs.

Businesses are combining these environmental benefits from JK, along with quicker system set-up, less downtime and increased quality at a lower cost of production, to increase margins and to realize significant, sustainable value for their digital production businesses.

#### EXAMPLE: FLUIDS

### Mouvex: Food on Our Tables, Not in Our Landfills



According to a study from Save Food and the Food and Agriculture

Organization (FAO) of the United Nations, about one third of all food produced for human consumption is thrown away or lost worldwide. This amounts to approximately 1.3 billion tons of wasted food each year. In fluid food processing, such as dairy, confectionery, beverages, and process food industries, a portion of this loss is due to the inability of traditional pumping methods to completely evacuate product in the suction and discharge sections of transfer lines when changing products or when cleaning at the end of production runs.

With Mouvex's Eccentric Disc Pump Technology, food processors can save 60% to 80% (or more) of formerly lost products in fluid transfer lines. This is because of Mouvex's unique capability to seamlessly purge valuable product from transfer lines for further processing or packaging without the use of water, which would otherwise dilute and contaminate the product. As a result, the amount of food being wasted is greatly reduced, allowing more product to reach our homes and tables.

## EXAMPLE: FLUIDS

### OPW: Fueling Protection of People and the Environment



Every day, millions of people around the globe shake hands

with OPW when they reach for the dispensing nozzle to fuel their vehicles. Little do people realize that OPW's mission and offering extends far beyond the fueling nozzle. In fact, it covers virtually every aspect of ensuring fueling operations are safe for people and the environment.

From fuel pipes, spill containers, overfill prevention valves, vapor recovery systems, fuel monitoring systems and more, OPW is doing its part to protect the well-being of people and the environment today, tomorrow and into the future. This is the nature of OPW and it has been for nearly 125 years.

## EXAMPLE: ENERGY

### US Synthetic: Safer, Smarter, More Sustainable



The success of oil and gas exploration projects often does not begin and end

with how much oil or natural gas can be located. Other critical factors include the overall ease and safety of extraction and the speed at which the oil and gas can be found.

US Synthetic helps companies expedite the drilling process by manufacturing long-lasting diamond inserts in down-hole drilling tools. The polycrystalline diamond cutter technology developed by US Synthetic allows drilling projects to drill longer before having to stop to change drill bits. The ability to operate without pause allows companies to extract reserves faster, increasing production efficiency and significantly reducing downtime. This unique technological breakthrough also means less traffic and personnel required at the drill site, reducing the environmental impact, while fewer bit changes reduce the number of potential accidents.

## Dover Innovation

Our commitment to green business is paralleled by our dedication to being on the cutting edge – whether that means promoting safety, sustainability or efficiency. Innovation is in the DNA of every Dover brand, and the result is solutions-oriented research and development that makes waves across a wide range of industries.

## EXAMPLE: ENGINEERED SYSTEMS

### Markem-Imaje: Green Printing in Many Colors



Markem-Imaje, a world leader in marking and printing solutions, provides innovative inkjet, thermal

transfer, laser, and print-and-apply label systems to help manufacturers efficiently and effectively identify their products for everything from food safety expiration dates and trace-back codes, to the proper labeling of pharmaceuticals.

The importance of quickly and reliably identifying batch or product origins is evident during product recalls. Markem-Imaje's innovative systems enable investigators to accurately isolate production runs that need to be removed from the market, leaving unaffected merchandise from wrongfully being collected and destroyed. The total savings could extend well into the tens of millions of dollars not only in saved product, but also in avoiding the considerable expense of collecting and destroying the material.



Supermarkets can reduce energy use in medium temperature units by about 70% if they close those cases.

#### EXAMPLE: ENGINEERED SYSTEMS

### MS Printing: Digital. Green. Technology: More Than Just a Fashion Statement



Digital Textile Printing (DTP) by MS Printing Solutions is fashionable in a very green way. Described as any ink jet-based method of printing colorants onto fabric, DTP is simultaneously improving environmental sustainability and business profitability. This digital green technology is all the rage with fashion style studios around the world, as it helps them shorten textile printing production times from as much as 40 days for 30,000 linear meters to less than 12 hours. This translates to improving production from 100 linear meters per hour to 75 linear meters per minute.

Compared to traditional fabric printing methods, DTP requires less water because fabric washing is unnecessary and there are no screens or printing rolls to clean. The process also reduces dye and chemical waste, lowers energy consumption and requires far less room because the printing equipment is smaller and storage of screens and cylinders is eliminated.

DTP not only allows fashion studios to deliver their creative, colorful and impressive fabrics to the world, but it also allows them to do it more efficiently, profitably and in an environmentally responsible way. This is perhaps the most powerful fashion statement of all.

#### EXAMPLE: FLUIDS

### Midland Manufacturing: Keeping Tanker Trains on Track



Midland Manufacturing, part of OPW, is a leader in specialty products for rail tank cars, chemical cargo tanks and International Standards Organization (ISO) containers. The company joined industry regulators, rail tank car builders, owners and customers to improve tank car safety when shipping crude oil.

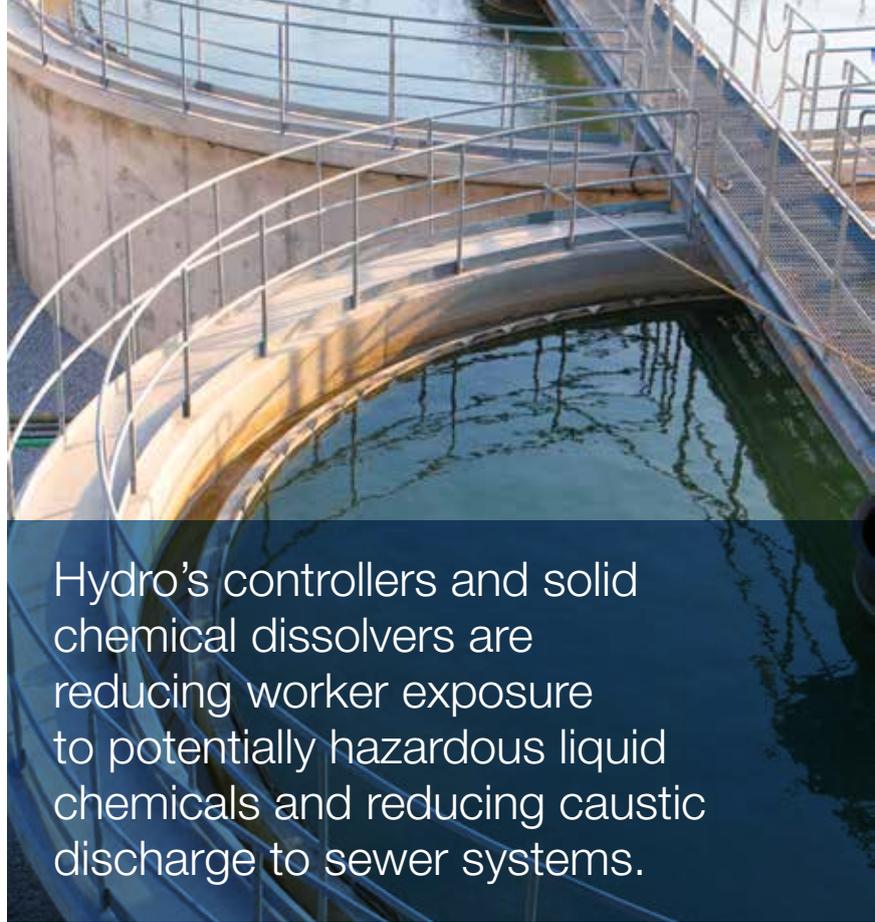
Midland has developed innovative pressure relief valves to provide fast, predictable and controlled release of pressure for tank cars used to transport ethanol and crude oil. Think of it as a safety valve that helps prevent catastrophes should a tanker car derail. The company also manufactures kits used at rail accidents by first responders. Additionally, Midland manufactures overflow prevention and liquid measurement devices, emergency valves and bottom outlet valves for rail cars carrying hazardous and non-hazardous commodities – all designed to help protect people and the environment.

**EXAMPLE: ENERGY**

### Dover Artificial Lift: Moving Oil & Gas Production in a Sustainable Direction



As oil and gas production increases, the need for equipment that will reduce environmental impact at the wellhead is critical. Artificial Lift automation and production optimization equipment enables operators to increase production and safety while reducing the impact on the environment. Reliable equipment improves product life cycles, which, in turn, reduces on-site maintenance and waste. Remote monitoring and automated controls at the wellhead reduce human intervention, resulting in fewer work hours and vehicle miles to visit sites. This increases productivity and personnel safety, reduces disruption to land and wildlife, and results in less fuel consumption and vehicle exhaust emissions.



Hydro's controllers and solid chemical dissolvers are reducing worker exposure to potentially hazardous liquid chemicals and reducing caustic discharge to sewer systems.

**EXAMPLE: FLUIDS**

### Hydro Systems: Providing the Green Treatment



For people, as well as industry, water is an essential requirement for a healthy life. Yet the reality is, untreated water can result in unhealthy recreational and drinking water for people. Harmful water in industrial boilers and cooling applications, biological contamination, corrosion, scaling and fouling result in reduced yields, environmental compliance problems, higher energy consumption and increased greenhouse gas emissions.

Proper chemical treatment of water, utilizing specialized Hydro Systems controllers and solid chemical dissolvers, helps water treatment professionals address these challenges by offering significant operational, safety and environmental benefits over comparative liquid water treatment chemicals.

Thanks to Hydro's controllers and solid chemical dissolvers, water treatment professionals are reducing worker exposure to potentially hazardous liquid chemicals, increasing energy efficiency, reducing shipping and disposal costs of chemicals and reducing caustic discharge to sewer systems.

**EXAMPLE: FLUIDS**

### CPC: Keeping Fluids Where They Belong



CPC provides a full line of quick connects and disconnects for medical, biopharmaceutical, chemical handling, industrial, food processing and hundreds of other applications. With a total commitment to safe and easy fluid handling, CPC is dedicated to safety and the environment. As you can imagine, preventing the loss of valuable or hazardous materials is a critical concern.

CPC is a true innovator, engineering systems to improve functionality of equipment and processes. DrumQuik® Pro, for example, is a technology designed to enable closed chemical handling systems, eliminating dangerous spills to help protect workers and the environment. The closed system also controls potentially dangerous vapors during fluid transfer. Additionally, this technology helps protect the integrity of the contained fluid, reducing waste.

Specifically, the DrumQuik Pro is already making a positive impact on the environment by enabling the safe handling of diesel exhaust fluid – an aqueous solution used to reduce harmful pollutants found in diesel-engine exhaust.

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