



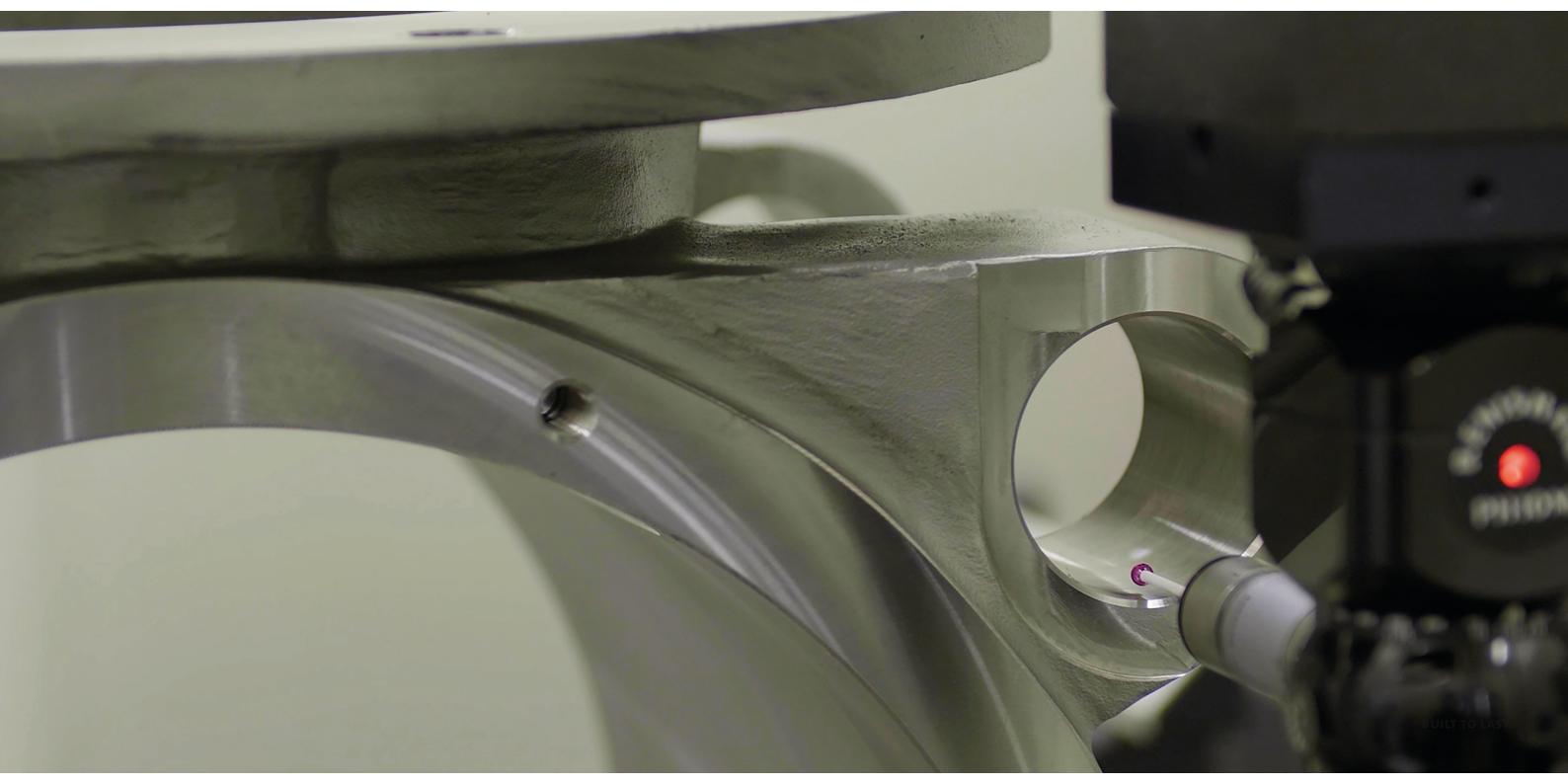
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The international world of processing comprises a large variety of industries and companies. DMN-WESTINGHOUSE has been designing and manufacturing rotary valves, diverter valves and other related components for the bulk solids handling industry for more than 40 years. As an independent company with no involvement in system design, our sole activity is to develop, manufacture and sell these components.

#### CONTENTS

ROTARY VALVES		4
Airlock	AL / AXL	6
Airlock	AML	8
Airlock	USAL	10
Blowing Seal	BL / BXL / BXXL	12
Medium Duty Airlock	MLD	14
Medium Duty Airlock	MALD	16
Sanitary Airlock	SAL	18
Granular Airlock	GL	20
Dust Lock	DL	22
Dairy Execution rotary valves	AL-AXL MZC & BL-BXL MZC	24
ROTARY VALVE TABLES		26
ROTOR OPTIONS		28
MATERIALS OF CONSTRUCTION		32
ACCESSORIES		34
DIVERTER VALVES		38
Dual Pipe Plug Diverter	PTD-II	40
Single Pipe Plug Diverter	SPTD	42
Single Pipe Plug Diverter	SPTDS	44
2-Port Tube Diverter	2-TDV	46
3-Port Tube Diverter	3-TDV	48
Multiport Tube Diverter	M-TDV	50
Gravity Plug Diverter	GPD	52
Flap Type Diverter	FDV	54
Ball Type Diverter	BTD	56
OTHERS		58
INDUSTRIES		62
CONTACT		64
LEGISLATION		66





# RCTARY MALVES

Our rotary valves and diverters have a well-established reputation for being able to handle powders and granular products from all industries, such as dairy, food, pharma, plastics and chemicals. We can supply cast iron, sp-aluminium and stainless steel valves with variations of build, depending on the materials being handled. For abrasive products we can offer different coatings depending on the nature of the materials, such as Hardox replaceable blades, Hard Chrome and Tungsten Carbide. For sanitary applications we have our original rail rotary valve, the "MZC", to allow easy removal of the rotor for cleaning purposes. EHEDG certification for CIP (Clean In Place) is also available. The valves can be polished internally and have full USDA / FDA approvals.











# AIRLOCK - AL / AXL



#### AL / AXL

PRESSURE	Up to 2 bar
PRESSURE SHOCK RESISTANT	Up to 10 bar
PRODUCT TEMP °C	Up to +150° (optional up to +600° depending on material of construction)
AMBIENT TEMP °C	-20° up to +40°
STANDARD / EASILY DETACHABLE	Yes
RID CONTROL	Yes
ROTOR	Adjustable blades / Fixed vanes
ADJUSTABLE BLADES	Steel / Steel hardened / Stainless steel / Polyurethane
SEAL	Gland / Air purge by means of: Packing cord / Lip seal
DRIVE	Chain / Direct drive: Helical gear unit - Parallel shaft helical gear unit
ATEX 2014/34/3U	1D/2GD Equipment / Protective system st.2 (10 bar p <sub>max</sub> )

<b>AL</b>	AX

MZC	Cast iron / Stainless steel only	Yes
MATERIAL OF CONSTRUCTION	Cast iron	Stainless steel 316
	Stainless steel 316	
	Aluminium	
	Ni-hard	
COATING	Chrome or Nickel plating	On request
	Tungsten carbide	
	Hard anodising	
FLANGE HOLE PATTERN	DIN PN10 / ANSI 150 (AL 100 DIN PN6)	DIN PN10 / ANSI 150

The AXL valves have enlarged inlets, which are specifically designed for products with poor flowab.	The AXL valves	have enlar	ged inlets,	which are s	pecificall	v designed	for prod	lucts with	poort	Towabil
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SIZE TYPE AL	100	150	175	200	250	300	350	400	450	500
SIZE TYPE AXL			200	250	300	350				
LTR/REV AT 100% FILLING	0,8	2,5	5,5	10,5	19	34	58	91	135	230

# AIRLOCK - AML















#### **AML**

PRESSURE	Up to 2 bar			
PRESSURE SHOCK RESISTANT	Up to 10 bar			
PRODUCT TEMP °C	Up to +150° (optional up to +600° depending on material of construction)			
AMBIENT TEMP °C	-20° up to 40°			
STANDARD / EASILY DETACHABLE	Yes			
MZC	Stainless steel only			
RID CONTROL	Yes			
MATERIAL OF CONSTRUCTION	Cast iron			
	Stainless steel 316			
COATING	Chrome or Nickel plating			
	Tungsten carbide			
FLANGE HOLE PATTERN	Round: DIN PN10 / ANSI 150 Square: upon drawing (AML 100 DIN PN6)			
ROTOR	Adjustable blades / Fixed vanes			
ADJUSTABLE BLADES	Steel / Steel hardened / Stainless steel / Polyurethane			
SEAL	Gland / Air purge by means of: Packing cord / Lip seal			
DRIVE	Chain / Direct drive: Helical gear unit - Parallel shaft helical gear unit			
ATEX 2014/34/3U	1D/2GD Equipment / Protective system st.2 (10 bar p <sub>max</sub> )			

SIZE TYPE AML	100	150	200	250	300	350	400
LTR/REV AT 100% FILLING	0,8	2,5	5,5	10,5	19	34	58

ROTARY VALVE - HIGH DUTY (OUTBOARD BEARING)

# **AIRLOCK – USAL**













#### USAL

PRESSURE	Up to 2 bar			
PRESSURE SHOCK RESISTANT	Up to 10 bar			
PRODUCT TEMP °C	Up to +150° (optional up to +400° depending on material of construction)			
AMBIENT TEMP °C	-20° up to +40°			
STANDARD / EASILY DETACHABLE	Yes			
MZC	No			
RID CONTROL	No			
MATERIAL OF CONSTRUCTION	NSTRUCTION Cast iron			
COATING	Chrome or Nickel plating			
	Tungsten carbide			
FLANGE HOLE PATTERN	Square: upon drawing			
ROTOR	Adjustable blades / Fixed vanes			
ADJUSTABLE BLADES	Steel / Steel hardened / Stainless steel / Polyurethane			
SEAL	Gland / Air purge by means of: Packing cord / Lip seal			
DRIVE	Chain / Direct drive: Helical gear unit - Parallel shaft helical gear unit			

SIZE TYPE USAL	203,2 (8")	254 (10")	304,8 (12")
LTR/REV AT 100% FILLING	5,5	10,5	19

# **BLOWING SEAL - BL / BXL / BXXL**













ROTARY VALVE - HIGH DUTY (OUTBOARD BEARING)



#### **BL/BXL/BXXL**

PRESSURE	Up to 2 bar
PRESSURE SHOCK RESISTANT	Up to 10 bar
PRODUCT TEMP °C	Up to +150° (optional up to +250°)
AMBIENT TEMP °C	-20° up to +40°
FLANGE DRILLED TO	DIN PN10 / ANSI 150
STANDARD / EASILY DETACHABLE	Yes
RID CONTROL	Yes
ROTOR	Ajustable blades / Fixed vanes
ADJUSTABLE BLADES	Steel / Steel hardened / Stainless steel / Polyurethane
SEAL	Gland / Air purge by means of: Packing cord / Lip seal
DRIVE	Chain / Direct drive: Helical gear unit - Parallel shaft helical gear unit
ATEX 2014/34/3U	1D/2GD Equipment / Protective system st.2 (10 bar p <sub>max</sub> )

	BL	BXL	BXXL
MATERIAL OF CONSTRUCTION	Cast iron Stainless steel 316		Stainless steel 316
	Stainless steel 316	Aluminium	
COATING	Chrome or Nickel plating	Hard anodising	On request
	Tungsten carbide layer		
MZC	Stainless steel only	Yes	Yes

The BXL and BXXLvalves have enlarged inlets, which are specifically designed for products with poor flowability.

SIZE TYPE BL	150	175	200	250	300	350	
SIZE TYPE BXL		200	250	300	350		
SIZE TYPE BXXL				350			
LTR/REV AT 100% FILLING	2,5	5,5	10,5	19	34	58	

# **MEDIUM DUTY AIRLOCK - MLD**











#### **MLD**

PRESSURE	Up to 1 bar
PRESSURE SHOCK RESISTANT	Up to 10 bar
PRODUCT TEMP °C	Up to +65°
AMBIENT TEMP °C	-20° up to +40°
MATERIAL OF CONSTRUCTION	Cast iron
	Stainless steel 316
COATING	Chrome or Nickel plating
	Tungsten carbide layer
FLANGE HOLE PATTERN	Round: DIN PN10 / ANSI 150 Square: upon drawing (MLD 100 DIN PN6)
ROTOR	Adjustable blades / Fixed vanes
ADJUSTABLE BLADES	Steel / Steel hardened / Stainless steel / Polyurethane
SEAL	Gland / Air purge by means of: Lip seal
DRIVE	Direct drive Helical gear unit
ATEX 2014/34/3U	1D/2GD Equipment

SIZE TYPE MLD	100	150	200	250	300	350	400	
LTR/REV AT 100% FILLING	0,8	2,5	5,5	10,5	19	34	58	











#### **MALD**

PRESSURE	Up to 1 bar
PRESSURE SHOCK RESISTANT	Up to 10 bar
PRODUCT TEMP °C	Up to +65°
AMBIENT TEMP °C	-20° up to +40°
MATERIAL OF CONSTRUCTION	Cast iron
	Stainless steel 316
	Aluminium
COATING	Chrome or Nickel plating
	Tungsten carbide layer
	Hard anodising
FLANGE HOLE PATTERN	Round: DIN PN10 / ANSI 150
ROTOR	Adjustable blades / Fixed vanes
ADJUSTABLE BLADES	Steel / Steel hardened / Stainless steel / Polyurethane
SEAL	Gland / Air purge by means of: Lip seal
DRIVE	Direct drive Helical gear unit
ATEX 2014/34/3U	1D/2GD Equipment

SIZE TYPE MALD	100	150	175	200	250	300	350
LTR/REV AT 100% FILLING	0,8	2,5	5,5	10,5	19	34	58

# **SANITARY AIRLOCK - SAL**











#### SAL

PRESSURE	Up to 1 bar	
PRODUCT TEMP °C	Up to +100°	
AMBIENT TEMP °C	-20° up to +40°	
MATERIAL OF CONSTRUCTION	Stainless steel 316L	
	Polished Ra o.8 (150 grit)	
COATING	No	
FLANGE HOLE PATTERN	Ferrule (Size 150: DIN PN6)	
ADJUSTABLE BLADES	N.A.	
SEAL	Gland / Air purge by means of: Lip seal	
DRIVE	Direct drive Worm gear unit	
ATEX 2014/34/EU	1D/2GD Equipment	

SIZE TYPE SAL	50	65	80	100	150
LTR/REV AT 100% FILLING	0,07	0,13	0,25	0,8	2,5

# **GRANULAR AIRLOCK - GL**











#### GL

PRESSURE	Up to 1.5 bar
PRODUCT TEMP °C	Up to +150° (optional up to +250° depending on material of construction)
AMBIENT TEMP °C	-20° up to +40°
MATERIAL OF CONSTRUCTION	Stainless steel 316
	Aluminium
COATING	Hard anodising
FLANGE HOLE PATTERN	DIN PN10 / ANSI 150
ROTOR	Fixed vane end disc stainless steel 316L
SEAL	Gland by means of packing cord
DRIVE	Chain / Direct drive: Helical gear unit - Parallel shaft helical gear unit
ATEX 2014/34/EU	1D/2GD Equipment

SIZE TYPE GL	150	200	250	300	350
LTR/REV AT 100% FILLING	5	10	17,5	32	79

# **DUST LOCK - DL**





#### DL

PRESSURE	Up to 0.5 bar
PRODUCT TEMP °C	Up to +70°
AMBIENT TEMP °C	-20° up to +40°
MATERIAL OF CONSTRUCTION	Cast Iron
FLANGE HOLE PATTERN	Universal flange connection to either Round or Square connection drilled to DIN PN10
ROTOR	Adjustable blades / Fixed vanes
ADJUSTABLE BLADES	Polyurethane
SEAL	Gland by means of Lip seal
DRIVE	Direct drive: Helical gear unit

<b>EXE</b>	CI	ITI		M 4	
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#### **EXECUTION 1EX**

ATEX 2014/34/EU	1D/2GD Equipment	1D/2GD Equipment / Protective system St.2
		Steel blades (3 bar p <sub>max</sub> )
		Polyurethane blades (2 bar p <sub>max</sub> )

SIZE TYPE DL	200	250	300
LTR/REV AT 100% FILLING	6	8,5	19

DL











# DAIRY EXECUTION ROTARY VALVES

The MZC rotary valves have been widely used in sanitary applications (Dairy execution) as well as many other applications. The unit has an easy Removeable rotor which can be removed within a few minutes to facilitate inspection and cleaning. The configuration with direct drive has a very narrow construction. The direct drive, in conjunction with a frequency inverter, results in a very flexible, safe and maintenance free unit (no chains or grease). The extraction mechanism offers a high degree of operator safety and gives the line operators considerable flexibility in cleaning and maintaining the equipment between runs. Moreover the stability of the extraction mechanism ensures that the rotor can be easily moved in and out of the housing without damaging the housing or the rotor blades.



#### **AL-AXL MZC** airlock with side rails

- Supporting bars for easy removal of rotor and end cover
- Direct drive or chain drive
- Narrow, fl exible and maintenance free construction with direct drive
- · Hygienic, USDA Dairy Accepted versions available
- Increased safety at work
- Explosion shock resistant up to 10 bar g
- Flameproof versions for both St1 and St2 products available
- Versions conforming to EC 1935/2004 available
- Versions conforming to ATEX 2014/34/EU available



#### **BL-BXL MZC blowing seal with side rails**

- Supporting bars for easy removal of rotor and end cover
- · Direct drive or chain drive
- Narrow, fl exible and maintenance free construction with direct drive
- · Hygienic, USDA Dairy Accepted versions
- Versions conforming to EC 1935/2004 available
- Increased safety at work
- Special blow through versions for cyclone or spray drier applications
- Explosion shock resistant up to 10 bar g
- Flameproof versions for both St1 and St2 products available
- Versions conforming to ATEX 2014/34/EU available



# **ROTARY VALVE TABLES**

#### FILLING CAPACITY VERSUS SIZE

MM/INCH"	50 / 2"	65 / 2.5"	80 / 3"	100 / 4"	150 / 6"	175 / 7"	200 / 8"	250 / 10"	300 / 12"	350 / 14"	400 / 16"	450 / 18"	500 / 20"
AL-BL				0.8 / 0.28	2.5 / o.8	5.5 / .19	10.5 / .37	19 /.67	34 /.1.2	58 / 2.05	91 / 3.21	135 / 4.77	220 / 8 12
AML				0.8 / 0.28	2.5 / 0.8	3.373	5.5 / .19	10.5 /.37	19 /.67	34 / .1.2	58 / 2.05	1337 4-11	2,0 / 0.12
AXL-BXL							5.5 / .19	10.5 /.37	19 /.67	34 / .1.2			
BXXL										19 / .67			
SAL	0.07 / .002	0.13 / .005	0.25 / .009	0.8 / 0.28	2.5 / o.8								
MLD				0.8 / 0.28	2.5 / o.8		5.5 / .19	10.5 / .37	19 / .67	34 / .1.2	58 / 2.05		
MALD					2.5 / o.8	5.5 / .19	10.5 / .37	19 / .67	34 / .1.2	58 / 2.05			
DL							6 / .21	8.5 / .3	19 / .67				

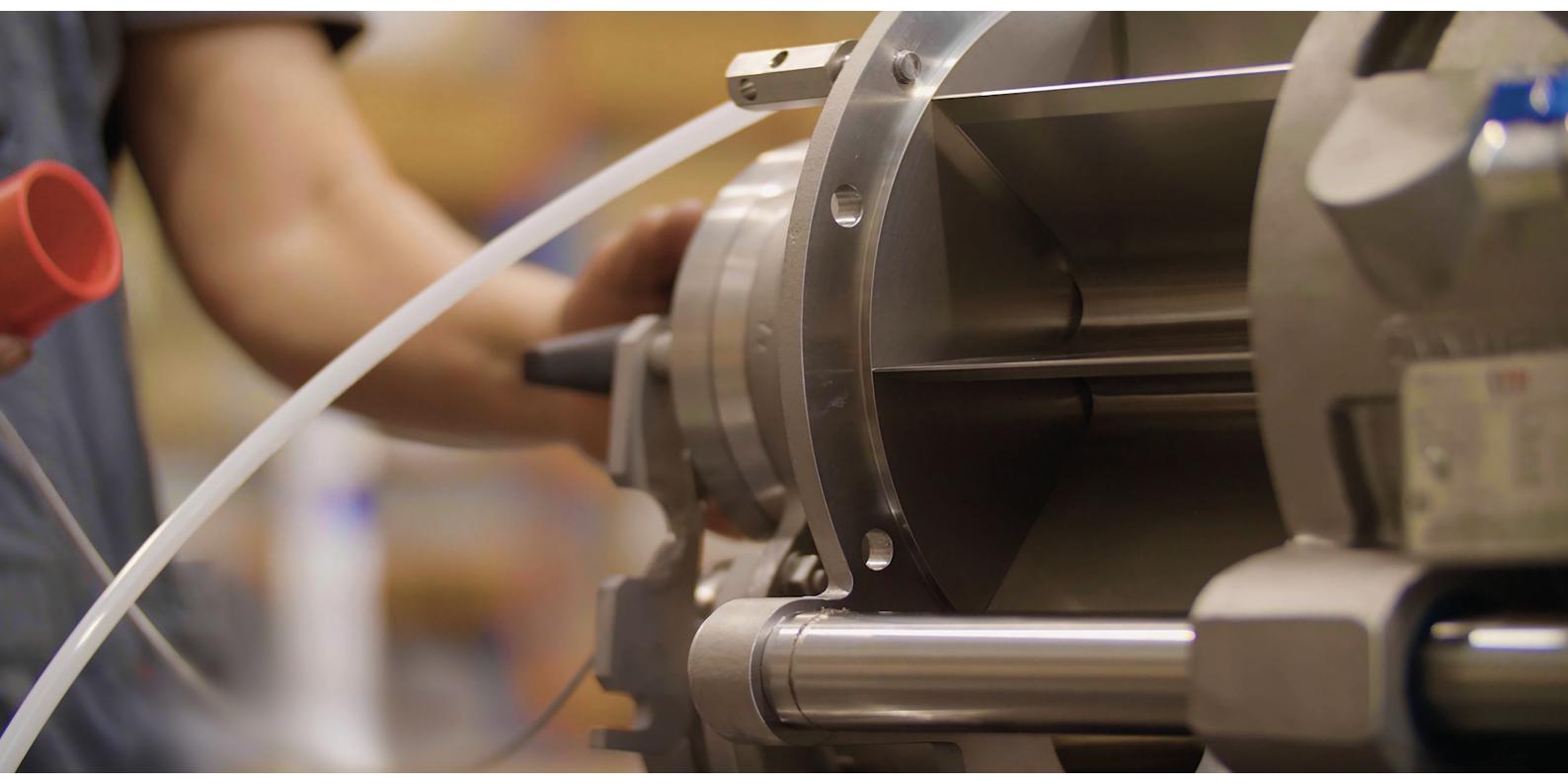
LTR./FT³

\* BASED ON LITRE / FT³ PER REVOLUTION AT 100% FILLING

#### **SIZE VERSUS FILLING CAPACITY**\*

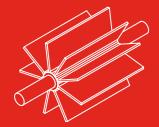
LTR./FT³	.07 / .002	.13 / .005	.25 / .009	.8 / .028	2.5 / .08	5.5 / .19	6 / .21	8,5 / .30	10.5 / .37	19 / .67	34 / 1.2	58 / 2.5	91 / 3.21	135 / 4.77	230 / 8.12
AL-BL				100 / 4"	150 / 6"	175 / 7"			200 / 8"	250 / 10"	250 / 10"	250 / 10"	400 / 16"	450 / 18"	500 / 20"
AML				100 / 4"	150 / 6"	200 / 8"			250 / 10"	300 / 12"	250 / 10"	400 / 16"			
AXL-BXL						200 / 8"			250 / 10"	300 / 12"	250 / 10"				
BXXL										350 / 14"					
SAL	50 / 2"	65 / 2.5"	80 / 3"	100 / 4"	150 / 6"										
MLD				100 / 4"	150 / 6"	200 / 8"			250 / 10"	300 / 12"	350 / 14"	400 / 16"			
MALD					150 / 6"	175 / 7"			200 / 8"	250 / 10"	300 / 12"	350 / 14"			
DL							200 / 8"	250 / 10"		300 / 12"					

MM/INCH"



# **ROTOR OPTIONS**

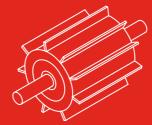




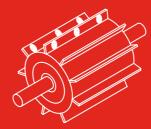
**FIXED BLADES** 



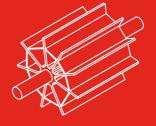
REPLACEABLE AND ADJUSTABLE BLADES



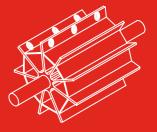
REDUCED CAPACITY
FIXED BLADES



REDUCED CAPACITY REPLACEABLE AND ADJUSTABLE BLADES



REDUCED CAPACITY
OPEN END FIXED BLADES



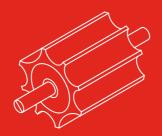
RC OPEN END REPLACEABLE AND ADJUSTABLE BLADES



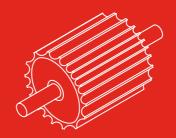
**END DISC FIXED BLADES** 



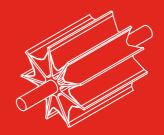
END-DISC REPLACEABLE AND ADJUSTABLE BLADES



SCALLOPED



**FINE DOSING** 



SCALLOPED OPEN END



SEMI END-DISC REPLACEABLE AND ADJUSTABLE BLADES



# MATERIALS OF CONSTRUCTION

#### **PRODUCT GROUP**

AL-AXL-AML-BL-BXL-BXXL-MLD-MALD

EXECUTION	BODY-END COVERS	ROTOR	ADJUBSTABLE BLADES	SHAFT SEAL
1	Cast iron	Mild steel	Mild steel	Gland - Rameh
2	Stainless steel 316	Stainless steel 316L	Stainless steel 316L	Gland - Teadit
3C	Cast Iron Completely Chromium plated	Stainless steel 316L	Stainless steel 316L	Gland - Teadit
3N	Cast Iron Completely Nickel plated	Stainless steel 316L	Stainless steel 316L	Gland - Teadit
4C	Cast Iron Bore + end covers Internally Chromium plated	Mild steel with Chromium plated shafts	Hardened steel (Hardox)	Air purge gland - Rameh
4TCO	Cast Iron Bore + end covers Internally Tungsted Carbide coated	Mild steel with Tungsten Carbide coated shafts	Hardened steel (Hardox)	Air purge gland - Rameh
4TS	Cast Iron Bore + end covers Internally Tungsten Carbide coated	Mild steel with Semi-end disc Tungsten Carbide coated discs and shafts	Hardened steel (Hardox)	Air purge gland - Rameh
4NH	Ni Hard body Cast Iron end covers	Mild steel End disc With End disc tipped with Stellite	Mild steel with Stellite tips	Gland - Rameh
5	SP-Aluminium	Stainless steel 316L	Stainless steel 316L	Gland - Teadit
DAIRY	Stainless steel 316	Stainless steel 316L	N.A.	Gland - Lip seal
DAIRY-WD	Stainless steel 316	Stainless steel 316L	N.A.	Gland - Lip seal
DAIRY-EL I	Stainless steel 316	Stainless steel 316L	N.A.	CIP seal

#### **ADDITIONAL**

D	Easy detachable
MZC	Easy detachable with supporting rails
HT 250	High temperature - Spherical roller bearing
HT 400	High temperature Cast Iron - Special ball bearing
HT 600	High temperature Stainless steel - Special ball bearing



# ACCESSORIES

# **ACCESSORIES**



**Inlet restrictor** 



Pressure regulator for all purged seals



**Vent box** 



**Dropout box** 



#### Rotor Interference Detection

Special control unit of DMN-Westinghouse design, used to monitor rotor to housing contact. The RID can be installed to minimize damage to the rotary valve and warn of possible contamination of the conveyed product.



#### **Toolkit**

Wornout bearings can cause serious damage to your rotary valves. That also applies to incorrect placement of new bearings. That's why DMN has developed the "Bearing Toolkit". This, allows you to proparly replace the bearings of your rotary valve in the right way for a perfectly functioning valve



# DIVIERIER VALUES

Diverters by DMN-WESTINGHOUSE are available in many types and sizes, suitable for a specific use or a variety of applications. The extensive diverter range comprises of a series of plug diverters (dual pipe, single pipe, gravity) and tube diverters (2-14 ports), some of which are also available in USDA Dairy accepted version. For the mineral industry, the BTD ball type diverter with its rugged design is very suitable for handling abrasive products.

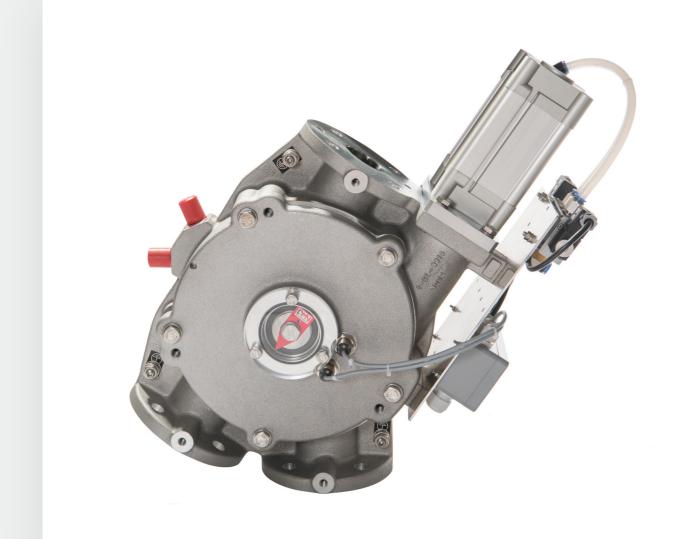
# **DUAL PIPE PLUG DIVERTER - PTD-II**











#### PTD-II

PRESSURE	Static -o.7 up to +3 bar
	Inflatable up to +6 bar
PRODUCT TEMPERATURE °C	Standard -20° up to +80° (Optional up to +120°)
AMBIENT TEMPERATURE °C	Standard -20° up to +60°
	ATEX -20° up to +40°
MATERIAL OF CONSTRUCTION	Aluminium body-plug-cover
	Stainless steel inserts
FLANGE HOLE PATTERN	DIN PN 10 / ANSI 150 lbs
SEAL	Static: silicone / polyurethane
	Inflatable: silicone
ATEX 2014/34/EU	1D / 2GD Equipment

SIZES	50	65	80	100	125	150	200
FLOW DIRECTION	50	65	80	100	125	150	200

# **SINGLE PIPE PLUG DIVERTER - SPTD**











#### **SPTD**

PRESSURE	Static -o.5 up to +3 bar
	Inflatable up to +6 bar
PRODUCT TEMPERATURE °C	Standard -20° up to +80° (Optional up to +150°)
AMBIENT TEMPERATURE °C	Standard -20° up to +60°
	ATEX -20° up to +40°
MATERIAL OF CONSTRUCTION	Aluminium body-plug-cover
	Stainless steel inserts
FLANGE HOLE PATTERN	DN PN 10 / ANSI 150 lbs
SEAL	Static: silicone
	Inflatable: silicone
ATEX 2014/34/EU	1D / 2GD Equipment
REMARK	Diverging only

									ON RE	QUEST
SIZES	150	162	200	213	250	267	300	318	350	400

VERTER VAIVE - DITIG TVE

SPTD

# **SINGLE PIPE PLUG DIVERTER - SPTDS**











#### **SPTDS**

PRESSURE	Static -o.5 up to +1 bar
PRODUCT TEMPERATURE °C	Standard -20° up to +80°
AMBIENT TEMPERATURE °C	Standard -20° up to +40°
MATERIAL OF CONSTRUCTION	Aluminium body-plug-cover
	Option: Hard anodised, stainless steel inserts
FLANGE DRILLED TO	Round: to drawing
SEAL	Static: silicone
ATEX 2014/34/EU	1D / 2GD Equipment
REMARK	Diverging only

SIZES 50	65	80	100	125	
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DIVERTER VALVE - PLUG TYPE

SPTDS

# **2-PORT TUBE DIVERTER - 2-TDV**













#### 2-TDV

PRESSURE	Static up to +1 bar
	Inflatable -0,8 up to +3 bar
PRODUCT TEMPERATURE °C	-20° up to +100° (+130° for short term only)
AMBIENT TEMPERATURE °C	Standard -20° up to +40°
MATERIAL OF CONSTRUCTION	Cover: Aluminium / Stainless steel 316L
	Tube: Stainless steel 316L
	Protection cover: Stainless steel 316L
PIPE	Imperial
SEAL	Static: silicone / Inflatable: EPDM
USDA	Optional
ATEX 2014/34/EU	1D / 2GD Equipment

SIZES	4	.0 50	65	80	100	125	150

DIVERTER VALVE - TUBE TYPE

2-TDV

# **3-PORT TUBE DIVERTER - 3-TDV**













#### 3-TDV

PRESSURE	Inflatable -o,8 up to +3 bar
PRODUCT TEMPERATURE °C	-20° up to +100° (+130° for short term only)
AMBIENT TEMPERATURE °C	Standard -20° up to +40°
MATERIAL OF CONSTRUCTION	Cover: Aluminium / Stainless steel 316L
	Tube: Stainless steel 316L
	Protection cover: Stainless steel 316L
PIPE	Imperial
SEAL	Inflatable: EPDM
USDA	Optional
ATEX 2014/34/EU	1D / 3D Equipment

SIZES	40	50	65	80	100	125	150	
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# **MULTI PORT TUBE DIVERTER - M-TDV**













#### M-TDV

PRESSURE	Inflatable -o,8 up to +3 bar
PRODUCT TEMPERATURE °C	-20° up to +100° (+130° for short term only)
AMBIENT TEMPERATURE °C	Standard -20° up to +40°
MATERIAL OF CONSTRUCTION	Cover: Aluminium / Stainless steel 316L
	Tube: Stainless steel 316L
	Protection cover: Stainless steel 316L
PIPE	Imperial
SEAL	Inflatable: EPDM
USDA	Optional
ATEX 2014/34/EU	1D / 2GD Equipment
REMARK	Specify mounting position and function on order. Upwards conveying while diverging is not recommended

SIZES	40	50	65	80	100	125	150
NUMBER OF PORTS	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

# **GRAVITY PLUG DIVERTER - GPD**











#### **GPD**

PRESSURE	No pressure	
PRODUCT TEMPERATURE °C	Standard -20° up to +80°	
AMBIENT TEMPERATURE °C	Standard -20° up to +40°	
MATERIAL OF CONSTRUCTION	Body-cover:	Plug:
	Cast Iron / Aluminium / Stainless steel 316	Mild steel / Hardox / Stainless steel 316L
FLANGE HOLE PATTERN	DIN PN 10 / ANSI 150 lbs	
SEAL	No seal	
ATEX 2014/34/EU	1D / 2GD Equipment	

SIZES	150	200	250	300

**DIVERTER VALVE - PLUG TYPE** 

GPD

# **FLAP TYPE DIVERTER - FDV**











#### **FDV**

PRESSURE	-0.3 up to +2 bar	
PRODUCT TEMPERATURE °C	Standard -25° up to +80° (Optional up to +150°)	
AMBIENT TEMPERATURE °C	Standard -20° up to +40°	
MATERIAL OF CONSTRUCTION	Body:	Pipe:
	Cast Iron / Aluminium / Stainless steel 316	Mild steel / Stainless steel 304L
FLANGE HOLE PATTERN	DIN PN 10 / ANSI 150 lbs	
PIPE	Metric	
SEAL	Static: Polyurethane / Silicone	
ATEX 2014/34/EU	1D / 2GD Equipment	

SIZES	50	65	80	100	125	150	200	250

FDV

# **BALL TYPE DIVERTER - BTD**







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PRESSURE	-o.5 up to +6 bar
PRODUCT TEMPERATURE °C	Standard -25° up to +80° (optional up to +150°)
AMBIENT TEMPERATURE °C	Standard -20° up to +40°
MATERIAL OF CONSTRUCTION	Ductile spheroidal cast iron GS 500/7
FLANGE HOLE PATTERN	DIN PN 10 / ANSI 150 lbs
SEAL	Static: Polyurethane
	Option: Viton (HT) / Silicone
ATEX 2014/34/EU	1D / 2GD Equipment
REMARK	Horizontal mounting is not recommended

SIZES	65	80	100	125	150	200	250	
JILLJ	05	80	100	125	150	200	250	



# OTHERS

# **OTHERS**



#### **Morris Couplings**

Morris couplings provide an economical connecting method of joining conveying pipes together. The range serves the pneumatic conveying industry with a complete line of precision quality coupling and tubing products. They can be used in both pressure and vacuum applications.

- × The original compression coupling
- × Easy to install
- × Substantial and reliable construction
- × Competitive pricing
- × Electrical conductivity guaranteed
- Available for practically every pipe diameter



#### **Pressure Relief Valve**

- × Reliable
- × Compact form
- × Maintenance free
- X Use of non corrosive materials
- × Easy disassembling and inspection



# INDUSTRIES

#### **ROTARY VALVES**

	AL AXL	AML	USAL	BL BXL BXXL	MLD MALD	SAL	GL	MZC	DL
FOOD	~	<b>~</b>	<b>~</b>	~	~	~		~	~
DAIRY	~	~		<b>~</b>		~		~	
ANIMAL FEED	~	<b>~</b>	<b>~</b>	~	~	~		~	~
PHARMA	~	<b>~</b>	~	<b>~</b>	~	<b>~</b>		<b>~</b>	~
PLASTICS	~	<b>~</b>	~	~	~		<b>~</b>	~	~
PETRO-CHEMICAL	~	<b>~</b>	<b>~</b>	<b>~</b>	~		~	~	~
MINERAL	~	<b>~</b>	<b>~</b>	~	~			~	~
POWER/BIOMASS	~	<b>~</b>	<b>~</b>	~	~			~	~
RECYCLING	~	<b>~</b>	~	~	~		~		~

**✓** RECOMMENDED **✓** \ SOMETIME USED **X** NOT RECOMMENDED

### **DIVERTER VALVES**

	PTD-II	SPTD	SPTDS	2-TDV 3-TDV	M-TDV	GPD	FDV	BTD
FOOD		~	<b>~</b>	<b>~</b>	~	<b>~</b>	<b>~</b>	
DAIRY	~	~	~	<b>~</b>	~	<b>~</b>	<b>~</b>	
ANIMAL FEED	~	~	~	<b>~</b>	~	<b>~</b>	<b>~</b>	~
PHARMA	~	~	<b>~</b>	<b>~</b>	~	<b>~</b>		
PLASTICS	~	~	<b>~</b>	<b>~</b>	~	<b>~</b>	<b>~</b>	
PETRO-CHEMICAL	~	~	<b>~</b>	<b>~</b>	~	<b>~</b>	<b>~</b>	
MINERAL	~	~	<b>~</b>			<b>~</b>	<b>~</b>	~
POWER/BIOMASS	~	~	<b>~</b>			<b>~</b>	<b>~</b>	<b>~</b>
RECYCLING	~	~	~			<b>~</b>	~	~

BUILT TO LAST.

✓ RECOMMENDED ✓ \ SOMETIME USED × NOT RECOMMENDED

# DMN-WESTINGHOUSE OFFICES WORLDWIDE

Head office

The Netherlands

#### **DMN-WESTINGHOUSE**

+31 252 361 800 dmn@dmnwestinghouse.com www.dmnwestinghouse.com France

#### DMN FRANCE SAS

+33 1 6949 8570 contact@dmn-westinghouse.fr www.dmnwestinghouse.fr United Kingdom

#### **DMN UK LTD**

+44 1249 818 400 dmn@dmnuk.com www.dmnwestinghouse.uk USA

#### **DMN INCORPORATED**

+1 870 733 9100 sales.us@dmnwestinghouse.com www.dmn-inc.com Germany

#### **DMN SCHUTTGUTTECHNIK GMBH**

+49 4181 931 40 dmn@dmn-sgt.com www.dmnwestinghouse.de

















# **LEGISLATION**

In certain parts of the process industry it is very important that product contamination is prevented in the process. When dealing with powders, there is also always a danger of dust explosions. In order to protect public health and to ensure safe working conditions, governments have drawn up an official legislation for systems and components. Moreover, private organisations have created specifications that components should comply with, in order to meet the required branch or system-specific requirements.

**ATEX** | Process systems and components often have to be able to withstand explosions and prevent fires from passing the component. This has resulted in official European legislation, known as the ATEX 2014/34/EU Directive. All DMN rotary valves and diverter valves are also available in ATEX 2014/34/EU compliant versions.

USDA | With regards to the USDA (United States Department of Agriculture), our AL, AML and BL rotary valves are tested and certified USDA Dairy Accepted. This also applies to our 2- and 3-TDV tube diverters, M-TDV multiport diverter and GPD gravity plug diverter. This means that these components meet the high standards that apply in the US food, dairy, pet food and other related industries.

NFPA 69 | The National Fire Protection Association (NFPA) provides regulations to protect your manufacturing plant from fires, deflagrations, explosions, and other safety risks. Our NFPA 69 compliant rotary valves have particular design and construction elements. Under NFPA 69 Section 12.2.3.2 for Rotary Valve Design Criteria, the following

models are offered with NFPA 69 compliance: AL/AXL, AML, BL/BXL/ BXXL, and USAL.

EC 1935/2004 FDA | The European regulation EC 1935/2004 applies to all food contact materials. With regard to the use of these materials as parts in our components, we can supply a declaration of compliance and appropriate documentation that demonstrate compliance to the EC 1935/2004 regulation and its supporting regulations EC 10/2011 and EC 2023/2006. The materials used also conform to FDA regulations with regard to food contact.

**EAC** | EAC is a certification mark which indicates that the products conform to all technical regulations of the Eurasian Customs Union and is a guarantee that the products marked with it comply with health, safety, and environmental protection standards. All DMN-WESTINGHOUSE rotary valves and diverter valves comply with the corresponding technical requirements of the EAEU (Eurasian Economic Union) and have passed all conformity assessment procedures.