

A woman with brown hair tied back, wearing a dark blue zip-up jacket, is looking down at a large, circular, metallic component. She is holding a small, cylindrical tool or probe in her right hand, touching it to the inner surface of the component. The component has a thick, flange-like outer ring with several small holes. The background is a blurred industrial setting with blue and grey tones.

**WE ADD  
SAFETY TO  
THE DAIRY  
INDUSTRY**

FUTURE-PROOF VALUE SINCE 1950





# TABLE OF CONTENTS

<b>THE DAIRY INDUSTRY’S CHOICE</b>	<b>04</b>
<b>DISCOVER OUR DAIRY SELECTION</b>	<b>12</b>
<b>EASY CLEANING</b>	<b>14</b>
<b>DAIRY ROTARY VALVES</b>	<b>16</b>
MZC-I and MZC-II rotary valves with slide rails	16
Drop-through: <b>AL/AXL/AML dairy</b>	18
Blow-through: <b>BL/BXL/BXXL dairy</b>	20
Drop-through replacement: <b>NR347 dairy</b>	22
<b>Rotary valve solutions</b>	<b>24</b>
Rotor Interference Detection (RID 3.0)	26
Shaft seal flow control	27
Sanitary Air Seal (SAS)	28
Rotary valve bearing toolkit	29
<b>DAIRY DIVERTER VALVES</b>	<b>30</b>
Plug type: <b>GPD dairy</b>	30
Tube type: <b>2-TDV/3-TDV/M-TDV dairy</b>	32
<b>CONTACT</b>	<b>35</b>



# CREATING EXCEPTIONAL DAIRY PRODUCTS TOGETHER

The dairy industry nourishes the world with indispensable products. Think of perfectly balanced, healthy formulas for our babies or how powdered milk, lactoferrin, and lactose powder benefits billions of people.

Through years of experience and valuable partnerships, DMN-WESTINGHOUSE has gained a deep understanding of the global dairy industry and its challenges. We have earned the trust of an industry where hygiene, cleanability, and safety are paramount.

## SETTING THE DAIRY STANDARD

In our R&D department we leverage innovative technology, setting the dairy industry standard. Staff in our factory controls every step in the manufacturing of hygienic rotary valves and diverter valves. We strive for unparalleled quality and consistency, a commitment underscored by our compliance with all essential certifications, including USDA, EHEDG-ED Class II, and ATEX.

## FUTURE-PROOF DAIRY PRODUCTION

When you choose our rotary valves and diverter valves, you enjoy the reliability, safety, and ultimate hygiene you are looking for. But it doesn't end here. Through training and maintenance support, our after-sales professionals help you to ensure the longevity and optimal performance of our dairy rotary valves and diverter valves. Maximising your output, making production processes future-proof.







## DAILY DAIRY, **DAILY COMMITMENT**


DMN-WESTINGHOUSE provides the world's leading rotary valves and diverter valves. Engineered to help you produce the highest quality dairy products, day in day out. Our commitment to quality and safety is demonstrated through our adherence to strict industry standards, including USDA, EHEDG-ED Class II, and ATEX. On top of that, expert guidance, maintenance support, and custom-made solutions make sure all your demands concerning safety, hygiene, and sustainability are met. Every single day.



**USDA**







“We help you comply with  
the requirements and regulations  
regarding hygiene and safety”

## **BIG IN HYGIENIC PROCESSING OF DAIRY POWDERS**

Our rotary valves and diverter valves are designed with utmost care. Precision-polished to achieve the highest levels of product hygiene, making our rotary valves and diverter valves the perfect fit for the global dairy industry. For instance, all product contact surfaces of our heavy-duty dairy rotary valves, like the MZC-I and MZC-II, feature an ultra-smooth Ra 0.8 µm surface finish (150 grit).

### **ALWAYS IMPROVING**

Our engineers constantly aim to increase the efficiency and cleanliness of our rotary and diverter valves, directly responding to your challenges in adhering to international health regulations and quality standards. Our commitment is to increase your uptime through easy cleaning and minimising downtime for repairs. Solutions like the Rotor Interference Detection and Shaft seal flow control provide even more safety, continuity, and reliability.



## YOU NAME IT, WE CAN **HANDLE IT**

The biggest dairy producers rely on DMN-WESTINGHOUSE rotary valves and diverter valves for the handling of their dairy powders and granules. We know the challenges concerning every type of dry dairy product. Depending on the dry dairy product you process and convey, we can provide the most efficient configuration of our rotary and diverter valves in your production line.

**MILK POWDER** Skim milk powder, whole milk powder, mixtures of skim milk powder and vegetable fats, fortified milk powder enriched with vitamins and minerals.

**SPECIALTY MILK POWDERS** Baby formula, buttermilk powder, cream powder, powdered formulations for complete infant nutrition.

**DAIRY INGREDIENTS** Casein and caseinates, whey protein concentrate and isolate, lactose powder, functional dairy powders.

**LACTOFERRIN** Recognised for its health benefits, lactoferrin demand is increasing. We help dairy producers to harness this opportunity.

**PROBIOTIC POWDER** Containing live beneficial bacteria for digestive health, calcium-fortified powder, dairy protein blends.

**BAKERY AND CONFECTIONERY** Dairy powders used in baking and confectionery items, instant milk powders, powders for dairy-based beverages, ingredients for ice cream and desserts, powdered ingredients used in instant soups, sauces, and ready-to-eat meals.

**DAIRY POWDER PROCESSING** Spray drying, freeze drying, quality control and testing.

**POWDER PARTICLE SIZE ANALYSIS** Ensuring consistent particle size for even distribution, moisture and fat content testing, microbiological testing.







## DISCOVER OUR **DAIRY** SELECTION

If producing dry dairy products is your business, then DMN-WESTINGHOUSE is your designated partner. Whether it's about (plant-based) milk powders, caseinates, probiotics, or lactoferrin – we engineer rotary valves and diverter valves to produce the highest quality dairy products. Comfortably meeting the industry standards.

### **SMOOTHER, CLEANER, SAFER**

We offer two types of heavy-duty dairy rotary valves, in various sizes and capacities: the drop-through type (AL/AXL/AML/NR) and the blow-through type (BL/BXL/BXXL). They more than meet the stringent hygiene standards the dairy industry needs to maintain. All product contact surfaces consist of food-grade material and are polished to perfection. They are all radiused and polished to 0.8 µm Ra (150 grit) and the rotor vanes have precisely chamfered edges.

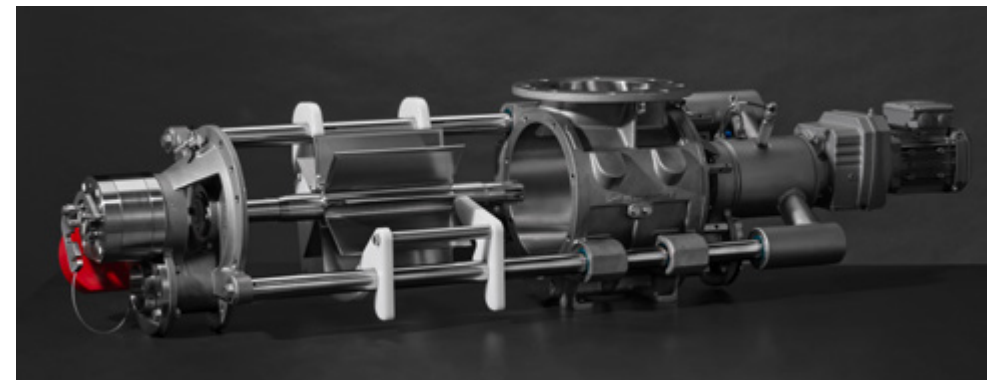
### **ALWAYS EASY CLEANING**

Both drop-through and blow-through products are also available in MZC execution. Supporting rails to remove the rotor and end covers allow for easier cleaning-in-place (CIP), thus maximising output.

### **BOOSTING EFFICIENCY AND HYGIENE**

Diverging and converging powders or granulates is a daily routine in dairy production. Safety, efficiency, and maximum hygiene are key. That's why our 2-TDV, 3-TDV, M-TDV, and GPD diverter valves are in high demand.





## EASY **CLEANING** TO MAXIMISE HYGIENE AND OUTPUT

Whether you are processing milk powder, ingredients for infant nutrition or probiotics: at a certain point your rotary valves need to be cleaned. In dairy there can be no compromising on quality and hygiene. When it comes to cleanability our MZC-I and MZC-II rotary valves, designed for the dairy industry, meet all your requirements.

### **MOST ACCURATE CLEANING**

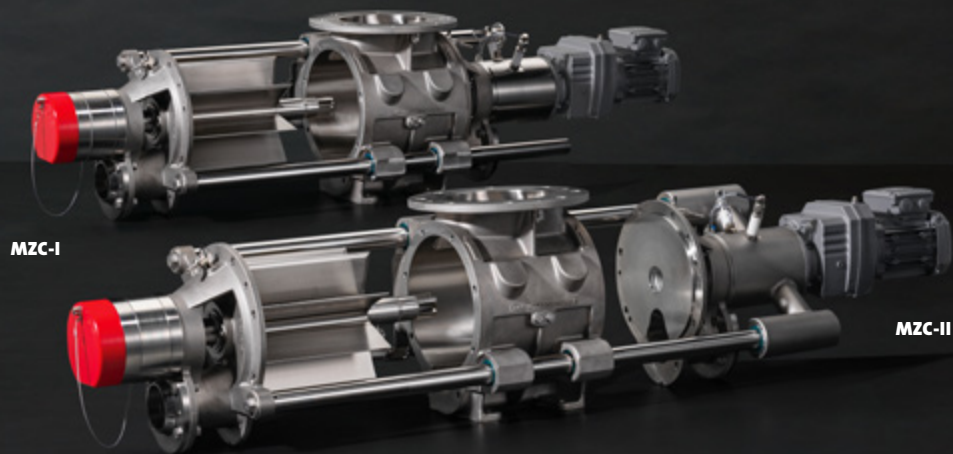
For cleaning within the Clean-in-Place process (CIP) the MZC-I and MZC-II rotary valves feature guiding rails to smoothly remove their rotor units, facilitating thorough and easy cleaning

of components. Our specially designed cradle in which the rotor can rest helps to perform CIP with even more accuracy. Accessories like a dummy shaft and dummy cover make sure the system remains closed and sealed during cleaning, ensuring cleanliness and integrity.

### **MORE SUSTAINABLE**

The MZC-design significantly improves CIP processes and reduces downtime. At the same time less water, chemicals, and energy are needed for cleaning operations, which enhances sustainability.





## MZC-I AND MZC-II STANDARD FOR SAFETY, HYGIENE, AND CLEANABILITY

Meet the MZC-I and MZC-II. Our AL and BL dairy rotary valves, equipped with slide rails. Designed for premium process handling and ultimate cleanability: easy one-sided or two-sided opening allows for easier cleaning. Maximise your output while cutting time

and costs for maintenance and cleaning. These rotary valves set the industry standard in safety, hygiene, and cleanability. The MZC-II rotary valve is a true gamechanger, engineered to eradicate even the most minute traces of powder.

### MZC-I CHARACTERISTICS

- Equipped with slide rails for ease of cleaning.
- Can be opened from the non-drive side.
- Rotor comes out attached to the non-drive end cover.
- Rotor body clearances are set automatically upon closing after cleaning.

### MZC-II CHARACTERISTICS

- Equipped with slide rails for ease of cleaning.
- Opens on two sides for unprecedented ease of access and superior cleanability.
- Rotor comes out attached to the non-drive end cover.
- Rotor body clearances are set automatically upon closing after cleaning.

Which rotary valve you need depends on your requirements for hygiene and access to the rotary valve.



TYPE		AVAILABLE SIZES AND CAPACITY					
DROP-THROUGH	AL	150 (6")	175 (7")	200 (8")	250 (10")	300 (12")	350 (14")
	AXL		200 (8")	250 (10")	300 (12")	350 (14")	
	NR				347		
BLOW-THROUGH	BL	150 (6")	175 (7")	200 (8")	250 (10")	300 (12")	350 (14")
	BXL		200 (8")	250 (10")	300 (12")	350 (14")	
	BXXL				350 (14")		
L/rev.*		2.5	5.5	10.5	19	34	58
Ft <sup>3</sup> /rev.*		0.09	0.19	0.37	0.67	1.20	2.05

\*At 100% capacity.





## AL/AXL/AML DAIRY ROTARY VALVE

### AUTHORITATIVE ENGINEERING FOR SANITARY PROCESSING

These rotary valves guarantee compliance with the highest safety standards, including USDA Dairy-accepted certification and EC 1935/2004 regulations. To prevent bacterial contamination in dairy processing, we construct our valves from food-grade materials and equip them with an exceptional surface finish, ensuring maximum hygiene. This series accommodates various capacity requirements, is available in different sizes and offers customisable polishing options for specific applications. With its larger inlet, the AXL excels in managing products with challenging flow properties.

### FEATURES FOR THE DAIRY INDUSTRY

- Smooth product contact surfaces polished to  $Ra=0.8\ \mu m$  (150 grit).
- Food contact materials compliant with EC 1935/2004 and FDA regulations.
- Easy removal of rotor for fast and efficient cleaning.
- Rotor pockets radiused and vanes chamfered on all edges.
- Higher-grade polishes available.
- Versions compliant with ATEX 2014/34/EU and NFPA 69 are available.
- AML rotary valves can also act as a transition piece from round to square and vice versa.

### AVAILABLE SIZES AND CAPACITY

AL	150 (6")	175 (7")	200 (8")	250 (10")	300 (12")	350 (14")
AXL		200 (8")	250 (10")	300 (12")	350 (14")	
AML		200 (8")	250 (10")	300 (12")	350 (14")	400 (16")
L/rev.*	2.5	5.5	10.5	19	34	58
Ft <sup>3</sup> /rev.*	0.09	0.19	0.37	0.67	1.20	2.05

\*At 100% capacity.



# BL/BXL/BXXL DAIRY ROTARY VALVE

## HALLMARK OF FOOD SAFETY AND EFFORTLESS PRODUCTION

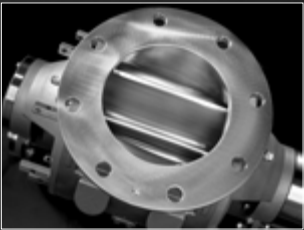
Expertly designed for the rigorous hygiene standards of the dairy industry. The BL/BXL/BXXL dairy blow-through rotary valves are a safety hallmark, boasting USDA certification. They enable swift, effortless maintenance and prevent bacterial contamination through food-grade, smoothly polished surfaces. The BL-series offers a versatile capacity range, constructed from robust AISI 316 and 316L stainless steel for longevity and hygiene. With their larger inlet, the BXL and BXXL excel in managing products with challenging flow properties.

## FEATURES FOR THE DAIRY INDUSTRY

- Smooth product contact surfaces polished to Ra=0.8 µm (150 grit).
- Food contact materials compliant with EC 1935/2004 and FDA regulations.
- Easy removal of rotor for fast and efficient cleaning.
- Rotor pockets radiused and vanes chamfered on all edges.
- Higher-grade polishes available.
- Versions compliant with ATEX 2014/34/EU and NFPA 69 are available.

AVAILABLE SIZES AND CAPACITY						
BL	150(6")	175 (7")	200 (8")	250 (10")	300 (12")	350 (14")
BXL		200 (8")	250 (10")	300 (12")	350 (14")	
BXXL				350 (14")		
L/rev.*	2.5	5.5	10.5	19	34	58
Ft³/rev.*	0.09	0.19	0.37	0.67	1.20	2.05

\*At 100% capacity.







## NR347 DAIRY REPLACEMENT ROTARY VALVE

### THE ULTIMATE REPLACEMENT FOR NIRO ROTARY VALVES

Handling dry dairy solids is about maintaining the strictest standards and requirements 24/7. So somewhere in the future, the Niro rotary valves you are currently using will have to be replaced. Our NR347 rotary valves (NR stands for Niro Replacement) match the outer dimensions of the Niro valves. They are a perfect fit, allowing for one-on-one, hassle-free replacement. The NR347 is based on our heavy-duty AL250 model and made of stainless steel. Meeting all hygiene and safety standards, the NR347 proves its value day in, day out.

### FEATURES FOR THE DAIRY INDUSTRY

- Exact-fit rotary valve dimensions.
- Easy installation.
- Versions with guide rails are available.
- Inlet round – outlet square.
- Smooth product contact surfaces polished to  $Ra=0.8\text{ }\mu\text{m}$  (150 grit).
- Food contact materials compliant with EC 1935/2004 and FDA regulations.
- Easy removal of rotor for fast and efficient cleaning.
- Rotor pockets radiused and vanes chamfered on all edges.
- Higher-grade polishes available.
- Versions compliant with ATEX 2014/34/EU and NFPA 69 are available.

### AVAILABLE SIZES AND CAPACITY

NR	347
L/rev.*	19
Ft <sup>3</sup> /rev.*	0.67

\*At 100% capacity.



## ENGINEER YOUR DAIRY PRODUCTION TO **PERFECTION**

Take your dairy production to the next level by adding our innovative solutions. Integrate our Rotor Interference Detection (RID 3.0), Sanitary Air Seal (SAS), or Shaft seal flow control into your production systems. Be one step ahead of future requirements and regulations!





## RID 3.0 REALTIME ROTOR INTERFERENCE DETECTION

Our third-generation Rotor Interference Detection (RID 3.0) marks a significant advancement in dairy safety and hygiene. RID 3.0 offers superb remote and real-time rotor interference detection in production lines. With extreme accuracy RID 3.0 detects unwanted contact between the rotor and body or end covers. It alarms operators to check for possible product contamination and ultimately also prevents major rotary valve damage. RID 3.0 is fifty times more accurate in resistance measurement than its predecessors.



## SHAFT SEAL FLOW CONTROL FOR PROTECTION AND PREVENTION

Boost the reliability of the AL and BL heavy-duty rotary valve series (including AXL, BXL, BXXL, and NR) even more. Shaft seal flow control ensures a consistent and controlled airflow, even in the face of pressure variations. This protects the shaft seals and prevents wear, ultimately contributing to the reliability

and performance of your equipment. Unlike pressure, airflow can be monitored precisely to register blockages or leaks. Accurate flow control prevents the build-up of powder residue on the shaft seals, minimising the risks of seal failure, contamination, leakage, damage, and downtime for cleaning and repair.



A detailed close-up photograph of a rotary valve shaft seal assembly. The central component is a polished, cylindrical metal shaft. It is surrounded by a complex arrangement of mechanical parts, including a series of small, rectangular, light-colored seals or gaskets that are precisely aligned along the shaft's length. The background shows the metallic, curved surfaces of the valve's internal components, creating a sense of depth and industrial precision.

## **SANITARY AIR SEAL (SAS) PREVENTING COMMON LEAKAGE PROBLEMS**

Today's dairy industry requires dependable and easy-to-use equipment. Rotary valves equipped with the SAS outboard bearing shaft seal are built to prevent leaks without fail. SAS ensures hassle-free operation while complying to the highest safety standards. SAS is the preferred shaft seal for dairy rotary valves and is mandatory for EHEDG-ED Class II certification.

A photograph of a Rotary Valve Bearing Toolkit. The toolkit is presented in a black, rugged plastic carrying case with a handle and latches. In front of the case, various components of the toolkit are neatly arranged on a dark surface. These include several long, thin metal rods of different lengths, a few smaller metal pins or spacers, and a collection of white, cylindrical bearing components of various sizes. The lighting is dramatic, highlighting the metallic sheen of the rods and the clean, white surface of the bearings against the dark background.

## **ROTARY VALVE BEARING TOOLKIT**

Worn-out bearings can cause severe damage to your rotary valves. The toolkit allows you to properly replace the bearings of your rotary valve for a perfectly functioning product.



# GPD DAIRY PLUG-TYPE DIVERTER VALVE

## THE DAIRY INDUSTRY’S CHOICE

How often a diverter valve needs to be cleaned mainly depends on the kind of powders or granulates your production lines are processing. For systems needing regular, quick cleaning with minimal downtime, our GPD is the perfect choice. This two-way gravity diverter valve enables swift disassembly and easy access to all contact surfaces, even when installed. It efficiently diverts gravity-fed material to two lines, using a 120° rotating plug blocking the inactive port. Smooth product contact surfaces polished to Ra=0.8 µm (150 grit) ensure the highest standards of cleanliness and hygiene. The GPD is designed to meet food safety regulations, with food contact materials compliant with EC 1935/2004 and FDA regulations.

## FEATURES FOR THE DAIRY INDUSTRY

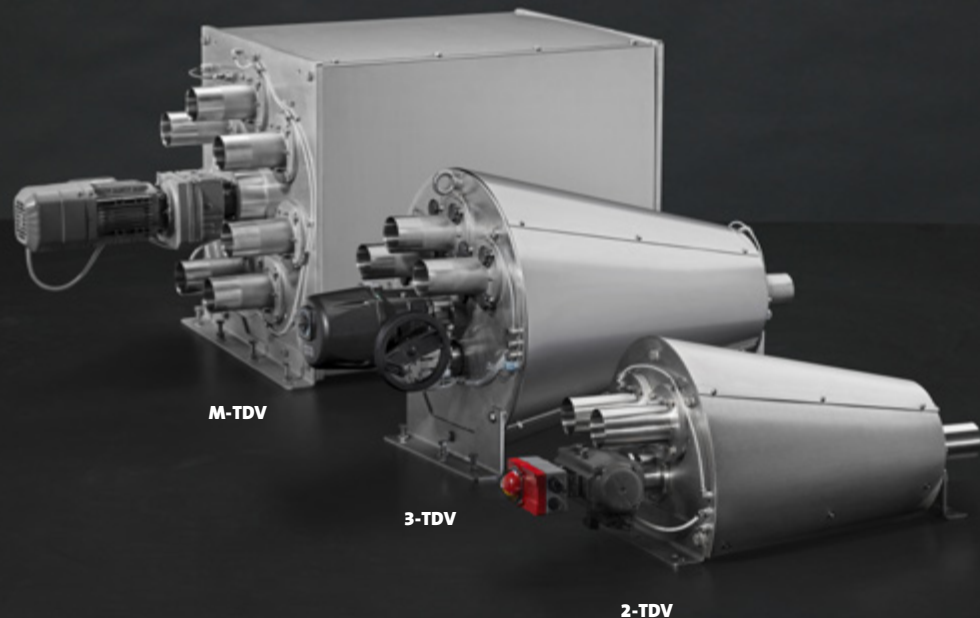
- Smooth product contact surfaces polished to Ra=0.8 µm (150 grit).
- Food contact materials compliant with EC 1935/2004 and FDA regulations.
- Easy removal of plug for fast and efficient cleaning.
- Higher-grade polishes available.
- Versions compliant with ATEX 2014/34/EU are available.

### AVAILABLE SIZES

GPD	150 (6")	200 (8")	250 (10")	300 (12")
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## 2-TDV/3-TDV/M-TDV DAIRY TUBE-TYPE DIVERTER VALVE

### STREAMLINING THE DISTRIBUTION OF DAIRY POWDERS

Elevate the efficiency and hygiene of your dairy powder handling. Our compact 2-TDV, 3-TDV, and M-TDV tube-type diverter valves streamline distribution. Thanks to a hygienic, smooth bore pipe between inlet and outlet, inflatable seals, and indexing tube plates sealing the unused ports. Our diverter valves are designed for quick disassembly and cleaning. But you can also take advantage of the CIP-option for routine upkeep.

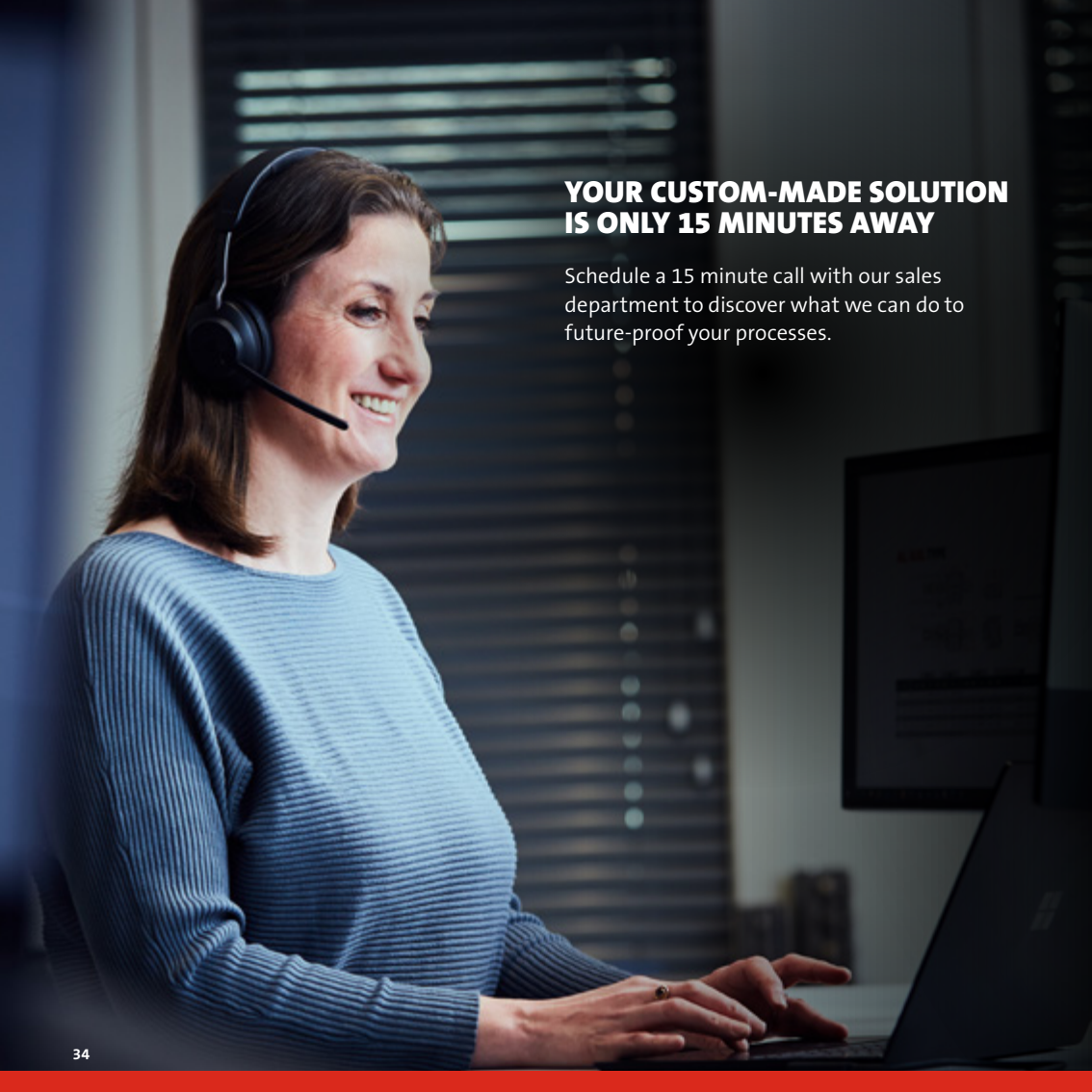
### FEATURES FOR THE DAIRY INDUSTRY

- Smooth product contact surfaces polished to Ra=0.8 µm (150 grit).
- All stainless steel configurations.
- Inflatable seals.
- Minimal product degradation.
- Easy detachable design.
- Food contact materials compliant with EC 1935/2004 and FDA regulations.
- Versions compliant with ATEX 2014/34/EU are available.

### AVAILABLE SIZES AND NUMBER OF PORTS

2-TDV/3-TDV/ M-TDV	40 (1.5")	50 (2")	65 (2.5")	80 (3")	100 (4")	125 (5")	150 (6")
Number of ports (M-TDV only)	4 up to 14	4 up to 13	4 up to 12	4 up to 11	4 up to 10	4 up to 8	4 up to 7





## YOUR CUSTOM-MADE SOLUTION IS ONLY 15 MINUTES AWAY

Schedule a 15 minute call with our sales department to discover what we can do to future-proof your processes.

## CONTACT

### WORLDWIDE DISTRIBUTION NETWORK

We are a global company with sales offices and distributors around the world. With our knowledge and expertise, we provide custom-made solutions and support to meet the unique needs of each customer. For more information and other inquiries, please contact your local sales team or distributor. You can find a complete list of distributors at [dmnwestinghouse.com/distributors](https://dmnwestinghouse.com/distributors).

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