

# All Wheels Recover Energy Some Do it Better...



**DRI™ ECO FRESH™**  
Energy Recovery Wheels

**MS 200 SERIES**



# Certifications



AHRI Certified Performance



Rotor Media is RoHS Compliant



CE Marked



Bacteria-static. Does not support microbial growth



An ISO 9001-2008 Certified Company



Zero Flame Spread



ETL Listed/Conforms to ANSI/UL 1995



In accordance to the guideline RLT-Richtlinie 01 (MS 200)



ISO 14001

## State-of-the-art Facilities



Fully integrated manufacturing facility for :

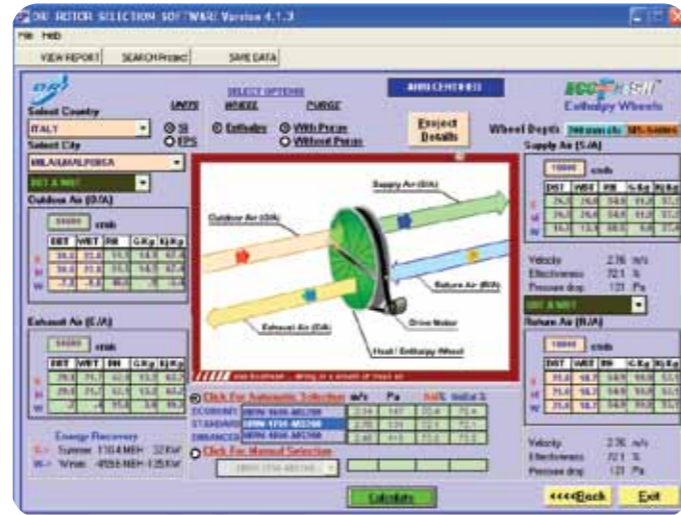
- ★ Synthesizing / coating.
- ★ Winding.
- ★ Inhouse Metal work.
- ★ Quick response, fast delivery.
- ★ Substantial capacity to meet large orders.
- ★ Experience with strong OEM customer base worldwide.
- ★ Surface finishing including CNC fabrication & powder coating.

## World-Class Manufacturing & Test Facilities



has set up a World-class Test Facility for performance evaluation of Enthalpy Wheels.

## Selection Software Available



Benefits of INSIDE

## ... Beyond Payback

Better ★ Humidity Control ★ Heat / Energy Recovery Heat Exchanger Wheel

Thus, better and enhanced IAQ at lower Energy costs

- ★ Pre-conditions incoming fresh air.
- ★ Easily integrated/retrofitted into new/existing ventilation systems.
- ★ Delivers fresh air throughout the year at conditions very near inside conditions.
- ★ Helps to meet ventilation standard without raising energy cost.
- ★ Maintains humidity conditions at no additional cost.
- ★ Allows reduction in system capacity by 30% to 65%.

EcoFresh Wheels have played a major role in many projects for achieving sustainable Green Building status with LEED and other energy certifications.

## GBC Memberships



# Think Afresh . . .with MS 200 series !!



## High Selectivity :

EcoFresh Energy Recovery Wheels MS 200 series use Molecular Sieve 3Å (EcoSorb 300) desiccant coated on aluminum substrate and this results in high latent recovery and control on cross contamination.

## Aluminium Substrate :

The aluminium substrate eliminates any fire risks and results in high sensible recovery and high structural strength.

## In-built Purge Sector Eliminates Cross Contamination :

Purge section provides strict separation of air flows, preventing carryover of bacteria, dust and pollutants from exhaust air to supply air. Purge section and sealing system limit cross contamination to 0.04% of the exhaust air concentration by volume.

## Non Contact Labyrinth Seal :

- ★ No wear and tear.
- ★ Long life.
- ★ Effective sealing.
- ★ Brush seal for wheels upto 2200mm.

## Structural Rigidity, Hardened Edges & Innovative Manufacturing Design :

- ★ State-of-the-art winding technology and adhesives EcoFresh give rotors high structural strength.
- ★ Wheel Edges hardened as standard to suit marine coastal application needs.

## Highly Polished Surface :

Vertical run out less than 1 mm per 1000 mm resulting in extremely low leakage across the central divider seals.

## Robust Spoke Structure.

## Highest Recovery Efficiency Ratio (RER) In The Industry

## Industry's Highest Recovery/ Performance :

- ★ High Desiccant loading / coating.
- ★ Nearly equal sensible and latent recovery, thus comparatively higher total enthalpy recovery.
- ★ Higher performance, low pressure drops.
- ★ Laminar airflow due to thin aluminium substrate & uniform desiccant coating.
- ★ Superior airflow characteristics.

## Wide Range & Additional Options :

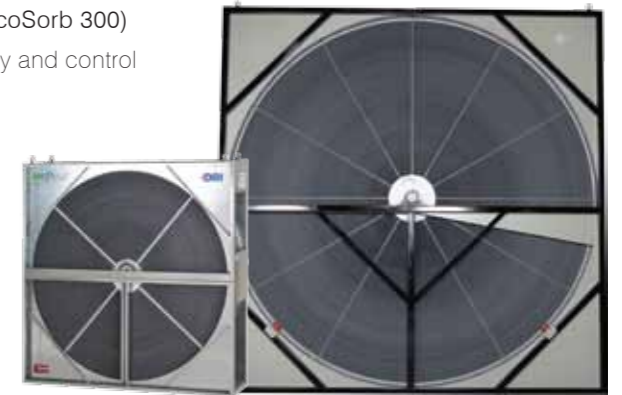
- ★ Total Energy Recovery Wheels (Enthalpy) & AHRI Certified sensible wheels.
- ★ Customized Flute height and Rotors depth-options.
- ★ Cassette as well as Rotor options.
- ★ Standard and Customized options.
- ★ 500 mm to 5000 mm (dia.)
- ★ Easy retrofit options.

## Segmented And Non Segmented Options.

## Controls Package Available.

DRI has its Airineers spread out world over

- ★ India
- ★ Japan
- ★ UAE
- ★ Malaysia
- ★ USA
- ★ Saudi Arabia
- ★ Indonesia
- ★ Canada
- ★ Vietnam
- ★ Bangladesh
- ★ Philippines
- ★ Brazil
- ★ Korea
- ★ Switzerland
- ★ China
- ★ Nigeria



**MS 200 SERIES**



## Worldwide Presence

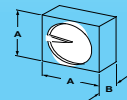
# HEAT RECOVERY WHEELS - Performance Data

## HRW SERIES (MS-200-1.9mm)



Velocity	M/S	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0				
Sensible	FPM	200	300	400	500	600	700	800	900	1000				
Latent (Winter Heating)	Efficiency in %	80	77	75	72	69	66	63	60	58	Height	Depth		
Latent (Summer Cooling)		80	77	75	72	69	66	63	60	58	and	In Flow	Net	
Total (Winter Heating)		82	79	77	74	71	69	67	64	62	Width	Direction	Weight	
Total (Summer Cooling)		81	78	76	73	71	68	65	62	60	"A"	"B"	Kg.	
Total (Summer Cooling)		81	78	76	73	71	68	65	62	60	mm	mm	Pounds	
Pressure Drop	Pa	74	85	102	122	143	165	189	214	241	Inches	Inches		
Pressure Drop	in. w.c.	0.29	0.33	0.40	0.48	0.56	0.65	0.74	0.84	0.95				
Model Number	Air Volume													
HRW-500(N)-MS 200	CMH	273	409	546	682	765	955	1092	1228	1365		700	295	55
	CFM	161	241	321	402	450	562	642	723	803		27.6	11.6	121
HRW-600(N)-MS 200	CMH	416	623	831	1039	1189	1454	1662	1870	2078		800	295	63
	CFM	245	367	489	611	700	856	978	1100	1223		31.5	11.6	139
HRW-700(N)-MS 200	CMH	586	879	1172	1465	1699	2051	2345	2638	2931		850	295	68
	CFM	345	517	690	862	1000	1207	1380	1552	1725		33.5	11.6	150
HRW-800(N)-MS 200	CMH	785	1177	1569	1962	2379	2746	3139	3531	3923		950	295	77
	CFM	462	693	924	1154	1400	1616	1847	2078	2309		37.4	11.6	170
HRW-900(N)-MS 200	CMH	1011	1517	2022	2528	3059	3539	4044	4550	5055		1030	295	85
	CFM	595	893	1190	1488	1800	2083	2380	2678	2975		40.6	11.6	187
HRW-1000(N)-MS 200	CMH	1265	1898	2531	3164	3738	4429	5062	5695	6327		1130	295	95
	CFM	745	1117	1489	1862	2200	2607	2979	3351	3724		44.5	11.6	209
HRW-1100(N)-MS 200	CMH	1548	2322	3096	3869	4588	5417	6191	6965	7739		1230	295	125
	CFM	911	1366	1822	2277	2700	3188	3643	4099	4554		48.4	11.6	276
HRW-1200(N)-MS 200	CMH	1820	2730	3640	4550	5438	6371	7281	8191	9101		1330	295	146
	CFM	1071	1607	2142	2678	3200	3749	4285	4820	5356		52.4	11.6	322
HRW-1300(N)-MS 200	CMH	2105	3157	4210	5262	6287	7367	8419	9472	10524		1430	295	172
	CFM	1239	1858	2477	3097	3700	4335	4955	5574	6193		56.3	11.6	379
HRW-1400(N)-MS 200	CMH	2467	3701	4934	6168	7307	8635	9869	11103	12336		1530	295	187
	CFM	1452	2178	2904	3630	4300	5082	5808	6534	7260		60.2	11.6	412
HRW-1500(N)-MS 200	CMH	2858	4286	5715	7144	8666	10002	11430	12859	14288		1630	295	199
	CFM	1682	2523	3363	4204	5100	5886	6727	7568	8409		64.2	11.6	439
HRW-1600(N)-MS 200	CMH	3239	4859	6479	8099	9686	11338	12958	14577	16197		1730	325	230
	CFM	1906	2860	3813	4766	5700	6672	7626	8579	9532		68.1	12.8	507
HRW-1700(N)-MS 200	CMH	3683	5524	7366	9207	11045	12890	14732	16573	18415		1830	325	235
	CFM	2167	3251	4335	5418	6500	7586	8670	9753	10837		72.0	12.8	518
HRW-1800(N)-MS 200	CMH	4154	6232	8309	10386	12574	14540	16617	18695	20772		1930	325	263
	CFM	2445	3667	4890	6112	7400	8557	9779	11002	12224		76.0	12.8	580
HRW-1900(N)-MS 200	CMH	4654	6981	9307	11634	13934	16288	18615	20942	23269		2030	325	282
	CFM	2739	4108	5477	6847	8200	9585	10955	12324	13694		79.9	12.8	622
HRW-2000(N)-MS 200	CMH	5181	7771	10362	12952	15633	18133	20724	23314	25905		2130	325	322
	CFM	3049	4574	6098	7623	9200	10672	12196	13721	15245		83.9	12.8	710
HRW-2130(N)-MS 200 (MonoG)	CMH	5907	8860	11813	14766	18182	20673	23626	26579	29533		2201	325	375
	CFM	3476	5214	6952	8690	10700	12166	13904	15642	17380		86.7	12.8	827
HRW-2200(N)-MS 200 (H.M. & SEG)	CMH	6355	9532	12709	15887	19031	22241	25419	28596	31773		2400	460	616
	CFM	3740	5610	7479	9349	11200	13089	14959	16829	18699		94.5	18.1	1358
HRW-2400(N)-MS 200 (MonoG)	CMH	7608	11413	15217	19021	22940	26630	30434	34238	38042		2480	325	479
	CFM	4478	6716	8955	11194	13500	15671	17910	20149	22388		97.6	12.8	1056
HRW-2400(N)-MS 200 (H.M. & SEG)	CMH	7608	11413	15217	19021	22940	26630	30434	34238	38042		2600	460	696
	CFM	4478	6716	8955	11194	13500	15671	17910	20149	22388		102.4	18.1	1534
HRW-2600(N)-MS 200	CMH	8974	13461	17948	22435	27018	31409	35896	40383	44870		2800	460	764
	CFM	5281	7922	10562	13203	15900	18484	21125	23765	26406		110.2	18.1	1684
HRW-2800(N)-MS 200	CMH	10451	15677	20902	26128	31436	36579	41805	47030	52256		3000	460	832
	CFM	6150	9226	12301	15376	18500	21527	24602	27677	30752		118.1	18.1	1834
HRW-3000(N)-MS 200	CMH	12040	18060	24080	30100	36194	42140	48160	54180	60200		3200	460	909
	CFM	7086	10628	14171	17714	21300	24800	28342	31885	35428		126.0	18.1	2003
HRW-3200(N)-MS 200	CMH	13741	20611	27481	34352	41291	48093	54963	61833	68704		3400	514	1000
	CFM	8086	12130	16173	20216	24300	28302	32346	36389	40432		133.9	20.2	2204
HRW-3400(N)-MS 200	CMH	15553	23330	31106	38883	46729	54436	62213	69989	77766		3600	514	1060
	CFM	9153	13730	18306	22883	27500	32036	36612	41189	45765		141.7	20.2	2336
HRW-3600(N)-MS 200	CMH	17477	26216	34954	43693	52506	61170	69909	78648	87386		3800	514	1154
	CFM	10285	15428	20571	25713	30900	35999	41141	46284	51427		149.6	20.2	2543
HRW-3800(N)-MS 200	CMH	19513	29270	39026	48783	58624	68296	78052	87809	97565		4000	514	1358
	CFM	11483	17225	22967	28709	34500	40192	45934	51676	57417		157.5	20.2	2993
HRW-4000(N)-MS 200	CMH	21661	32491	43321	54152	65081	75812	86643	97473	108303		4200	514	1448
	CFM	12747	19121	25495	31868	38300	44616	50989	57363	63737		165.4	20.2	3191
HRW-4200(N)-MS 200	CMH	23920	35880	47840	59800	71878	83720	95680	107640	119600		4400	514	2413
	CFM	14077	21115	28154	35192	42300	49269	56308	63346	70384		173.2	20.2	5318
HRW-4400(N)-MS 200	CMH	26291	39436	52582	65727	79014	92018	105164	118309	131455		4600	514	2550
	CFM	15472	23208	30944	38681	46500	54153	61889	69625	77361		181.1	20.2	5620
HRW-4600(N)-MS 200	CMH	28774	43161	57547	71934	86321	100708	115095	129482	143869		4800	514	2691
	CFM	16933	25400	33867	42333	50800	59267	67733	76200	84667		189.0	20.2	5931
HRW-4800(N)-MS 200	CMH	31368	47052	62736	78421	94138	109789	125473	141157	156841		5000	514	2835
	CFM	18460	27690	36920	46150	55400	64611	73841	83071	92301		196.9	20.2	6248
HRW-5000(N)-MS 200	CMH	34074	51112	68149	85186	102294	119260	136298	153335	170372		5200	514	2964
	CFM	20053	30079	40106	50132	60200	70185	80211	90238	100264		204.7	20.2	6533

**Note :**  
 (1) Monolithic wheel up to HRW-2200(MonoG), HRW-2200 is also available in Half moon/Segmented construction for specific requirement.  
 (2) 2400mm diameter and above rotor are available with removable segmented media. Half moon cassettes complete with half moon rotors for containerisation and ease of shipping are available as options. Dimensions and weight shall vary in such cases.  
 (3) Because of our policy of continuous product improvements, specifications are subject to change without notice.



**DRI** DESICCANT ROTORS INTERNATIONAL Pvt. Ltd.  
 Innovative Air Solutions

**PAWA GROUP**  
 Innovation is life

<b>DRI (INDIA)</b> 100-101, Udyog Vihar, Phase-IV, Gurugram 122015, INDIA Tel.: +91-124-4188888 Fax: +91-124-4188800 E-Mail: drimarketing@pawha.com Web: www.drirotors.com	<b>DRI (KOREA)</b> 107-503 Yeoksam E pyonhan Sesang APT, Yeoksamdong 755-4 Kangnamgu Seoul Korea (SeonReungro 69th street 20) Tel.: +82-10-8635-0851 E-Mail: driukorea@hanmail.net Web: www.drikorea.co.kr	<b>DRI (USA)</b> 8675 Rio Grande Blvd. NW Los Ranchos, NM 87114, USA Phone: +1-928-639-2767 E-mail: mgclark@driamerica.com Website: www.driamerica.com	<b>DRI (UAE)</b> P.O. Box No. 120672, Q3-106, SAIF-Zone, Sharjah, UAE Tel.: +971-6-5578148 Fax: +971-6-5578149 Email: enquire@dri.ae Website: www.drirotors.com	<b>COUNTRY</b> MALAYSIA CHINA PHILIPPINES BRAZIL INDONESIA VIETNAM CANADA NIGERIA SWITZERLAND BANGLADESH	<b>Phone</b> +60-3-77259
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