

TECHNICAL SPECIFICATION



HEAT RECOVERY WHEEL HRW SERIES (F2-200)

HEAT RECOVERY WHEEL (HRW-500 to 5000) COMES WITH **ECO FRESH™** WHEEL/ROTOR
ALL HRW SERIES UNIT HAVE THE FOLLOWING OUTSTANDING FEATURES

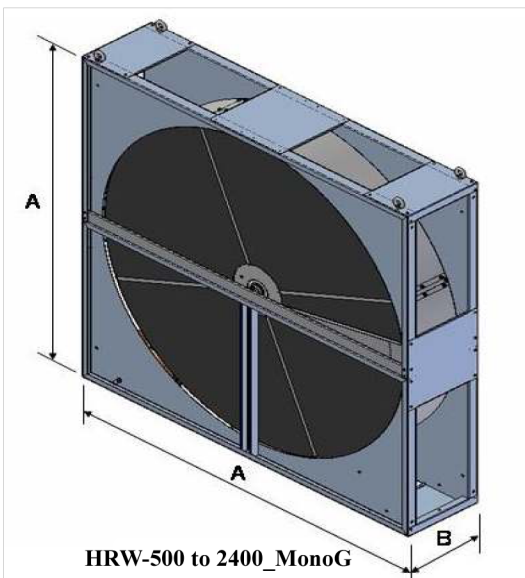
High efficiency and reliability

- * Galvanised steel sheet casing (upto 2200mm)
- * Optional HRW-2200 & 2400 are available in Galvanized Steel (Mongo) (MonoG)
- * Epoxy painted structural steel frame & Precoated panel/casing (above 2400mm).
- * Molecular sieve coated aluminium "EcoFresh" total energy recovery wheel.
- * Equal sensible and latent recovery.
- * Designed for low rotor speed around 20-25 rpm.
- * The rotor is made of alternate flat and corrugated aluminium foil of very uniform pitch and height.

- * The media is cleanable with compressed air.
- * Highest efficiency wheel in its category.
- * The surface of the wheel is highly polished to ensure that the vertical runout does not exceed $\pm 1\text{mm}$ for every 1 meter diameter.
- * Rotor depth 200mm.
- * The face and radial seals are brush seal (upto 2400mm)
- * The face and radial seals are four (4) pass non contact labyrinth seals (above 2400mm) for effective sealing between the two air streams.
- * Rotor face edges are hardend which ensures long life of the media.

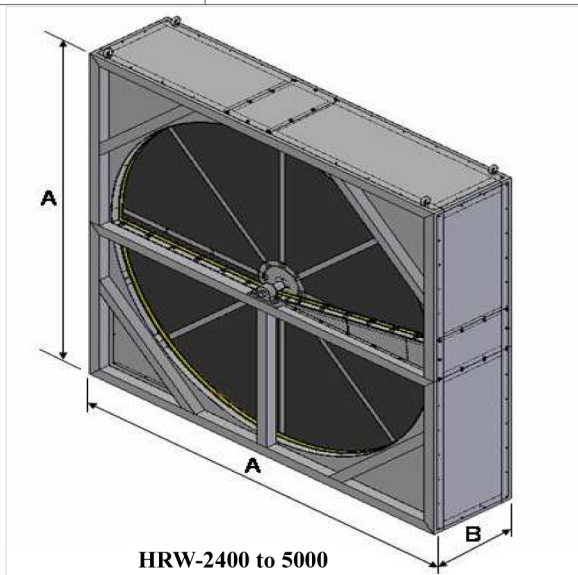
WHEEL CONSTRUCTION

MONOLITHIC	HRW-500 to 2200
HALF MOON	HRW-2400 to 3800
SEGMENTED	HRW-4000 to 5000



POWER REQUIREMENT

HRW-500 to 1100	0.09 KW, 415V/3PH/50HZ
HRW-1200 to 1600	0.18 KW, 415V/3PH/50HZ
HRW-1700 to 2200	0.37 KW, 415V/3PH/50HZ
HRW-2400	0.55 KW, 415V/3PH/50HZ
HRW-2600 to 5000	0.75 KW, 415V/3PH/50HZ



OPTIONS AVAILABLE

SENSIBLE ONLY	AVAILABLE
VARIABLE SPEED DRIVE	AVAILABLE ON REQUEST
SINGLE PHASE DRIVE	AVAILABLE ON REQUEST
CUSTOMISED FLUTE HEIGHT	AVAILABLE ON REQUEST
HORIZONTAL MOUNTING	CONSULT FACTORY
ARRANGEMENT CODE	1-8 (REFER PAGE 4 of 4)
SEGMENTED WHEELS	AVAILABLE ON REQUEST

ALL DATA SUBJECT TO CHANGE WITHOUT NOTICE

Heat Recovery Wheel - Performance Data

HRW SERIES (F2-200)



Velocity	M/S	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
FPM		200	300	400	500	600	700	800	900	1000
Sensible	Efficiency in %	83.0	79.0	75.5	72.0	69.0	66.0	62.0	61.0	59.0
Latent (Winter Heating)		83.6	79.6	75.0	70.2	68.0	65.0	57.5	56.0	55.0
Latent (Summer Cooling)		82.0	78.0	72.0	61.5	56.0	50.5	44.5	42.5	41.4
Total (Winter Heating)		83.2	79.2	75.3	71.4	68.7	65.7	60.5	59.3	57.6
Total (Summer Cooling)		82.4	78.4	73.3	65.5	60.9	56.4	51.1	49.5	48.1
Pressure Drop	Pa	74	85	102	122	143	166	195	215	241
	in. w.c	0.29	0.33	0.40	0.48	0.56	0.65	0.75	0.85	0.95
Model Number	Air Volume									
HRW-500-F2-200	CMH	319	479	639	799	958	1118	1278	1438	1597
	CFM	188	282	376	470	564	658	752	846	940
HRW-600-F2-200	CMH	477	716	955	1194	1432	1671	1910	2149	2387
	CFM	281	422	562	703	843	984	1124	1265	1405
HRW-700-F2-200	CMH	664	997	1329	1661	1993	2325	2658	2990	3322
	CFM	391	587	782	978	1173	1369	1564	1760	1955
HRW-800-F2-200	CMH	880	1320	1760	2200	2640	3080	3519	3959	4399
	CFM	518	777	1036	1295	1553	1812	2071	2330	2589
HRW-900-F2-200	CMH	1124	1686	2248	2810	3372	3934	4495	5057	5619
	CFM	661	992	1323	1654	1984	2315	2646	2976	3307
HRW-1000-F2-200	CMH	1397	2095	2794	3492	4190	4889	5587	6285	6984
	CFM	822	1233	1644	2055	2466	2877	3288	3699	4110
HRW-1100-F2-200	CMH	1699	2548	3397	4246	5096	5945	6794	7644	8493
	CFM	1000	1499	1999	2499	2999	3499	3998	4498	4998
HRW-1200-F2-200	CMH	2029	3043	4058	5072	6087	7101	8116	9130	10144
	CFM	1194	1791	2388	2985	3582	4179	4776	5373	5970
HRW-1300-F2-200	CMH	2323	3484	4646	5807	6969	8130	9291	10453	11614
	CFM	1367	2051	2734	3418	4101	4785	5468	6152	6835
HRW-1400-F2-200	CMH	2711	4066	5421	6777	8132	9487	10842	12198	13553
	CFM	1595	2393	3190	3988	4786	5583	6381	7178	7976
HRW-1500-F2-200	CMH	3127	4691	6255	7818	9382	10945	12509	14073	15636
	CFM	1840	2761	3681	4601	5521	6441	7362	8282	9202
HRW-1600-F2-200	CMH	3573	5359	7146	8932	10718	12505	14291	16078	17864
	CFM	2103	3154	4205	5257	6308	7359	8410	9462	10513
HRW-1700-F2-200	CMH	4047	6070	8093	10116	12140	14163	16186	18210	20233
	CFM	2381	3572	4763	5954	7144	8335	9526	10716	11907
HRW-1800-F2-200	CMH	4550	6824	9099	11374	13649	15923	18198	20473	22748
	CFM	2677	4016	5355	6694	8032	9371	10710	12048	13387
HRW-1900-F2-200	CMH	5081	7622	10162	12703	15243	17784	20324	22865	25405
	CFM	2990	4485	5980	7476	8971	10466	11961	13456	14951
HRW-2000-F2-200	CMH	5641	8462	11282	14103	16923	19744	22564	25385	28206
	CFM	3320	4980	6640	8300	9959	11619	13279	14939	16599
HRW-2200-F2-200 (MonoG)	CMH	6815	10222	13629	17037	20444	23851	27258	30666	34073
	CFM	4010	6016	8021	10026	12031	14036	16042	18047	20052
HRW-2200-F2-200 (H.M. & SEG)	CMH	6815	10222	13629	17037	20444	23851	27258	30666	34073
	CFM	4010	6016	8021	10026	12031	14036	16042	18047	20052
HRW-2400-F2-200 (MonoG)	CMH	8136	12204	16272	20340	24408	28476	32544	36612	40680
	CFM	4788	7182	9576	11970	14364	16758	19152	21546	23940
HRW-2400-F2-200 (H.M. & SEG)	CMH	8136	12204	16272	20340	24408	28476	32544	36612	40680
	CFM	4788	7182	9576	11970	14364	16758	19152	21546	23940
HRW-2600-F2-200	CMH	9572	14359	19145	23931	28717	33504	38290	43076	47862
	CFM	5633	8450	11267	14084	16900	19717	22534	25350	28167
HRW-2800-F2-200	CMH	11124	16686	22248	27810	33372	38934	44495	50057	55619
	CFM	6546	9820	13093	16366	19639	22912	26186	29459	32732
HRW-3000-F2-200	CMH	12790	19185	25580	31975	38370	44766	51161	57556	63951
	CFM	7527	11291	15054	18818	22581	26345	30108	33872	37635
HRW-3200-F2-200	CMH	14572	21857	29143	36429	43715	51001	58286	65572	72858
	CFM	8575	12863	17151	21439	25726	30014	34302	38589	42877
HRW-3400-F2-200	CMH	16468	24701	32935	41169	49403	57637	65871	74104	82338
	CFM	9691	14537	19382	24228	29074	33919	38765	43610	48456
HRW-3600-F2-200	CMH	18479	27718	36958	46197	55437	64676	73915	83155	92394
	CFM	10875	16312	21750	27187	32624	38062	43499	48937	54374
HRW-3800-F2-200	CMH	20605	30907	41210	51512	61815	72117	82420	92722	103025
	CFM	12126	18189	24252	30315	36378	42441	48504	54567	60630
HRW-4000-F2-200	CMH	22846	34268	45691	57114	68537	79959	91382	102805	114228
	CFM	13445	20167	26889	33612	40334	47056	53778	60501	67223
HRW-4200-F2-200	CMH	25201	37802	50403	63003	75604	88205	100805	113406	126007
	CFM	14831	22247	29662	37078	44493	51909	59324	66740	74155
HRW-4400-F2-200	CMH	27672	41509	55345	69181	83017	96853	110690	124526	138362
	CFM	16285	24428	32570	40713	48856	56998	65141	73283	81426
HRW-4600-F2-200	CMH	30258	45387	60516	75645	90774	105903	121032	136161	151290
	CFM	17807	26710	35614	44517	53420	62324	71227	80131	89034
HRW-4800-F2-200	CMH	32958	49438	65917	82396	98875	115354	131833	148313	164792
	CFM	19396	29094	38792	48490	58188	67886	77584	87282	96980
HRW-5000-F2-200	CMH	35774	53661	71548	89435	107322	125209	143096	160983	178870
	CFM	21053	31580	42106	52633	63159	73686	84212	94739	105265

Height and Width "A" mm Inches	Depth in Flow Direction "B" mm Inches	Net Weight Kg. Pounds
700	295	55
27.6	11.6	121
800	295	63
31.5	11.6	139
850	295	68
33.5	11.6	150
950	295	70
37.4	11.6	154
1030	295	85
40.6	11.6	187
1130	295	95
44.5	11.6	209
1230	295	125
48.4	11.6	276
1330	295	146
52.4	11.6	322
1430	295	172
56.3	11.6	379
1530	295	187
60.2	11.6	412
1630	295	199
64.2	11.6	439
1730	325	230
68.1	12.8	507
1830	325	235
72.0	12.8	518
1930	325	263
76.0	12.8	580
2030	325	282
79.9	12.8	622
2130	325	322
83.9	12.8	710
2201	325	375
86.7	12.8	827
2400	460	616
94.5	18.1	1358
2480	325	479
97.6	12.8	1056
2600	460	696
102.4	18.1	1534
2800	460	764
110.2	18.1	1684
3000	460	832
118.1	18.1	1834
3200	460	909
126.0	18.1	2003
3400	514	1000
133.9	20.2	2204
3600	514	1060
141.7	20.2	2336
3800	514	1154
149.6	20.2	2543
4000	514	1358
157.5	20.2	2993
4200	514	1448
165.4	20.2	3191
4400	514	2413
173.2	20.2	5318
4600	514	2550
181.1	20.2	5620
4800	514	2691
189.0	20.2	5931
5000	514	2835
196.9	20.2	6248
5200	514	2964
204.7	20.2	6533

Note :

- (1) 2200mm 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.
- (2) Because of our policy of continuous product improvements, specifications are subject to change without notice.

