

**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**

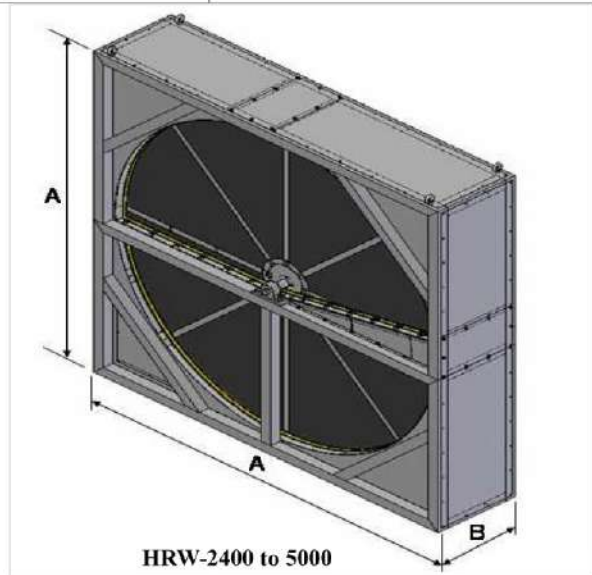
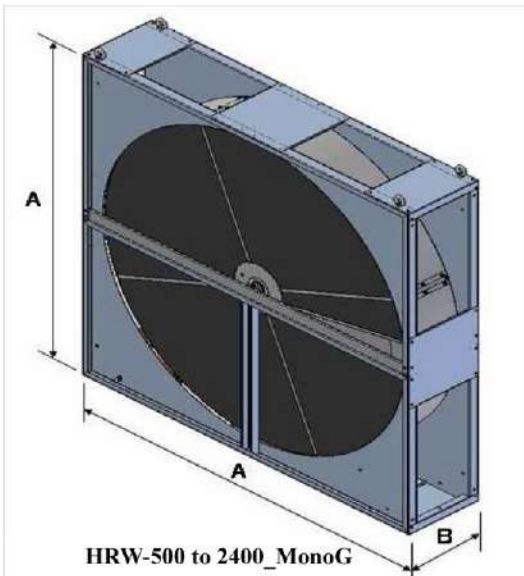
- \* Galvanised steel sheet casing (upto 2200mm)
- \* Optional HRW-2200 & 2400 are available in Galvanized Steel (Mongoo) (MonoG)
- \* Epoxy painted structural steel frame & Precoated panel/casing (above 2400mm).
- \* Molecular sieve coated aluminium "EcoFresh" total energy recovery wheel.
- \* Equal 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 ±1mm 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    | Height and Width "A" mm Inches | Depth in Flow Direction "B" mm Inches | Net Weight Kg. Pounds |      |
|------------------------------|-----------------|------------|-------|-------|-------|--------|--------|--------|--------|--------|--------------------------------|---------------------------------------|-----------------------|------|
|                              | 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                           | 700                                   | 295                   | 55   |
|                              | CFM             | 188        | 282   | 376   | 470   | 564    | 658    | 752    | 846    | 940    | 27.6                           | 11.6                                  | 121                   |      |
| HRW-600-F2-200               | CMH             | 477        | 716   | 955   | 1194  | 1432   | 1671   | 1910   | 2149   | 2387   | 800                            | 295                                   | 63                    |      |
|                              | CFM             | 281        | 422   | 562   | 703   | 843    | 984    | 1124   | 1265   | 1405   | 31.5                           | 11.6                                  | 139                   |      |
| HRW-700-F2-200               | CMH             | 664        | 997   | 1329  | 1661  | 1993   | 2325   | 2658   | 2990   | 3322   | 850                            | 295                                   | 68                    |      |
|                              | CFM             | 391        | 587   | 782   | 978   | 1173   | 1369   | 1564   | 1760   | 1955   | 33.5                           | 11.6                                  | 150                   |      |
| HRW-800-F2-200               | CMH             | 880        | 1320  | 1760  | 2200  | 2640   | 3080   | 3519   | 3959   | 4399   | 950                            | 295                                   | 70                    |      |
|                              | CFM             | 518        | 777   | 1036  | 1295  | 1553   | 1812   | 2071   | 2330   | 2589   | 37.4                           | 11.6                                  | 154                   |      |
| HRW-900-F2-200               | CMH             | 1124       | 1686  | 2248  | 2810  | 3372   | 3934   | 4495   | 5057   | 5619   | 1030                           | 295                                   | 85                    |      |
|                              | CFM             | 661        | 992   | 1323  | 1654  | 1984   | 2315   | 2646   | 2976   | 3307   | 40.6                           | 11.6                                  | 187                   |      |
| HRW-1000-F2-200              | CMH             | 1397       | 2095  | 2794  | 3492  | 4190   | 4889   | 5587   | 6285   | 6984   | 1130                           | 295                                   | 95                    |      |
|                              | CFM             | 822        | 1233  | 1644  | 2055  | 2466   | 2877   | 3288   | 3699   | 4110   | 44.5                           | 11.6                                  | 209                   |      |
| HRW-1100-F2-200              | CMH             | 1699       | 2548  | 3397  | 4246  | 5095   | 5945   | 6794   | 7644   | 8493   | 1230                           | 295                                   | 125                   |      |
|                              | CFM             | 1000       | 1499  | 1999  | 2499  | 2999   | 3499   | 3998   | 4498   | 4998   | 48.4                           | 11.6                                  | 276                   |      |
| HRW-1200-F2-200              | CMH             | 2029       | 3043  | 4058  | 5072  | 6087   | 7101   | 8116   | 9130   | 10144  | 1330                           | 295                                   | 146                   |      |
|                              | CFM             | 1194       | 1791  | 2388  | 2985  | 3582   | 4179   | 4776   | 5373   | 5970   | 52.4                           | 11.6                                  | 322                   |      |
| HRW-1300-F2-200              | CMH             | 2323       | 3484  | 4646  | 5807  | 6969   | 8130   | 9291   | 10453  | 11614  | 1430                           | 295                                   | 172                   |      |
|                              | CFM             | 1367       | 2051  | 2734  | 3418  | 4101   | 4785   | 5468   | 6152   | 6835   | 56.3                           | 11.6                                  | 379                   |      |
| HRW-1400-F2-200              | CMH             | 2711       | 4066  | 5421  | 6777  | 8132   | 9487   | 10842  | 12198  | 13553  | 1530                           | 295                                   | 187                   |      |
|                              | CFM             | 1595       | 2393  | 3190  | 3988  | 4786   | 5583   | 6381   | 7178   | 7976   | 60.2                           | 11.6                                  | 412                   |      |
| HRW-1500-F2-200              | CMH             | 3127       | 4691  | 6255  | 7818  | 9382   | 10945  | 12509  | 14073  | 15636  | 1630                           | 295                                   | 199                   |      |
|                              | CFM             | 1840       | 2761  | 3681  | 4601  | 5521   | 6441   | 7362   | 8282   | 9202   | 64.2                           | 11.6                                  | 439                   |      |
| HRW-1600-F2-200              | CMH             | 3573       | 5359  | 7146  | 8932  | 10718  | 12505  | 14291  | 16078  | 17864  | 1730                           | 325                                   | 230                   |      |
|                              | CFM             | 2103       | 3154  | 4205  | 5257  | 6308   | 7359   | 8410   | 9462   | 10513  | 68.1                           | 12.8                                  | 507                   |      |
| HRW-1700-F2-200              | CMH             | 4047       | 6070  | 8093  | 10116 | 12140  | 14163  | 16186  | 18210  | 20233  | 1830                           | 325                                   | 235                   |      |
|                              | CFM             | 2381       | 3572  | 4763  | 5954  | 7144   | 8335   | 9526   | 10716  | 11907  | 72.0                           | 12.8                                  | 518                   |      |
| HRW-1800-F2-200              | CMH             | 4550       | 6824  | 9099  | 11374 | 13649  | 15923  | 18198  | 20473  | 22748  | 1930                           | 325                                   | 263                   |      |
|                              | CFM             | 2677       | 4016  | 5355  | 6694  | 8032   | 9371   | 10710  | 12048  | 13387  | 76.0                           | 12.8                                  | 580                   |      |
| HRW-1900-F2-200              | CMH             | 5081       | 7622  | 10162 | 12703 | 15243  | 17784  | 20324  | 22865  | 25405  | 2030                           | 325                                   | 282                   |      |
|                              | CFM             | 2990       | 4485  | 5980  | 7476  | 8971   | 10466  | 11961  | 13456  | 14951  | 79.9                           | 12.8                                  | 622                   |      |
| HRW-2000-F2-200              | CMH             | 5641       | 8462  | 11282 | 14103 | 16923  | 19744  | 22564  | 25385  | 28206  | 2130                           | 325                                   | 322                   |      |
|                              | CFM             | 3320       | 4980  | 6640  | 8300  | 9959   | 11619  | 13279  | 14939  | 16599  | 83.9                           | 12.8                                  | 710                   |      |
| HRW-2200-F2-200 (MonoG)      | CMH             | 6815       | 10222 | 13629 | 17037 | 20444  | 23851  | 27258  | 30666  | 34073  | 2201                           | 325                                   | 375                   |      |
|                              | CFM             | 4010       | 6016  | 8021  | 10026 | 12031  | 14036  | 16042  | 18047  | 20052  | 86.7                           | 12.8                                  | 827                   |      |
| HRW-2200-F2-200 (H.M. & SEG) | CMH             | 6815       | 10222 | 13629 | 17037 | 20444  | 23851  | 27258  | 30666  | 34073  | 2400                           | 460                                   | 616                   |      |
|                              | CFM             | 4010       | 6016  | 8021  | 10026 | 12031  | 14036  | 16042  | 18047  | 20052  | 94.5                           | 18.1                                  | 1358                  |      |
| HRW-2400-F2-200 (MonoG)      | CMH             | 8136       | 12204 | 16272 | 20340 | 24408  | 28476  | 32544  | 36612  | 40680  | 2480                           | 325                                   | 479                   |      |
|                              | CFM             | 4788       | 7182  | 9576  | 11970 | 14364  | 16758  | 19152  | 21546  | 23940  | 97.6                           | 12.8                                  | 1056                  |      |
| HRW-2400-F2-200 (H.M. & SEG) | CMH             | 8136       | 12204 | 16272 | 20340 | 24408  | 28476  | 32544  | 36612  | 40680  | 2600                           | 460                                   | 696                   |      |
|                              | CFM             | 4788       | 7182  | 9576  | 11970 | 14364  | 16758  | 19152  | 21546  | 23940  | 102.4                          | 18.1                                  | 1534                  |      |
| HRW-2600-F2-200              | CMH             | 9572       | 14359 | 19145 | 23931 | 28717  | 33504  | 38290  | 43076  | 47862  | 2800                           | 460                                   | 764                   |      |
|                              | CFM             | 5633       | 8450  | 11267 | 14084 | 16900  | 19717  | 22534  | 25350  | 28167  | 110.2                          | 18.1                                  | 1684                  |      |
| HRW-2800-F2-200              | CMH             | 11124      | 16686 | 22248 | 27810 | 33372  | 38934  | 44495  | 50057  | 55619  | 3000                           | 460                                   | 832                   |      |
|                              | CFM             | 6546       | 9820  | 13093 | 16366 | 19639  | 22912  | 26186  | 29459  | 32732  | 118.1                          | 18.1                                  | 1834                  |      |
| HRW-3000-F2-200              | CMH             | 12790      | 19185 | 25580 | 31975 | 38370  | 44766  | 51161  | 57556  | 63951  | 3200                           | 460                                   | 909                   |      |
|                              | CFM             | 7527       | 11291 | 15054 | 18818 | 22581  | 26345  | 30108  | 33872  | 37635  | 126.0                          | 18.1                                  | 2003                  |      |
| HRW-3200-F2-200              | CMH             | 14572      | 21857 | 29143 | 36429 | 43715  | 51001  | 58286  | 65572  | 72858  | 3400                           | 514                                   | 1000                  |      |
|                              | CFM             | 8575       | 12863 | 17151 | 21439 | 25726  | 30014  | 34302  | 38589  | 42877  | 133.9                          | 20.2                                  | 2204                  |      |
| HRW-3400-F2-200              | CMH             | 16468      | 24701 | 32935 | 41169 | 49403  | 57637  | 65871  | 74104  | 82338  | 3600                           | 514                                   | 1060                  |      |
|                              | CFM             | 9691       | 14537 | 19382 | 24228 | 29074  | 33919  | 38765  | 43610  | 48456  | 141.7                          | 20.2                                  | 2336                  |      |
| HRW-3600-F2-200              | CMH             | 18479      | 27718 | 36958 | 46197 | 55437  | 64676  | 73915  | 83155  | 92394  | 3800                           | 514                                   | 1154                  |      |
|                              | CFM             | 10875      | 16312 | 21750 | 27187 | 32624  | 38062  | 43499  | 48937  | 54374  | 149.6                          | 20.2                                  | 2543                  |      |
| HRW-3800-F2-200              | CMH             | 20605      | 30907 | 41210 | 51512 | 61815  | 72117  | 82420  | 92722  | 103025 | 4000                           | 514                                   | 1358                  |      |
|                              | CFM             | 12126      | 18189 | 24252 | 30315 | 36378  | 42441  | 48504  | 54567  | 60630  | 157.5                          | 20.2                                  | 2993                  |      |
| HRW-4000-F2-200              | CMH             | 22846      | 34268 | 45691 | 57114 | 68537  | 79959  | 91382  | 102805 | 114228 | 4200                           | 514                                   | 1448                  |      |
|                              | CFM             | 13445      | 20167 | 26889 | 33612 | 40334  | 47056  | 53778  | 60501  | 67223  | 165.4                          | 20.2                                  | 3191                  |      |
| HRW-4200-F2-200              | CMH             | 25201      | 37802 | 50403 | 63003 | 75604  | 88205  | 100805 | 113406 | 126007 | 4400                           | 514                                   | 2413                  |      |
|                              | CFM             | 14831      | 22247 | 29662 | 37078 | 44493  | 51909  | 59324  | 66740  | 74155  | 173.2                          | 20.2                                  | 5318                  |      |
| HRW-4400-F2-200              | CMH             | 27672      | 41509 | 55345 | 69181 | 83017  | 96853  | 110690 | 124526 | 138362 | 4600                           | 514                                   | 2550                  |      |
|                              | CFM             | 16285      | 24428 | 32570 | 40713 | 48856  | 56998  | 65141  | 73283  | 81426  | 181.1                          | 20.2                                  | 5620                  |      |
| HRW-4600-F2-200              | CMH             | 30258      | 45387 | 60516 | 75645 | 90774  | 105903 | 121032 | 136161 | 151290 | 4800                           | 514                                   | 2691                  |      |
|                              | CFM             | 17807      | 26710 | 35614 | 44517 | 53420  | 62324  | 71227  | 80131  | 89034  | 189.0                          | 20.2                                  | 5931                  |      |
| HRW-4800-F2-200              | CMH             | 32958      | 49438 | 65917 | 82396 | 98875  | 115354 | 131833 | 148313 | 164792 | 5000                           | 514                                   | 2835                  |      |
|                              | CFM             | 19396      | 29094 | 38792 | 48490 | 58188  | 67886  | 77584  | 87282  | 96980  | 196.9                          | 20.2                                  | 6248                  |      |
| HRW-5000-F2-200              | CMH             | 35774      | 53661 | 71548 | 89435 | 107322 | 125209 | 143096 | 160983 | 178870 | 5200                           | 514                                   | 2964                  |      |
|                              | CFM             | 21053      | 31580 | 42106 | 52633 | 63159  | 73686  | 84212  | 94739  | 105265 | 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.

