ROTARY AIRLOCK VALVE





ABOUT US

Setting the standard for environmental protection. At UNICON we are constantly investing in resources for Product development with an objective to provide Market-leading products that reduce our customers Downtime as well as keeping the environment safe.

Delivering technology and services with more than 25 years of experience



Global presence over 10+ countries across the world

Our Strength is the vast pool of expertise already mobilized from various fields of Design, Manufacturing, Project management, Servicing, Up gradation and Augmentation of Air Pollution Control equipments.

time, continually

We have created our organization with a vision to provide world-class service to our clients in all the above areas where we are unquestionably strong. Our greatest strength lies in our highly skilled and committed work force.



DESIGN & ENGINEERING

Optimum Sizing

With our vast experience in sizing of APC equipments, we are able to provide Optimum sizing to our customers.

Cost Effectiveness

As Unicon utilizes modern technologies for designing equipments, we are able to provide cost effective solution to our customers.

Working with Space Constraints

Unicon is equipped with various tools to provide suitable solutions considering all space constraints.

RANGE OF PRODUCTS

NAME OF PRODUCT RANGE 1 MW to 600 MW Electrostatic Precipitator (ESP) 1 MW to 300 MW Bag Filter / Bag House Ammonia Flue Gas Conditioning 5 MW to 300 MW 5 MW to 300 MW Pneumatic Conveying Systems 100 mm to 1200 mm opening Rotary Airlock Valve Slide Gate Valves 200 mm to 1500 mm opening Double Cone Valves 200 mm to 800 mm opening Double Flap Valves 200 mm to 1000 mm opening Clam Shell Gate 300 mm to 2000 mm opening Dome Valve 100 mm to 500 mm opening Defense Equipments As per customer requirement Storage Tanks Upto 10,000 mm diameter Upto 5,000 mm diameter Agitators Decomposer As per customer requirement Pressure Vessels Upto 5,000 mm diameter Jacketed Vessels Upto 5,000 mm diameter

SPECIAL FEATURES OF UNICON DESIGN

- Very compact to accommodate any space constraints
- Less weight
- Competitive price
- Special designs to suite customer requirements
- Cost effective solutions to meet customer needs
- Very less wear and tear & improved life
- Optimum power consumption



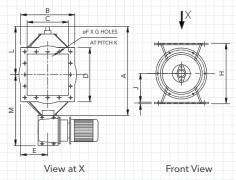
Installing RAV's for your factory, industry or plant? Our installation solutions extends around the world

ROTARY AIRLOCK VALVE CASTING (UCR)



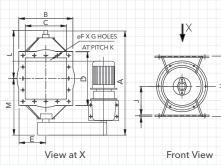
DIRECT DRIVE : Dimensions

SIZE	А	В	С	D	E		G	Н			K	L	M*
UCR 150	450	250	150X150	250X250	125	12	8	250	10	125	224	300	290
UCR 200	614	325	200X200	325X325	162.5	14	10	325	12	162.5	280	350	340
UCR 250	664	375	250X250	375X375	187.5	14	16	375	12	187.5	335	400	390
UCR 300	730	425	300X300	425X425	215	14	16	425	12	212	391	450	440
UCR 350	780	475	350X350	475X475	238	20	16	475	12	280	447	500	490
UCR 400	830	525	400X400	525X525	262.5	14	12	600	12	300	503	550	540



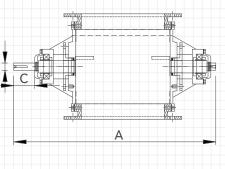
CHAIN DRIVE : Dimensions

	SIZE	А	В	С	D	E	F	G	Н	1	J	K	L	М
	UCR 150	450	250	150X150	250X250	125	12	8	250	10	125	224	300	230
	UCR 200	614	325	200X200	325X325	162.5	14	10	325	12	162.5	280	350	280
_	UCR 250	664	375	250X250	375X375	187.5	14	16	375	12	187.5	335	400	330
	UCR 300	730	425	300X300	425X425	215	14	16	425	12	212	391	450	380
	UCR 350	780	475	350X350	475X475	238	20	16	475	12	280	447	500	430
	UCR 400	830	525	400X400	525X525	262.5	14	12	600	12	300	503	550	480



BARE SHAFT : Dimensions

SIZE	А	В	С	
UCR 150	580	25	50	
UCR 200	600	25	50	
UCR 250	670	25	50	
UCR 300	730	30	50	
UCR 350	800	30	50	
UCR 400	850	30	50	



All dimensions are in mm.

Our standard Valve body is designed in a way that Connection Flanges are suitable for Square and Round type Flanges, which make it best to suit the connection.

UCR type Valve Body is made up of Cast Iron which has advantage of less wear, high corrosion resistance and thermal stability over Mild Steel.

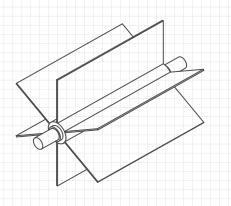
Unicon Valve body has the following salient features,

- High Filling Efficiency
- Sheared angle inlet
- Minimum air leakage
- Customized Solution
- Robust body adequately stiffened to prevent distortion.

ROTORS

Our Standard Rotor is Open End Type with 6 Vanes. Optional features of Closed End Rotor are available upon request.

Unicon Rotors are provided with adjustable Wear blades as an optional features and having a close radial clearance of 0.1 mm.



SHAFT SEALING

We are using Teflon Ring / O Ring / Labyrinth seal that fits around the shaft to prevent the leakage of any particles from Valve Body.

These seals provide non-contact sealing action by resisting the passage of dust particles. In addition, we are providing Graphite sealing to make the seal effective and friction free.

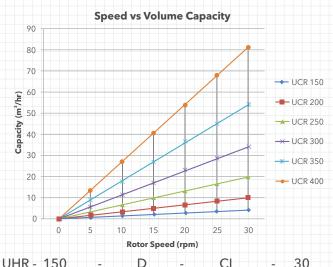
- No Dust / Particle Spillage
- Friction less sealing
- Longer life span
- Lesser cost

CAPACITY/MODEL SELECTON TABLE

SIZE	SPEED (rpm)	CAPACITY (m³/hr)
UCR 150	30	4.3
UCR 200	30	10.2
UCR 250	30	19.9
UCR300	30	34.3
UCR 350	25	45.4
UCR 400	25	67.8

Primary function of Rotary Valve is to regulate the flow from one chamber to another while maintaining a good Airlock condition.

MODEL SELECTION CHART



100	U	CI	30
SIZE (mm)	DRIVE	MOC	rpm
150	D - Direct	CI - Cast Iron	15-32
200	C - Chain	SS -	
250	B - Bare shaft	Stainless steel	
300			
350			
400			

Body	•	Cast Iron / SS
Rotor		Cast Iron / SS - Open / Closed
		rotortype
End Cover :	•	Cast Iron / SS
Seals	:	Oil Seal / O Ring / Labyrinth Seal
Special Seals	:	Grease Purge / Air Purge
Painting colour code :	:	Royal Blue
Bearings		In board
Bearing Make		SKF/NTN/FAG
GearBox	:	Worm Gears / Helical Gears
Temperatures	:	Built to significant temperature
Capacity Range	:	Upto 55 m³/hr Max.
SurfaceTreatment		SA2.5

ROTARY AIRLOCK VALVE FABRICATED (UFR)

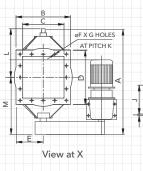


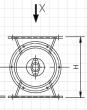
DIRECT DRIVE : Dimensions

SIZE	A	В	С	D	E		G	н			К		M*	
UFR 150	450	250	150X150	250X250	125	12	8	250	10	125	224	300	290	
UFR 200	614	325	200X200	325X325	162.5	14	10	325	12	162.5	280	350	340	
UFR 250	664	375	250X250	375X375	187.5	14	16	375	12	187.5	335	400	390	
UFR 300	730	425	300X300	425X425	215	14	16	425	12	212	391	450	440	
UFR 350	780	475	350X350	475X475	238	20	16	475	12	280	447	500	490	
UFR 400	830	525	400X400	525X525	262.5	14	12	600	12	300	503	550	540	
														View at X Front View

CHAIN DRIVE : Dimensions

	SIZE	А	В	С	D	E	F	G	Н	I	J	К	L	M*
_	UFR 150	450	250	150X150	250X250	125	12	8	250	10	125	224	300	230
	UFR 200	614	325	200X200	325X325	162.5	14	10	325	12	162.5	280	350	280
_	UFR 250	664	375	250X250	375X375	187.5	14	16	375	12	187.5	335	400	330
_	UFR 300	730	425	300X300	425X425	215	14	16	425	12	212	391	450	380
	UFR 350	780	475	350X350	475X475	238	20	16	475	12	280	447	500	430
_	UFR 400	830	525	400X400	525X525	262.5	14	12	600	12	300	503	550	480

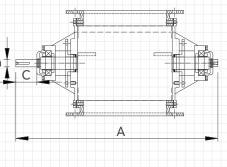




Front View

BARE SHAFT : Dimensions

SIZE	A	В	С	
UCR 150	580	25	50	
UCR 200	600	25	50	Ω.
UCR 250	670	25	50	
UCR 300	730	30	50	
UCR 350	800	30	50	
UCR 400	850	30	50	



All dimensions are in mm.

Our standard Valve body is designed in a way that Connection Flanges are suitable for Square and Round type Flanges, which make it best to suit the connection.

UFR type Valve Body is made up of Mild Steel / SS (of any Grade) which has advantage of flexible design for various duty over Cast Iron.

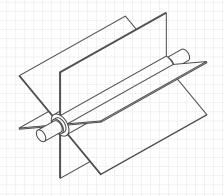
Unicon Valve body has the salient features,

- High Filling Efficiency
- Sheared angle inlet
- Minimum air leakage
- Customized Solution
- Robust body adequately stiffened to prevent distortion.

ROTORS

Our Standard Rotor is Open End Type with 6 Vanes. Optional features of Closed End Rotor are available upon request. Also we have add-on features for 7/8/9 vanes.

Unicon Rotors are provided with adjustable Wear blades as an optional features and having a close radial clearance of 0.1 mm.



SHAFT SEALING

We are using Teflon Ring / O Ring / Labyrinth seal that fits around the shaft to prevent the leakage of any particles from Valve Body.

These seals provide non-contact sealing action by resisting the passage of dust particles. In addition, we are providing Graphite sealing to make the seal effective and friction free.

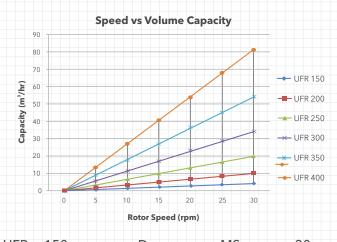
- No Dust / Particle Spillage
- Friction less sealing
- Longer life span
- Lesser cost

CAPACITY/MODEL SELECTON TABLE

SIZE	SPEED (rpm)	CAPACITY (m³/hr)
UFR 150	30	4.3
UFR 200	30	10.2
UFR 250	30	19.9
UFR300	30	34.3
UFR 350	25	45.4
UFR 400	25	67.8

Primary function of Rotary Valve is to regulate the flow from one chamber to another while maintaining a good Airlock condition.

MODEL SELECTION CHART



UFR - 150	- D -	MIS -	30	
SIZE (mm)	DRIVE	MOC	rpm	
150	D - Direct	MS -	15-32	
200	C - Chain	Mild Steel		
250	B - Bare shaft	SS -		
300		Stainless steel		
350				
400				

Body	:	Mild Steel/SS
Rotor	÷	Mild Steel / SS - Open / Closed
		rotortype
End Cover	:	Mild Steel / SS
Seals	:	Oil Seal / O Ring / Labyrinth Seal
Special Seals	:	Grease Purge / Air Purge
Painting colour code	e :	Royal Blue
Bearings	÷	In board / Out board
Bearing Make	:	SKF/NTN/FAG
GearBox	:	Worm Gears / Helical Gears
Temperatures	:	Built to significant temperature
Capacity Range	:	Upto 55 m³/hr Max.
SurfaceTreatment	÷	SA2.5

ROTARY AIRLOCK VALVE BLOW THROUGH (UBR)



DIRECT DRIVE : Dimensions

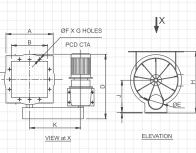
SIZE A B C *D E F G H I JJ *K UBR 150 363 \u0096290 \u0096150 \u00550 \u009665 \u009622 \u0088 \u003333 \u00550 \u00566 UBR 200 \u00388 \u0098340 \u0098200 \u006600 \u009880 \u009822 \u00888 \u003838 \u00560 \u005600 UBR 250 \u00488 \u0068300 \u006802 \u00880 \u009822 \u00488 \u003838 \u006860 \u006860 \u006822 \u00488 \u00388 \u006860 \u006860 \u006822 \u00488 \u00488 \u006860 \u006860 \u006822 \u00488 \u00488 \u006860 \u006860 \u006860 \u006860 \u006860 \u0068860 \u006860 \u0068860 \u006860 \u006860 \u0048860 \u006860 \u0068860 <												
UBR 200 388 ø340 ø200 600 ø80 ø22 8 380 5 190 550 UBR 250 438 ø395 ø250 650 ø100 ø22 12 440 5 226 600 UBR 300 498 ø445 ø300 700 ø120 ø22 12 500 6 260 650	SIZE	А	В	С	*D	E	F	G	н	I	J	*K
UBR 250 438 ø395 ø250 650 ø100 ø22 12 440 5 226 600 UBR 300 498 ø445 ø300 700 ø120 ø22 12 500 6 260 650	UBR 150	363	ø290	ø150	550	ø65	ø22	8	333	5	165	500
UBR 300 498 ø445 ø300 700 ø120 ø22 12 500 6 260 650	UBR 200	388	ø340	ø200	600	ø80	ø22	8	380	5	190	550
	UBR 250	438	ø395	ø250	650	ø100	ø22	12	440	5	226	600
UBR 350 538 ø495 ø350 750 ø130 ø22 12 555 6 290 700	UBR 300	498	ø445	ø300	700	ø120	ø22	12	500	6	260	650
	UBR 350	538	ø495	ø350	750	ø130	ø22	12	555	6	290	700

CHAIN DRIVE : Dimensions

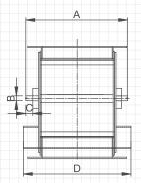
	SIZE	А	В	С	*D	E	F	G	н	1	J	*K
_	UBR 150	363	ø290	ø150	550	ø65	ø22	8	333	5	165	250
_	UBR 200	388	ø340	ø200	600	ø80	ø22	8	380	5	190	250
_	UBR 250	438	ø395	ø250	650	ø100	ø22	12	440	5	226	250
_	UBR 300	498	ø445	ø300	700	ø120	ø22	12	500	6	260	300
	UBR 350	538	ø495	ø350	750	ø130	ø22	12	555	6	290	300

BARE SHAFT : Dimensions

Ĩ				
	SIZE	А	В	С
	UBR 150	460	25	50
	UBR 200	510	25	50
	UBR 250	560	25	50
	UBR 300	610	30	50
	UBR 350	660	30	50



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All dimensions are in mm.

Our standard Blow through Type Valve body is designed in a way that blower pipe connected with one side and materials delivery through the other side.

Connection Flanges are suitable for Square and Round type Flanges, which make it best to suit the connection.

UBR type Valve Body is made up of Mild Steel / SS (of any Grade) which has advantage

of flexible design for various duties over Cast Iron.

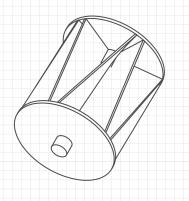
Unicon Valve body has the salient features,

- High Filling Efficiency
- Sheared angle inlet
- Minimum air leakage
- Customized Solution
- Robust body adequately stiffened to prevent distortion.

ROTORS

Our Standard Rotor is Open End Type with 6 Vanes. Optional features of Closed End Rotor are available upon request. Also we have add-on features for 7/8/9 vanes & Bevel rotor arrangement.

Unicon Rotors are provided with adjustable Wear blades as an optional features and having a close radial clearance of 0.1 mm.



SHAFT SEALING

We are using Teflon Ring / O Ring / Labyrinth seal that fits around the shaft to prevent the leakage of any particles from Valve Body. These seals provide noncontact sealing action by resisting the passage of dust particles. In addition, we are providing Graphite sealing to make the seal effective and friction free.

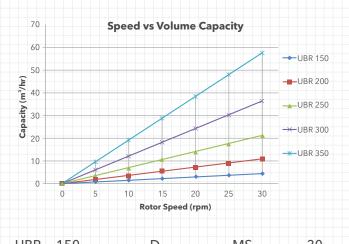
- No Dust / Particle Spillage
- Friction less sealing
- Longer life span
- Lesser cost

CAPACITY/MODEL SELECTON TABLE

SIZE	SPEED (rpm)	CAPACITY (m³/hr)		
150	30	4.5		
200	30	10.6		
250	30	21.1		
300	30	36.2		
350	30	57.4		

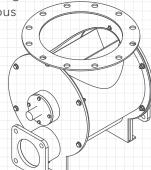
Primary function of Rotary Valve is to regulate the flow from one chamber to another while Blower will be used to pump the materials to designated point maintaining a good Airlock condition.

MODEL SELECTION CHART



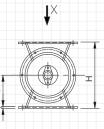
UBR - 150	- D -	MS -	30
SIZE (mm)	DRIVE	MOC	rpm
150	D - Direct	MS -	15-32
200	C - Chain	Mild Steel	
250	B - Bare shaft	SS -	
300		Stainless steel	
350			

Body	:	Mild Steel / SS
Rotor	÷	Mild Steel / SS - Open / Closed
		rotortype
End Cover	:	Mild Steel / SS
Seals	:	Oil Seal / O Ring / Labyrinth Seal
Special Seals	:	Grease Purge / Air Purge
Painting colour code	e :	Royal Blue
Bearings	:	In board / Out board
Bearing Make	:	SKF/NTN/FAG
GearBox	:	Worm Gears / Helical Gears
Temperatures	:	Built to significant temperature
Capacity Range	:	Upto 55 m³/hr Max.
Surface Treatment	÷	SA 2.5



ROTARY AIRLOCK VALVE Heavy Duty (UHR)





Front View

CHAIN DRIVE : Dimensions

SIZE	А	В	C	D	E	F	G	Н		J	К	L	М
UHR 500	1000	610	500X500	610	305	14	16	750	14	375	142	230	650
UHR 600	1100	730	600X600	730	365	18	16	900	14	450	170	250	800
UHR 700	1250	855	700X700	855	427.5	18	20	1050	16	525	159	300	900
UHR 800	1400	955	800X800	955	477.5	18	20	1200	16	600	179	370	1050
UHR 900	1450	1060	900X900	1060	530	18	20	1350	16	675	195	400	1200
UHR 1000	1600	1160	1000X1000	1160	580	20	20	1500	18	750	215	450	1300

BARE SHAFT : Dimensions

SIZE	A	В	С
UHR 500	850	70	100
UHR 600	950	70	100
UHR 700	1050	70	150
UHR 800	1150	70	200
UHR 900	1250	80	200
UHR 1000	1350	80	225

All dimensions are in mm.

Our standard Valve body is designed for heavy Application of Bulk conveying for high Temperatures and huge particle sizes.

UHR type Valve Body is made up of Mild Steel / SS (of any Grade) which has advantage of flexible design for various duties over Cast Iron. Provision of Side Doors in Valve body is also available.

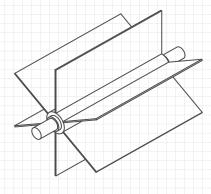
Unicon Valve body has the salient features,

- High Filling Efficiency
- Sheared angle inlet
- Minimum air leakage
- Customized Solution
- Robust body adequately stiffened to prevent distortion.

ROTORS

Our Standard Rotor is Open End Type with 6 Vanes. Optional features of Closed End Rotor are available upon request. Also we have add-on features for 7/8/9 vanes.

Unicon Rotors are provided with adjustable Wear blades as an optional features and having a close radial clearance of 0.1 mm



SHAFT SEALING

We are using Teflon Ring / O Ring / Labyrinth seal that fits around the shaft to prevent the leakage of any particles from Valve Body.

These seals provide non-contact sealing action by resisting the passage of dust particles. In addition, we are providing Graphite sealing to make the seal effective and friction free.

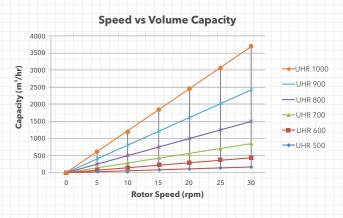
- No Dust / Particle Spillage
- Friction less sealing
- Longer life span
- Lesser cost

CAPACITY/MODEL SELECTON TABLE

SIZE	SPEED (rpm)	CAPACITY (m³/hr)
UHR 500	25	130
UHR 600	25	230
UHR 700	25	360
UHR 800	25	540
UHR 900	25	770
UHR 1000	25	1060

Primary function of Rotary Valve is to regulate the flow from one chamber to another while maintaining a good Airlock condition for heavy Application of Bulk conveying.

MODEL SELECTION CHART



UHR - 150	- C -	MS -	30
SIZE (mm)	DRIVE	MOC	rpm
500	C - Chain	MS -	15-32
600	B - Bare shaft	Mild Steel	
700		SS -	
800		Stainless steel	
900			
1000			

Body	:	Mild Steel / SS
Rotor	÷	Mild Steel / SS - Open / Closed
		rotortype
End Cover	:	Mild Steel / SS
Seals	:	Oil Seal / O Ring / Labyrinth Seal
Special Seals	:	Grease Purge / Air Purge
Painting colour code	e :	Royal Blue
Bearings	÷	In board / Out board
Bearing Make	÷	SKF/NTN/FAG
GearBox	:	Worm Gears / Helical Gears
Temperatures	:	Built to significant temperature
Capacity Range	:	Upto 55 m³/hr Max.
Surface Treatment	÷	SA 2.5



UNICON ENGINEERS

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