



### **Innovation Handbook**







### Solving Global Challenges Together

The challenges of a rapidly changing and increasingly complex world mean you urgently need solutions that meet your global and day-today challenges head on. You need innovations that maximize your production efficiency, yet without compromising hygiene and food safety.

You're facing a combination of increasingly scarce resources, inflation, rising costs, climate change, supply chain issues, recruitment problems, prohibitive legislation, accelerating digitalization - with the increasing burden of interpreting data that grows exponentially - the growing sophistication of your customer's preferences, and the demands of Environmental Corporate Governance (ECG) compliance.

These challenges are testing every aspect of your operations to the limit. It's why every incremental gain is crucial in helping you create competitive advantage in sectors where your margins are routinely squeezed. Diversey - Innovation For The Challenges Ahead



**BALANCE** resources

**ADD** value

**CREATE** significant savings and reduce costs

**INCREASE** productivity and profitability

**ASSURE** hygiene and compliance

**IMPROVE** water quality

**REDUCE**, reuse, and recycle resources

**MAINTAIN** food safety and quality



### A Close Partnership Based On Our Core Strengths

- Complete solution in one place
- A single supplier for world class hygiene and water treatment solutions
- The drive to discover compound savings across each
- Acknowledged global experience and expertise (KBS)
- Sector-specific global knowledge
- Acute understanding of your needs
- Constantly developing a range of innovations with a healthy pipeline
- Leading the way with sustainable solutions
- Work together with commitment to drive continuous improvement







### We Deliver Measurable Benefits to your Business

- Tailor-made programs
- Optimize efficiency
- Fulfil your key operational objectives
- KPI management
- Agreed ROI
- Reduce TCO

### We help you Build Strategically

- Reveal hidden opportunities
- Identify and create pathways to success
- Maintain your brand reputation
- Good corporate citizen
- Respect for life and consumer safety
- More sustainable, agile and resilient businesses.



### **Divosan Dew**

How Removing a Rinse Can Increase **Your Production Capacity** 







**Processed Food Manufacturing** 

Do changing demands to do more with less mean you're sacrificing food safety?

Sometimes it can feel like an impossible challenge, when to meet your production requirements and stay competitive, you're under pressure to reduce resource consumption without risking food safety standards.

Divosan Dew is a new 'no rinse' disinfectant solution that removes the need for a final rinse and helps optimize your cleaning.

#### **Look Forward to Savings**

You can achieve up to 20% time, water and wastewater treatment savings, improve hygiene results, and eliminate risk of biocide residues.

#### The Reassurance of Divosan Dew

- · Hygiene results are not compromised in pursuit of efficiency or savings
- · No trade-off necessary between standards, time, chemical and water consumption
- · Avoid potential for lower quality product, consumer dissatisfaction, and product

With downtime a significant cost, release your cleaning time, labour and resources back to production capacity.

#### Why Use Divosan Dew?

- Ensures highest hygiene standards
- Harnesses power of nature for reliable results with less
- Eliminates risk of chemical residues from traditional biocides based on QACs, Hypochlorite, or Akylamines











#### More for less?

#### Let's Talk -

Email: foodbev@solenis.com www.solenis.com/Divosan Dew

Divosan Dew Film

### **Diverclean Sonic**

**Transform Your OPC and Free Up Precious Time** 



#### Sector

**Processed Food Manufacturing** 



How do you feel about your OPC? Unavoidable necessity, or inflexible downtime based on outdated methods?

Traditional cleaning methods have served their time. With soaring utility and labour costs - typically up to 65% of OPC costs - we can help return that time to serve you.



What if you could reduce your OPC time by 35% without a risk to food safety?



**Diverclean Sonic** is a pre-cleaning step-change that reduces your need for pre-rinsing, to free up time, labour and resources.

#### **Innovation For The Challenges** AheadReliable Savings **Everywhere You Need Them**

#### Time (Cleaning) -

Up to 35% savings



#### Water and Wastewater -

Up to 20% savings in each



#### Energy -

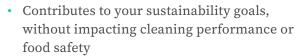
compressed air and temperature -Up to 20% savings



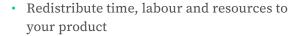
#### Chemicals -

Up to 20% savings

#### **Your Key to Efficient Cleaning**







Reducing your cleaning window to unlock valuable production time and capacity is essential for business resilience and to retain your competitive edge.

#### Why Use Diverclean Sonic?

- Combined 2-in-1 detergent/ disinfectant step uses your existing equipment
- · Acts quicker so you use less water for daily environmental cleaning
- Less maintenance extends your ROI

#### Time to transform your OPC?

#### For a Free Consultation -

www.solenis.com/Diverclean Sonic Film









### Intelligent CIP

**Discover the Hidden Truth About Your CIP System** 



Sector Food, Brewing



Does your CIP System reveal whether you're cleaning too much, or cleaning too little?

Your CIP system is your first line of defence and a large proportion of your budget.

But, in common with well over 50% in your industry, it's likely to be running unvalidated. It's impossible to be sure that your cleaning achieves the highest standards of hygiene compliance and food safety.



**Intelligent CIP** is a transformational, remote cloud-based analytics platform that delivers deep, real-time insight for CIP management.

#### **Bring New Eyes to Your CIP Process**

- Unnecessary cleaning is lost production time and revenue
- · Drive resource savings time, water and chemical
- Save on wastewater treatment fees
- · Target your sustainability goals

Repeatability is the golden nugget. Analyse data from your entire CIP-process - from start to finish, multiple times. By overlaying different runs, you have a complete picture for the first time.



#### The Impact of Intelligent CIP

- · Unlock typically buried information and receive actionable insight
- Predict potential areas of failure before they occur
- Identify opportunities over time to add value, optimize production, and shorten your CIP processes



#### Why Use Intelligent CIP?

- · Primary focus on hygienic compliance
- · Improves operational efficiency and sustainability
- · Avoids contamination and protects your brand



Together, we can see what's really going on.



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#### BottleCare -

### **DivoMask**

Making Your Returnable Glass Bottles Last Up to 50% Longer



**Sector**Food, Brewing



You have a reputation for high quality, so how can you ensure the condition of your bottles isn't letting you down?

Your returnable bottle fleet is a significant cost. Visual appearance is crucial to retain consumer confidence in your brand quality. Bottling line bottle- to-bottle abrasion and the bottle washer's caustic etching leaves scuffs and marks. The more bottles are circulated - the more they deteriorate.

**DivoMask** is a unique high shine, quick drying, non-sticky maskant that extends the life of your bottle fleet and enhances your brand image.

#### **Savings on Your Bottle Fleet**

- Avoid cost-appearance trade-off damaging your bottom line or brand image
- Achieve bottle life cycle up to or exceeding - 50 trips
- A significant sustainability boost when existing industry average is just 20 trips
- · A 50% ROI on your bottle fleet

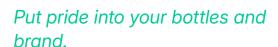
Custom designed, non-invasive DivoMask application system retro-fits to your line to avoid additional cost and downtime. Adapts to speed and bottle presence to ensure consistent dilution and precise, economical dosing.



#### Why Use DivoMask?

- Food safe coating with no taste impact
- Protects feel and label presentation of your product
- Researched and developed to meet industry requirements for masking technology
- Exceeds parameters in all four key areas identified







Our Expertise is Here For You -

www.solenis.com/DivoMask

Film





#### BottleCare -

### **DivoBrite Defend**

**Keep Up the Appearance of Your Returnable Glass Bottles** 



**Sector**Food, Brewing



Is your choice of strong detergent actually damaging your glass bottles and your cleaning?

High temperatures and harsh chemicals corrode your glass bottles during the washing cycle. When a returnable glass bottle fleet is one of your largest capital investments, you can't afford for repeat transportation, sorting, washing, and filling to create the typical scuff rings that threaten your reputation.

**DivoBrite Defend** is a sustainable additive developed to deliver cleaning power equivalent to the most corrosive detergents and superior glass protection.

### For Clear Savings on Your Glass Bottles

- Reduces glass corrosion by 50% without compromising your cleaning
- Increases glass shelf life from 20, to at least 30 cycles
- Protects ACL/logo fading even up to 30 cycles
- Maximizes re-use for best ROI and to help maintain market share

Dispensed through conventional dosing equipment, DivoBrite Defend improves line efficiency, delivers high performance cleaning, removes mould and insect larvae, while maintaining product quality.



- Prevents premature culling of bottles
- Reduces your carbon footprint and costs through lower re-wash rates
- Reduces micro contamination risks by effective scale removal and build-up prevention
- · Reduces your TCO

#### Defend your glass bottles.

#### Discover How -

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www.solenis.com/DivoBrite Defend

Film









### **DryFormance**

**Conveying Your Line Lubrication** into the Future



Sector

Food, Brewing



Are you creating wet, slippery floors and biological growth with your conveyor lubrication?

Conveying your cartons, cans, bottles and kegs between filling and packaging machines at high speed is crucial in running an efficient packaging line. A wet lube solution might be traditional, but doesn't it feel counter intuitive when you're attempting to save resources and ensure a safer, more hygienic working environment?

**DryFormance** combines water-free conveyor lubrication with packaging line engineering excellence from our sector-specific expertise and experience

#### **By Taking The Water Out**

- 100% reduction in water used for conveyor lubrication
- Achieve your health and safety targets
- Improve overall operational efficiency
- Help meet your sustainability commitments

The combination of our DryFormance distribution system, application method and specially formulated lubricant allows precise control of package/ container flow during your packaging process.

#### Why Use DryFormance?

- Cuts common slips from wet or contaminated floors
- Extends life-span of plastic conveyors by at least 100%
- · Slows mechanical component degradation
- Fewer replacement parts and emergency shut downs

#### **DryFormance Reduces...**

Your water consumption, effluent load, strain on conveyor motors and energy consumption.

Your CO2 emissions, waste-water treatment and recycling, and replacement of wasted packages.

Your Chemical cleaning requirement, and removal of biological growth - especially in PET packaging lines.

DryFormance is just one of the innovative solutions in the Diversey portfolio of Knowledge-based Services.

#### A DryFormance Performance?

#### For a Tailored Solution -

www.solenis.com/IDryFormance









### **Divosan Protect**

Save time and resources with No-Rinse, No compromise Detergent-Disinfectant



#### Sector

**Processed Food Manufacturing** 



It's a tough challenge to meet production requirements when you're under pressure to do more with less. Divosan Protect reduces your cleaning window without compromising existing high-quality food safety standards. Fully compliant, its plant-based formulation can also help achieve your environmental and sustainability goals.

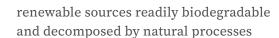
**Divosan Protect** is a new no rinse detergent-disinfectant solution that removes the need for a final rinse and helps optimize your cleaning program reducing the application cost and with no disruption.

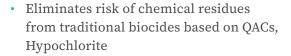
#### No Rinse Savings

You can achieve up to 20% time, water, and wastewater treatment savings, improve hygiene results, and eliminate risk of biocide residues.

### **Divosan Protect Provides Peace** of Mind

- No trade-off necessary between hygiene standards, time, chemical and water consumption
- Contains plant-based ingredients from





With downtime a significant cost, release a proportion of your cleaning time, labour and resources back to production capacity.

#### Why Use Divosan Protect?

- Harnesses power of nature for reliable results with reduced environmental impact
- Suitable for cleaning and disinfection of all surfaces
- EU wide BPR approval
- Can be used with standard pressure, wallmounted foaming systems
- Very effective against wide range of microorganisms: bacteria, virus, and yeasts

#### Disinfection Without Rinsing?

#### Time to Talk -

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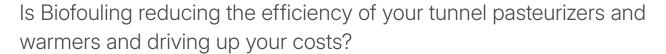
### **Biosperse NT1901**

A Unique Solution to Your Persistent and Costly Pasteurizer Issues



#### Sector

Beverage, Brewing, Food, Dairy



It can feel as if conditions in your tunnel pasteurizer creates more problems than it solves. From microbiological growth, biofouling, corrosion, and scale - to high chemical, water, and energy consumption, and disruptive boil-outs - your Cleaning frequency and costs are increasing.

Biosperse NT1901 is a unique patented water treatment biocide that is highly effective against slime and spore formers, molds, algae, and bacteria - including sulphate reducers.

# Microbial Growth Threatens Efficiency and Safety in Industrial Water Systems

Biofilms and slime formations not only trap additional foulants but also clog valves and foul sensors, leading to performance degradation. These biofilms act as insulators in heat exchangers, increasing energy consumption and causing pressure drops and quality loss in cooled products. Furthermore, microbial activity contributes to composite fouling, corrosion, and scalingaccounting for an estimated 20-50% of all corrosion. Materials such as plastics and gaskets are also vulnerable to microbial degradation. Beyond mechanical issues, the presence of pathogens like Legionella and Pseudomonas aeruginosa poses serious hygienic risks, emphasizing the need for robust microbial control strategies in industrial water systems.

#### **Why Use Biosperse NT1901?**

- **Rapid biofilm penetration** 170x faster than bleach
- Extended contact time due to low decay rate.
- Highly effective under challenging and variable conditions
- Low corrosive impact prevents rust that can spot or stain products
- Fully compatible with standard process and water treatment chemicals, simplifying integration.
- · Detailed information available on the RDS.

### For Safer Chemistry, Sustainability and Reduced Downtime

- Safer alternative that reduces occupational and environmental risks in response to stricter regulation
- Helps deliver continuous monitoring and control, and reduced TCO
- Delivers reductions in water, energy, and chemical consumption
- Increased thermal efficiency helps reduce downtime, labour costs and environmental impact to drive profitability and sustainability goals

#### Beat Biofouling with Biosperse NT1901

Make the switch –

Email: foodbev@solenis.com

www.solenis.com/Biosperse NT1901









### **Dicolube Sustain-5**

**Sustainable Lubrication for Beverage Conveyors: Reducing Water Use and Biofouling Risks** 





# **Sector**Beverage, Brewing

Are excessive water consumption and biofouling threatening your packaging line efficiency and leading to increased maintenance and manual intervention?

It's crucial to run an efficient packaging line. Central to this has been a traditional soap and water 'wet lube' solution. However, this method can be water intensive, with a negative impact on the water:beverage ratio and create the ideal environment for biological growth on pipelines and conveyors.

Dicolube Sustain-5 is a specially formulated high performance track treatment lubricant designed for steel and plastic conveyors across all packaging types - plastic, cans, and glass. Its Smart Dispensing system combines low water usage with an enhanced action that prevents biofouling in conveyor line pipework to deliver improved hygiene and overall operational efficiency.

#### **You Key Conveyance Challenges**

- Preventing container contamination during the conveyor process
- Maintaining hygiene standards
- Preventing biofouling which creates labourintensive extra cleaning downtime
- Finding solutions which reduce water use, chemical cleaning requirements, and wastewater costs
- Minimal to no-investment requirements
- Compatibility with low-quality water and/or recycled water

Our innovative approach to track treatment reduces water use, wastewater treatment and recycling, and packaging waste, to contribute to your sustainability commitments and cost savings. In addition, Dicolube Sustain-5 reduces chemicals, effluent costs and downtime for removal of biological growth.

#### Why Use Dicolube Sustain-5?

- Prevents biofouling in pipework which can lead to blocked nozzles
- Compatibility with all type of water soft and hard
   including recycled water
- Propels containers with enhanced quality, hygiene, and less disruptive maintenance
- Requires minimal to no-investment
- Expertise support and tailored recommendations from Diversey Experts

Dicolube Sustain-5 is easily implemented with minimal investment and delivers between 50-65% water savings compared to wet lubrication.

### Are Your Conveyors Running in Line With Your Business Goals?

Start Saving Today -

Email: foodbev@solenis.com

www.solenis.com/Dicolube Sustain-5







### **DryFormance HT7**

**Tailored Dry Lubrication For Your Stainless Glass Bottle Conveyors** 



**Sector** 

Beverage, Brewing



Has dry lubrication left your glass bottles running on blackened stainless steel conveyors

Your conveyors are crucial in running an efficient packaging line. Changing from a traditional wet lube solution saves you resources and ensures a safer, more hygienic working environment. However, have you found your lubricant accumulates soils on your stainless conveyor and is hard to clean? Apart from a contamination risk, it is also driving up your chemical consumption and process/labour costs.

DryFormance HT7 is a dry conveyor lubricant that delivers water reduction, improves health and safety, and advances overall operational efficiency, while helping to meet sustainability commitments. It combines innovative lube technology with an intermittent clean to remove blackening without incurring downtime. Its cutting-edge formulation is further evidence of how Diversey applies its sector-specific expertise and experience to help tailor solutions that are acutely responsive to your needs.

#### A Unique Solution That Delivers

- An 85% reduction in overall water consumed on the track treatment
- 90% less chemical consumption
- · A clean and hygienic conveyor
- Improved overall operational efficiency
- Reduced downtime caused by blackening and biofouling build up

The combination of Diversey's DryFormance HT7 distribution system, application method and specially

formulated lubricant allows precise control of package/container flow during the packaging process at the most efficient and Sustainable way.

#### **Why Use DryFormance HT7?**

- Dry technology specially formulated for stainless steel and glass bottles
- Cuts common slips from wet or contaminated floors
- · Slows mechanical component degradation
- Fewer replacement parts and emergency shut downs
- · Contains bio-based ingredient
- Protects your brand and improves your TCO

#### **DryFormance Reduces...**

- Your water consumption, effluent load, strain on conveyor motors and energy consumption.
- Your CO2 emissions, transportation costs and wastewater treatment.
- Your chemical cleaning requirement and labour costs for removal of blackening biological deposits.

#### Conveyors Not So Stainless?

For a Tailored Solution -

Email: foodbev@solenis.com

www.solenis.com/IDryFormance HT7









### Lub-e Control

**Designed to Make Your Line Lubrication System Work More Efficiently** 





# **Sector**Food, Brewing

Are you still relying upon manual operation to ensure your track treatment is running efficiently?

Persistent economic challenges in the Beverage industry make it essential that your conveyor works at high speed, with maximum efficiency, optimum chemical and water usage, and with minimum downtime. By using traditional methods of track treatment control, you are at risk of becoming less competitive.

**Lub-e Control** is an online, cloudbased data tool that provides real time information for close analysis of conveyor line efficiencies, enabling you to quickly identify and troubleshoot any operational issues.

#### Go to Another Level of Control

- Receive insights that improve line efficiency, and tighten your cost control
- Undertake close analysis of your water and chemical consumption, concentration, and flow
- · Help meet your sustainability commitments

Our Lub-e Control system covers all the key points of your lubrication - including the number and type of nozzles you employ in each zone, your line pressure, chemical and water consumption - to help ensure more precise control of container flow during your packaging process.

#### Why Use Lub-e Control?

- Provides online, real time operational information
- Improves overall conveyor line efficiency
- · Delivers water and chemical savings
- Ensures fast identification and solution of operational issues
- Helps establish more stringent cost control regime

### Displayed in a Way That Works For You

Your information can be displayed in a way that works for you - including graphs comparing ideal and real scenarios – so you can be more responsive and effectively target your efficiency and sustainability KPIs.

#### **Enhanced Line Efficiency?**

Time To Take Control -

Email: foodbev@solenis.com

www.solenis.com/Lub-e Control









To learn more about how Diversey a Solenis Company can help your toughest challenges and more, please visit solenis.com