

# Twin City Fan & Blower

## *ADJUSTABLE PITCH PROPELLER FANS*

**TYPE TCWPX**

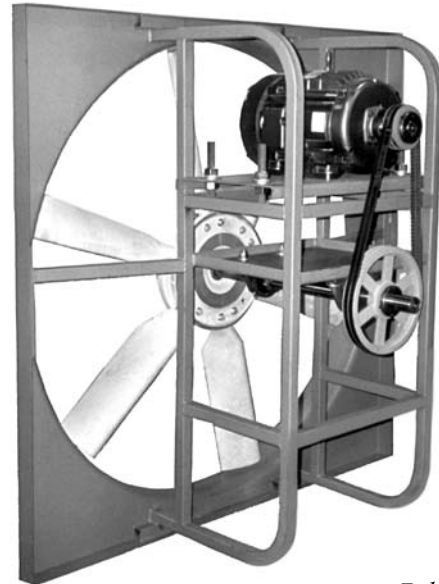


# TCWPX Adjustable Pitch Propeller Fans

Sizes 24" – 48"



*Direct Drive*



*Belt Driven*

## Heavy-Duty Construction

Twin City Fan & Blower adjustable pitch propeller fans, model TCWPX, are constructed of heavy-duty carbon steel, with aluminum or stainless steel panels available as an option. A tubular design frame is used for extra strength. The adjustable motor mount allows easy tensioning of the drive belts. Extra heavy-duty bearings provide a minimum of 200,000 hours average life. The deep spun orifice and tight propeller tip clearance provide the highest efficiency.

## Type "E" Adjustable Propeller

Both hub and blades are A319 alloy quality aluminum castings. Each blade shank is machined round and is easily inserted into the hub socket and retained with a machined retaining ring and two bolts. This positive locking design provides accurate assembly and easy setting of the blade angle. The cast aluminum hub is designed to use standard Browning taper-lock bushings, and mounting to the shaft is simple and positive.



## Simple Angle Adjustment

Each "E" type blade has an index mark on the blade shank which can be matched with an angle setting scale on the hub socket, providing a method for adjusting blade angle through a 20-degree range.



# TCWPX Adjustable Pitch Propeller Fans

## Sizes 54" – 72"

### Heavy-Duty Construction

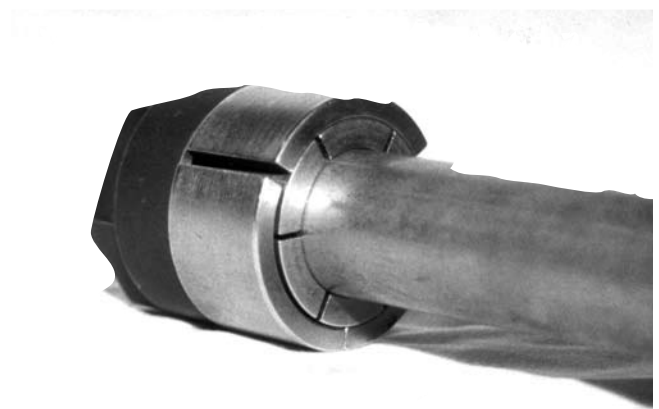
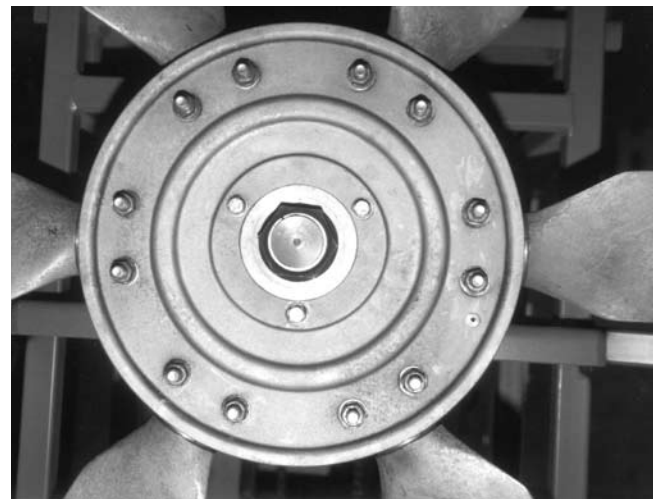
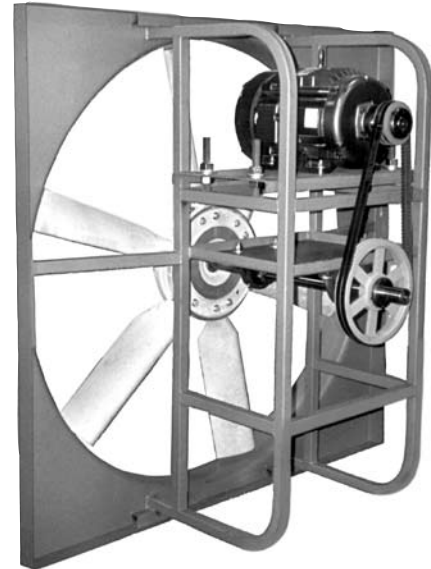
- Heavy-gauge steel panels. Also available in aluminum and stainless steel.
- Tubular frame design for extra strength.
- Easily adjusted motor mount.
- Extra heavy-duty bearings give minimum of 200,000 hours average life.
- Deep spun orifice and tight propeller tip clearance provide the highest efficiency.

### Type "C" Adjustable Propeller

- Adjustable pitch cast aluminum propeller gives the widest performance range.
- Simple blade adjustment provides for changes in volume/pressure requirements.
- Blades can be quickly adjusted without propeller removal.
- Propellers available for OEM applications.

### Trantorque Keyless Bushing

- Self-centering, keyless bushing reduces chance of overstressing or cracking hub.
- Infinite axial adjustment to perfectly align wheel in orifice.
- Simple, one nut on/off feature for easy maintenance.



# Performance Data – Belt Driven

## TCWPX 24BE4 – 20° Blade Angle

Wheel Diameter: 24" Outlet Area: 3.21 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	1246	911	0.14	1054	0.23	1186	0.34	1306	0.46	1421	0.59	<u>1530</u>	<u>0.72</u>	<u>1637</u>	<u>0.87</u>	1742	1.03						
4500	1402	1025	0.19	1152	0.30	1275	0.42	1385	0.54	1490	0.68	1592	0.82	<u>1690</u>	<u>0.98</u>	<u>1786</u>	<u>1.14</u>	1880	1.32				
5000	1558	1139	0.27	1253	0.38	1366	0.51	1471	0.65	1567	0.79	1661	0.94	1753	1.10	<u>1843</u>	<u>1.27</u>	<u>1929</u>	<u>1.45</u>	2099	1.83	2263	2.24
5500	1713	1253	0.35	1357	0.48	1460	0.61	1559	0.76	1651	0.92	1738	1.08	1823	1.24	1907	1.42	<u>1989</u>	<u>1.60</u>	<u>2147</u>	<u>1.99</u>		
6000	1869	1366	0.46	1463	0.59	1557	0.74	1650	0.90	1738	1.06	1820	1.23	1900	1.41	1978	1.59	2055	1.78	<u>2205</u>	<u>2.18</u>		
6500	2025	1480	0.58	1569	0.73	1656	0.88	1743	1.05	1828	1.23	1907	1.41	1982	1.59	2055	1.78	2127	1.98	2269	2.39		
7000	2181	1594	0.73	1677	0.88	1758	1.05	1839	1.22	1919	1.41	1995	1.60	2068	1.80	2137	1.99	2205	2.20				
7500	2336	1708	0.90	1785	1.06	1861	1.23	1937	1.42	2012	1.62	2086	1.82	2156	2.03	2223	2.23	2287	2.44				
8000	2492	1822	1.09	1894	1.26	1966	1.45	2037	1.64	2107	1.84	2177	2.06	2245	2.27								
8500	2648	1936	1.31	2004	1.49	2071	1.68	2138	1.89	2205	2.10	2271	2.32										
9000	2804	2050	1.55	2114	1.74	2178	1.95	2241	2.16														
9500	2960	2164	1.82	2225	2.03	2285	2.24																
10000	3115	2277	2.13																				
10500	3271																						
11000	3427																						
11500	3583																						

## TCWPX 24BE4 – 28° Blade Angle

Wheel Diameter: 24" Outlet Area: 3.21 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	1246	717	0.11	869	0.22	1001	0.34	<u>1123</u>	<u>0.47</u>	<u>1240</u>	<u>0.62</u>												
4500	1402	806	0.16	943	0.28	1066	0.41	1177	0.54	<u>1285</u>	<u>0.70</u>	<u>1388</u>	<u>0.87</u>										
5000	1558	896	0.22	1020	0.35	1135	0.49	1238	0.64	1337	0.79	<u>1433</u>	<u>0.97</u>	1527	1.16								
5500	1713	985	0.30	1099	0.44	1206	0.59	1304	0.75	1396	0.91	1485	1.09	1572	1.28	1657	1.49						
6000	1869	1075	0.38	1180	0.54	1280	0.70	1373	0.87	1459	1.04	1542	1.22	1624	1.42	<u>1704</u>	<u>1.63</u>	<u>1783</u>	<u>1.86</u>				
6500	2025	1164	0.49	1261	0.65	1355	0.83	1444	1.02	1526	1.20	1604	1.38	1681	1.58	1757	1.80	<u>1831</u>	<u>2.03</u>	1975	2.51		
7000	2181	1254	0.61	1344	0.79	1431	0.97	1516	1.17	1595	1.37	1670	1.57	1742	1.77	1813	1.99	1883	2.22	<u>2020</u>	<u>2.71</u>	<u>2153</u>	<u>3.25</u>
7500	2336	1344	0.75	1428	0.94	1510	1.14	1590	1.35	1666	1.56	1738	1.77	1807	1.98	1874	2.20	1940	2.43	2071	2.94	<u>2197</u>	<u>3.48</u>
8000	2492	1433	0.91	1513	1.11	1590	1.32	1665	1.54	1738	1.77	1808	2.00	1874	2.22	1938	2.45	2001	2.68	2125	3.19	<u>2246</u>	<u>3.74</u>
8500	2648	1523	1.09	1598	1.31	1670	1.52	1742	1.76	1812	2.00	1879	2.24	1944	2.48	2005	2.72	2065	2.96	2183	3.47	2299	4.03
9000	2804	1612	1.30	1683	1.52	1752	1.75	1820	2.00	1887	2.25	1952	2.50	2014	2.76	2074	3.01	2132	3.27	2244	3.78		
9500	2960	1702	1.53	1769	1.76	1835	2.01	1899	2.26	1963	2.52	2025	2.79	2086	3.06	2144	3.33	2200	3.59				
10000	3115	1791	1.78	1855	2.03	1918	2.28	1979	2.54	2040	2.82	2100	3.10	2158	3.38	2215	3.67	2270	3.95				
10500	3271	1881	2.06	1942	2.32	2002	2.59	2061	2.86	2118	3.14	2176	3.44	2232	3.73	2287	4.03						
11000	3427	1971	2.37	2029	2.64	2086	2.92	2142	3.20	2198	3.50	2253	3.80										
11500	3583	2060	2.71	2116	2.99	2171	3.28	2225	3.58	2278	3.88												
12000	3738	2150	3.08	2203	3.37	2256	3.67																
12500	3894	2239	3.47	2291	3.79																		
13000	4050																						
13500	4206																						

Underlined figures indicate maximum static efficiency.

# Performance Data – Belt Driven

## TCWPX 30BE4 – 20° Blade Angle

Wheel Diameter: 30" Outlet Area: 5.03 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5500	1093	623	0.16	744	0.30	843	0.45	<u>941</u>	<u>0.63</u>	<u>1038</u>	<u>0.84</u>												
6000	1193	680	0.21	794	0.36	886	0.52	974	0.70	<u>1066</u>	<u>0.92</u>	<u>1152</u>	<u>1.14</u>										
6500	1292	737	0.26	845	0.43	930	0.59	1013	0.79	1096	1.00	<u>1180</u>	<u>1.24</u>	1258	1.49								
7000	1392	793	0.33	896	0.50	977	0.68	1054	0.88	1130	1.10	<u>1209</u>	<u>1.34</u>	<u>1286</u>	<u>1.60</u>	<u>1358</u>	<u>1.87</u>						
8000	1590	907	0.49	1000	0.69	1074	0.89	1143	1.10	1210	1.33	1277	1.58	1345	1.85	<u>1414</u>	<u>2.14</u>	<u>1480</u>	<u>2.44</u>				
9000	1789	1020	0.70	1105	0.93	1175	1.15	1237	1.37	1298	1.62	1358	1.88	1417	2.16	1477	2.45	<u>1538</u>	<u>2.76</u>	<u>1658</u>	<u>3.43</u>	<u>1769</u>	<u>4.13</u>
10000	1988	1133	0.96	1211	1.21	1278	1.46	1336	1.71	1391	1.96	1446	2.24	1500	2.53	1553	2.83	1606	3.15	<u>1716</u>	<u>3.84</u>	<u>1824</u>	<u>4.57</u>
11000	2187	1246	1.28	1318	1.55	1381	1.83	1437	2.10	1488	2.37	1538	2.66	1588	2.96	1637	3.28	1685	3.61	<u>1782</u>	<u>4.31</u>	<u>1882</u>	<u>5.07</u>
12000	2386	1360	1.66	1426	1.96	1486	2.26	1540	2.56	1588	2.85	1634	3.15	1680	3.47	1726	3.80	1771	4.14	1860	4.87	1949	5.64
13000	2584	1473	2.11	1535	2.43	1591	2.76	1643	3.09	1690	3.41	1734	3.73	1776	4.05	1818	4.39	1861	4.75	1944	5.50	2026	6.30
14000	2783	1586	2.63	1644	2.98	1698	3.34	1747	3.69	1793	4.04	1835	4.38	1875	4.72	1914	5.07	1953	5.44	2032	6.22		
15000	2982	1700	3.24	1754	3.62	1805	3.99	1852	4.37	1896	4.74	1937	5.11	1976	5.48	2013	5.85	2050	6.23				
16000	3181	1813	3.93	1864	4.33	1912	4.73	1957	5.13	2000	5.54	2040	5.93	2078	6.33								
17000	3380	1926	4.71	1975	5.14	2020	5.57	2063	5.99														
18000	3579	2040	5.60	2086	6.05																		
19000	3777																						

## TCWPX 30BE4 – 28° Blade Angle

Wheel Diameter: 30" Outlet Area: 5.03 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5500	1093	493	0.13	612	0.28	<u>718</u>	<u>0.45</u>	<u>824</u>	<u>0.68</u>														
6000	1193	537	0.17	648	0.33	747	0.51	<u>845</u>	<u>0.73</u>	<u>936</u>	<u>0.98</u>												
6500	1292	582	0.22	685	0.38	778	0.58	<u>868</u>	<u>0.80</u>	<u>958</u>	<u>1.06</u>	<u>1039</u>	<u>1.34</u>										
7000	1392	627	0.27	723	0.45	811	0.65	894	0.88	<u>979</u>	<u>1.14</u>	<u>1059</u>	<u>1.43</u>	1134	1.73								
8000	1590	716	0.40	801	0.60	881	0.83	955	1.07	1028	1.33	<u>1102</u>	<u>1.63</u>	<u>1175</u>	<u>1.96</u>	<u>1241</u>	<u>2.29</u>	1307	2.65				
9000	1789	806	0.57	882	0.80	954	1.04	1023	1.30	1088	1.58	1152	1.88	<u>1218</u>	<u>2.21</u>	<u>1284</u>	<u>2.57</u>	<u>1346</u>	<u>2.94</u>	1463	3.72		
10000	1988	895	0.78	964	1.03	1030	1.30	1093	1.57	1154	1.87	1212	2.18	1270	2.51	<u>1329</u>	<u>2.87</u>	<u>1389</u>	<u>3.27</u>	<u>1503</u>	<u>4.10</u>	<u>1607</u>	<u>4.94</u>
11000	2187	985	1.04	1048	1.32	1108	1.60	1167	1.90	1224	2.22	1278	2.54	1331	2.89	<u>1383</u>	<u>3.25</u>	<u>1437</u>	<u>3.64</u>	<u>1545</u>	<u>4.49</u>	<u>1648</u>	<u>5.40</u>
12000	2386	1075	1.36	1132	1.65	1188	1.96	1243	2.28	1296	2.62	1347	2.96	1397	3.32	1445	3.69	1493	4.08	<u>1591</u>	<u>4.93</u>	<u>1691</u>	<u>5.89</u>
13000	2584	1164	1.72	1217	2.04	1269	2.37	1320	2.72	1370	3.07	1418	3.44	1466	3.82	1511	4.21	1556	4.61	1645	5.46	<u>1736</u>	<u>6.41</u>
14000	2783	1254	2.15	1303	2.49	1352	2.85	1399	3.21	1446	3.59	1491	3.97	1536	4.37	1580	4.79	1623	5.21	1706	6.08	1788	7.01
15000	2982	1343	2.64	1390	3.02	1435	3.39	1480	3.78	1524	4.18	1567	4.59	1609	5.00	1651	5.43	1691	5.87	1770	6.77	1847	7.72
16000	3181	1433	3.21	1476	3.60	1519	4.00	1561	4.41	1603	4.84	1643	5.26	1683	5.70	1723	6.15	1762	6.61	1838	7.56	1911	8.53
17000	3380	1522	3.85	1563	4.26	1604	4.69	1644	5.13	1683	5.57	1721	6.02	1760	6.48	1797	6.94	1834	7.42	1907	8.41	1977	9.42
18000	3579	1612	4.57	1651	5.01	1689	5.46	1727	5.92	1764	6.38	1801	6.86	1837	7.34	1873	7.83	1908	8.32	1978	9.34	2046	10.40
19000	3777	1701	5.37	1738	5.84	1774	6.31	1810	6.79	1846	7.28	1881	7.78	1915	8.27	1950	8.79	1984	9.31	2050	10.36		
20000	3976	1791	6.27	1826	6.76	1860	7.25	1895	7.76	1928	8.26	1962	8.79	1995	9.31	2028	9.85	2060	10.38				
21000	4175	1881	7.27	1914	7.77	1947	8.29	1979	8.81	2012	9.35	2044	9.89	2075	10.43								
22000	4374	1970	8.35	2002	8.88	2033	9.42	2065	9.98														
23000	4573	2060	9.54	2090	10.10																		

Underlined figures indicate maximum static efficiency.

# Performance Data – Belt Driven

## TCWPX 36BE4 – 20° Blade Angle

Wheel Diameter: 36" Outlet Area: 7.22 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
7000	970	540	0.17	662	0.35	765	0.55	859	0.77															
8000	1108	617	0.25	727	0.45	820	0.67	907	0.91	988	1.16													
9000	1247	695	0.36	795	0.58	880	0.82	960	1.08	1036	1.36	1107	1.64											
10000	1385	772	0.50	864	0.74	942	1.00	1016	1.28	1088	1.57	1155	1.88	1220	2.20									
11000	1524	849	0.66	934	0.93	1007	1.21	1076	1.51	1142	1.82	1206	2.14	1268	2.48	1327	2.83							
12000	1662	926	0.86	1005	1.15	1075	1.45	1138	1.77	1200	2.10	1261	2.45	1319	2.80	1375	3.17	1429	3.54					
13000	1801	1003	1.09	1077	1.40	1143	1.73	1203	2.07	1261	2.42	1317	2.78	1373	3.16	1427	3.55	1479	3.95	1579	4.77			
14000	1939	1080	1.36	1149	1.70	1212	2.05	1269	2.40	1323	2.77	1377	3.16	1429	3.55	1480	3.96	1530	4.38	1626	5.24	1718	6.13	
15000	2078	1158	1.68	1222	2.03	1282	2.41	1337	2.79	1388	3.18	1438	3.58	1488	3.99	1537	4.42	1585	4.86	1677	5.76	1765	6.69	
16000	2216	1235	2.03	1296	2.42	1352	2.81	1405	3.21	1454	3.62	1502	4.05	1549	4.48	1595	4.92	1641	5.38	1730	6.33	1815	7.30	
17000	2355	1312	2.44	1370	2.85	1424	3.27	1474	3.69	1522	4.12	1567	4.56	1611	5.01	1655	5.47	1699	5.95	1784	6.93			
18000	2493	1389	2.89	1444	3.33	1495	3.76	1544	4.21	1590	4.67	1633	5.13	1676	5.61	1718	6.09	1759	6.58					
19000	2632	1466	3.40	1518	3.86	1567	4.32	1614	4.79	1659	5.27	1701	5.76	1741	6.24	1781	6.74							
20000	2770	1544	3.97	1593	4.45	1640	4.93	1685	5.43	1728	5.93	1769	6.44	1808	6.95									
21000	2909	1621	4.60	1668	5.10	1713	5.61	1756	6.12															
22000	3047	1698	5.28	1743	5.81	1786	6.34																	
23000	3186	1775	6.04	1818	6.58																			
24000	3324																							
25000	3463																							
26000	3601																							

## TCWPX 36BE4 – 28° Blade Angle

Wheel Diameter: 36" Outlet Area: 7.22 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7000	970	402	0.12	528	0.30	<u>635</u>	<u>0.52</u>	733	0.78														
8000	1108	460	0.18	573	0.38	669	0.61	<u>760</u>	<u>0.89</u>	845	1.20												
9000	1247	517	0.25	618	0.48	708	0.73	791	1.01	<u>870</u>	<u>1.33</u>	946	1.69										
10000	1385	575	0.35	665	0.59	751	0.87	826	1.16	<u>901</u>	<u>1.49</u>	<u>971</u>	<u>1.85</u>	1040	2.24	1105	2.67						
11000	1524	632	0.46	714	0.72	796	1.03	866	1.33	934	1.67	<u>1001</u>	<u>2.04</u>	<u>1065</u>	<u>2.44</u>	<u>1128</u>	<u>2.87</u>	1188	3.33				
12000	1662	690	0.60	765	0.88	841	1.20	909	1.54	972	1.89	1034	2.26	<u>1095</u>	<u>2.67</u>	<u>1154</u>	<u>3.10</u>	<u>1211</u>	<u>3.56</u>	1321	4.56		
13000	1801	747	0.77	817	1.06	887	1.40	953	1.76	1013	2.13	1070	2.52	1128	2.94	<u>1184</u>	<u>3.38</u>	<u>1239</u>	<u>3.85</u>	1344	4.85	1444	5.95
14000	1939	805	0.96	869	1.27	934	1.63	998	2.02	1056	2.41	1110	2.81	1163	3.23	1217	3.69	<u>1269</u>	<u>4.16</u>	<u>1369</u>	<u>5.17</u>	1467	6.29
15000	2078	862	1.18	923	1.52	983	1.89	1044	2.30	1100	2.71	1152	3.13	1202	3.57	1252	4.03	1302	4.52	<u>1399</u>	<u>5.55</u>	<u>1491</u>	<u>6.66</u>
16000	2216	920	1.43	976	1.78	1033	2.18	1090	2.60	1145	3.05	1196	3.50	1244	3.95	1290	4.41	1337	4.91	<u>1430</u>	<u>5.96</u>	<u>1519</u>	<u>7.09</u>
17000	2355	977	1.72	1030	2.09	1083	2.49	1137	2.94	1190	3.41	1240	3.88	1287	4.36	1331	4.84	1375	5.34	1463	6.41	<u>1550</u>	<u>7.57</u>
18000	2493	1035	2.04	1085	2.43	1135	2.86	1186	3.32	1236	3.80	1285	4.31	1331	4.81	1374	5.31	1416	5.83	1499	6.92	1582	8.09
19000	2632	1092	2.40	1140	2.81	1187	3.25	1235	3.73	1283	4.23	1331	4.77	1375	5.29	1418	5.83	1458	6.35	1537	7.46	1616	8.65
20000	2770	1150	2.80	1195	3.23	1240	3.69	1285	4.18	1331	4.71	1377	5.26	1421	5.82	1462	6.37	1502	6.93	1578	8.07	1653	9.28
21000	2909	1207	3.24	1250	3.69	1293	4.17	1336	4.68	1379	5.21	1423	5.78	1466	6.37	1507	6.95	1546	7.54	1620	8.72	1692	9.95
22000	3047	1265	3.73	1306	4.20	1347	4.70	1388	5.22	1429	5.77	1471	6.36	1512	6.96	1552	7.57	1591	8.19	1663	9.41	1732	10.67
23000	3186	1322	4.25	1362	4.76	1401	5.27	1440	5.81	1479	6.38	1519	6.98	1559	7.60	1598	8.24	1636	8.88	1707	10.16	1774	11.45
24000	3324	1380	4.84	1417	5.35	1455	5.89	1493	6.46	1530	7.03	1568	7.64	1606	8.28	1644	8.94	1682	9.62	1752	10.96	1818	12.30
25000	3463	1437	5.46	1473	6.00	1509	6.55	1546	7.15	1582	7.75	1618	8.37	1654	9.01	1691	9.70	1727	10.39	1797	11.79		
26000	3601	1495	6.15	1530	6.71	1564	7.28	1599	7.88	1634	8.51	1668	9.14	1703	9.80	1739	10.51	1774	11.22				

Underlined figures indicate maximum static efficiency.

# Performance Data – Belt Driven

## TCWPX 42BE4 – 20° Blade Angle

Wheel Diameter: 42" Outlet Area: 9.79 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
9000	919	388	0.19	489	0.42	574	0.70																	
10000	1021	431	0.26	525	0.51	602	0.80	<u>679</u>	<u>1.14</u>															
11000	1124	475	0.34	562	0.62	633	0.92	703	1.28	<u>772</u>	<u>1.67</u>													
12000	1226	518	0.45	600	0.74	667	1.07	730	1.43	<u>795</u>	<u>1.84</u>	<u>857</u>	<u>2.28</u>											
13000	1328	561	0.57	639	0.89	701	1.23	761	1.61	819	2.02	<u>879</u>	<u>2.48</u>											
14000	1430	604	0.71	678	1.06	737	1.41	793	1.81	848	2.24	903	2.71	<u>957</u>	<u>3.20</u>									
15000	1532	647	0.87	717	1.24	774	1.62	827	2.03	878	2.47	929	2.95	980	3.45	<u>1031</u>	<u>3.99</u>							
16000	1634	690	1.05	757	1.45	812	1.86	861	2.27	910	2.73	958	3.22	1006	3.75	<u>1054</u>	<u>4.29</u>	1102	4.88					
17000	1736	734	1.27	797	1.69	850	2.12	897	2.55	944	3.03	989	3.53	1034	4.06	1079	4.62	<u>1125</u>	<u>5.22</u>	<u>1212</u>	<u>6.46</u>			
18000	1839	777	1.50	837	1.95	889	2.40	934	2.86	978	3.34	1021	3.86	1064	4.41	1106	4.98	1149	5.58	<u>1234</u>	<u>6.85</u>			
19000	1941	820	1.77	877	2.23	927	2.71	971	3.19	1013	3.69	1055	4.23	1095	4.78	1136	5.37	1176	5.98	<u>1257</u>	<u>7.28</u>	<u>1336</u>	<u>8.66</u>	
20000	2043	863	2.06	918	2.55	967	3.06	1009	3.56	1049	4.07	1089	4.62	1128	5.19	1167	5.80	1205	6.42	1281	7.73	<u>1358</u>	<u>9.14</u>	
21000	2145	906	2.38	959	2.91	1006	3.43	1048	3.96	1086	4.49	1124	5.05	1162	5.64	1199	6.25	1235	6.88	1308	8.23	<u>1381</u>	<u>9.66</u>	
22000	2247	949	2.74	1000	3.29	1045	3.83	1086	4.39	1124	4.95	1160	5.52	1196	6.11	1232	6.75	1267	7.40	1336	8.76	1406	10.22	
23000	2349	992	3.13	1041	3.70	1085	4.28	1125	4.85	1162	5.43	1197	6.03	1231	6.63	1266	7.28	1300	7.95	1366	9.33	1432	10.80	
24000	2451	1036	3.56	1083	4.16	1125	4.75	1164	5.35	1200	5.95	1234	6.57	1267	7.19	1300	7.84	1333	8.53	1397	9.94	1461	11.46	
25000	2554	1079	4.02	1124	4.64	1165	5.26	1204	5.90	1239	6.52	1272	7.15	1304	7.80	1336	8.47	1367	9.15	1429	10.59	1490	12.12	
26000	2656	1122	4.52	1166	5.17	1206	5.82	1243	6.47	1278	7.13	1310	7.78	1341	8.44	1372	9.13	1402	9.82	1463	11.31	1521	12.85	
28000	2860	1208	5.64	1249	6.34	1287	7.04	1322	7.74	1356	8.45	1387	9.15	1417	9.86	1445	10.56	1474	11.31	1530	12.82	1586	14.45	
30000	3064	1294	6.94	1333	7.70	1369	8.45	1402	9.18	1435	9.95	1465	10.70	1493	11.44	1521	12.21	1548	12.98	1601	14.57			

## TCWPX 42BE4 – 28° Blade Angle

Wheel Diameter: 42" Outlet Area: 9.79 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
9000	919	302	0.15	405	0.40	<u>497</u>	<u>0.72</u>																	
10000	1021	336	0.20	430	0.47	<u>513</u>	<u>0.80</u>	<u>592</u>	<u>1.21</u>															
11000	1124	369	0.27	456	0.56	533	0.91	<u>608</u>	<u>1.32</u>	676	1.79													
12000	1226	403	0.35	483	0.66	555	1.02	<u>624</u>	<u>1.44</u>	<u>690</u>	<u>1.92</u>													
13000	1328	437	0.44	511	0.78	579	1.16	643	1.59	<u>707</u>	<u>2.09</u>	<u>765</u>	<u>2.61</u>											
14000	1430	470	0.55	540	0.91	604	1.31	664	1.75	<u>724</u>	<u>2.26</u>	<u>781</u>	<u>2.80</u>	<u>835</u>	<u>3.39</u>									
15000	1532	504	0.68	569	1.06	630	1.48	687	1.94	742	2.44	<u>798</u>	<u>3.01</u>	<u>850</u>	<u>3.61</u>	<u>900</u>	<u>4.24</u>							
16000	1634	537	0.83	598	1.22	657	1.67	711	2.14	763	2.66	<u>815</u>	<u>3.23</u>	<u>867</u>	<u>3.85</u>	<u>915</u>	<u>4.49</u>	<u>962</u>	<u>5.17</u>					
17000	1736	571	0.99	629	1.42	684	1.87	736	2.37	785	2.89	834	3.47	<u>884</u>	<u>4.11</u>	<u>932</u>	<u>4.78</u>	<u>977</u>	<u>5.47</u>					
18000	1839	604	1.17	659	1.62	712	2.11	762	2.62	809	3.16	855	3.74	902	4.38	<u>948</u>	<u>5.06</u>	<u>993</u>	<u>5.77</u>	<u>1077</u>	<u>7.27</u>			
19000	1941	638	1.38	690	1.85	740	2.35	788	2.89	834	3.45	878	4.05	921	4.67	<u>966</u>	<u>5.37</u>	<u>1010</u>	<u>6.11</u>	<u>1092</u>	<u>7.63</u>			
20000	2043	672	1.62	721	2.10	769	2.63	815	3.18	859	3.76	902	4.38	943	5.02	985	5.71	<u>1027</u>	<u>6.45</u>	<u>1108</u>	<u>8.02</u>	1171	9.28	
21000	2145	705	1.87	752	2.38	798	2.93	843	3.51	886	4.11	926	4.73	966	5.39	1005	6.07	1045	6.81	<u>1125</u>	<u>8.43</u>	<u>1199</u>	<u>10.11</u>	
22000	2247	739	2.15	784	2.69	828	3.25	870	3.84	912	4.47	952	5.13	990	5.79	1027	6.48	1065	7.22	<u>1142</u>	<u>8.86</u>	<u>1216</u>	<u>10.60</u>	
23000	2349	772	2.45	815	3.01	858	3.61	899	4.22	939	4.87	978	5.54	1015	6.23	1051	6.94	1087	7.68	<u>1160</u>	<u>9.31</u>	<u>1232</u>	<u>11.07</u>	
24000	2451	806	2.79	847	3.37	888	3.98	927	4.61	966	5.28	1004	5.98	1040	6.68	1075	7.41	1109	8.15	1179	9.79	<u>1249</u>	<u>11.58</u>	
25000	2554	840	3.16	879	3.75	918	4.39	956	5.04	994	5.74	1030	6.44	1066	7.18	1100	7.92	1133	8.68	1199	10.31	<u>1267</u>	<u>12.13</u>	
26000	2656	873	3.55	911	4.17	949	4.83	986	5.51	1022	6.22	1057	6.94	1092	7.70	1125	8.46	1158	9.26	1221	10.89	1286	12.71	
28000	2860	940	4.43	976	5.11	1011	5.80	1045	6.52	1079	7.27	1112	8.03	1145	8.83	1177	9.64	1208	10.47	1268	12.17	1327	13.98	
30000	3064	1007	5.44	1041	6.17	1073	6.90	1106	7.68	1137	8.45	1169	9.28	1200	10.11	1230	10.95	1260	11.83	1318	13.63	1373	15.47	

Underlined figures indicate maximum static efficiency.

# Performance Data – Belt Driven

## TCWPX 48BE4 – 20° Blade Angle

Wheel Diameter: 48" Outlet Area: 12.76 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
12000	940	391	0.27	484	0.57	564	0.92																	
13000	1019	423	0.34	511	0.67	587	1.04	655	1.44															
14000	1097	456	0.43	539	0.78	610	1.17	676	1.59	737	2.03													
15000	1176	488	0.53	567	0.90	634	1.30	698	1.75	756	2.21													
16000	1254	521	0.64	596	1.04	660	1.46	720	1.92	777	2.41	831	2.92											
17000	1332	554	0.77	625	1.19	686	1.63	744	2.12	798	2.62	850	3.14											
18000	1411	586	0.92	655	1.36	713	1.82	768	2.32	821	2.85	871	3.40	919	3.96									
19000	1489	619	1.08	684	1.54	740	2.03	793	2.55	844	3.09	892	3.65	939	4.24	984	4.85							
20000	1567	651	1.25	714	1.74	768	2.25	818	2.78	867	3.35	915	3.94	960	4.55	1004	5.18	<u>1046</u>	<u>5.82</u>					
21000	1646	684	1.46	744	1.97	796	2.49	845	3.05	892	3.63	938	4.25	982	4.88	1024	5.51	1065	6.17					
22000	1724	716	1.67	774	2.21	825	2.76	872	3.34	917	3.94	961	4.56	1004	5.21	1046	5.89	1086	6.57					
23000	1803	749	1.91	804	2.46	854	3.04	899	3.64	943	4.26	985	4.90	1027	5.57	1067	6.26	1107	6.97	1182	8.42			
24000	1881	781	2.17	835	2.75	883	3.35	927	3.97	969	4.61	1010	5.27	1051	5.97	1090	6.67	1128	7.39	1202	8.89			
25000	1959	814	2.45	865	3.05	912	3.67	955	4.32	995	4.97	1035	5.65	1075	6.37	1113	7.09	1150	7.83					
26000	2038	847	2.76	896	3.38	942	4.03	983	4.69	1023	5.37	1061	6.07	1099	6.79	1137	7.55	1173	8.31					
27000	2116	879	3.09	927	3.74	971	4.40	1012	5.09	1050	5.79	1087	6.50	1124	7.25	1161	8.03	1196	8.80					
28000	2194	912	3.45	958	4.12	1001	4.81	1041	5.52	1078	6.23	1114	6.97	1150	7.74	1185	8.52	1220	9.33					
30000	2351	977	4.24	1020	4.95	1061	5.70	1099	6.44	1135	7.21	1169	7.99	1203	8.80									
32000	2508	1042	5.15	1083	5.91	1121	6.69	1158	7.49	1192	8.29													
34000	2665	1107	6.17	1146	6.99	1182	7.81	1217	8.65															

## TCWPX 48BE4 – 28° Blade Angle

Wheel Diameter: 48" Outlet Area: 12.76 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
12000	940	291	0.19	388	0.50	<u>470</u>	<u>0.89</u>	546	1.36															
13000	1019	315	0.24	406	0.58	483	0.97	<u>556</u>	<u>1.45</u>															
14000	1097	340	0.30	425	0.66	498	1.07	<u>567</u>	<u>1.55</u>	632	2.11													
15000	1176	364	0.37	444	0.75	514	1.18	<u>580</u>	<u>1.67</u>	<u>641</u>	<u>2.22</u>	700	2.86											
16000	1254	388	0.45	464	0.85	531	1.30	593	1.80	<u>653</u>	<u>2.37</u>	710	3.00											
17000	1332	412	0.54	483	0.95	549	1.43	608	1.94	<u>665</u>	<u>2.51</u>	<u>720</u>	<u>3.16</u>	772	3.85									
18000	1411	437	0.65	504	1.08	567	1.57	623	2.09	<u>678</u>	<u>2.68</u>	<u>731</u>	<u>3.32</u>	<u>782</u>	<u>4.03</u>	831	4.79							
19000	1489	461	0.76	524	1.20	586	1.73	640	2.27	693	2.87	<u>744</u>	<u>3.52</u>	<u>792</u>	<u>4.21</u>	840	4.98	886	5.80					
20000	1567	485	0.89	545	1.35	605	1.90	657	2.45	707	3.06	<u>757</u>	<u>3.73</u>	<u>804</u>	<u>4.43</u>	<u>850</u>	<u>5.19</u>	895	6.01					
21000	1646	509	1.02	567	1.51	624	2.07	676	2.67	723	3.27	771	3.95	<u>817</u>	<u>4.67</u>	<u>861</u>	<u>5.42</u>	<u>905</u>	<u>6.25</u>					
22000	1724	534	1.18	588	1.68	643	2.26	694	2.88	740	3.51	785	4.18	<u>830</u>	<u>4.91</u>	<u>874</u>	<u>5.70</u>	<u>916</u>	<u>6.52</u>	997	8.29			
23000	1803	558	1.35	610	1.87	663	2.47	713	3.12	757	3.75	801	4.45	844	5.18	<u>887</u>	<u>5.98</u>	<u>928</u>	<u>6.81</u>	1007	8.59			
24000	1881	582	1.53	632	2.07	683	2.69	732	3.36	775	4.02	817	4.72	859	5.48	900	6.27	<u>940</u>	<u>7.10</u>	<u>1017</u>	<u>8.89</u>	1092	10.89	
25000	1959	606	1.73	654	2.28	703	2.92	751	3.62	794	4.32	834	5.02	874	5.78	914	6.59	<u>953</u>	<u>7.43</u>	<u>1028</u>	<u>9.23</u>	1101	11.21	
26000	2038	631	1.95	677	2.53	723	3.17	770	3.89	812	4.61	852	5.35	890	6.10	929	6.93	967	7.78	<u>1041</u>	<u>9.62</u>	<u>1111</u>	<u>11.58</u>	
27000	2116	655	2.18	699	2.77	744	3.44	789	4.18	831	4.93	870	5.69	907	6.46	944	7.28	981	8.15	<u>1053</u>	<u>9.99</u>	<u>1122</u>	<u>11.98</u>	
28000	2194	679	2.43	722	3.05	765	3.73	809	4.49	850	5.26	888	6.04	925	6.85	960	7.66	996	8.54	<u>1067</u>	<u>10.43</u>	<u>1134</u>	<u>12.41</u>	
30000	2351	728	2.99	768	3.65	808	4.37	848	5.14	889	5.99	926	6.82	961	7.66	995	8.52	1028	9.40	1094	11.30	<u>1159</u>	<u>13.34</u>	
32000	2508	776	3.63	814	4.33	851	5.07	889	5.89	927	6.76	964	7.66	998	8.55	1030	9.43	1062	10.36	1124	12.29	1187	14.40	
34000	2665	825	4.36	860	5.09	895	5.87	931	6.73	967	7.63	1002	8.57	1036	9.53	1067	10.46	1098	11.43	1157	13.41	1216	15.54	

Underlined figures indicate maximum static efficiency.

# Performance Data – Belt Driven

## TCWPX 54BC6 – 10° Blade Angle

Wheel Diameter: 54.5" Outlet Area: 16.20 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
12000	741	269	0.19	371	0.55	442	0.91	<u>511</u>	<u>1.32</u>	571	1.79													
14000	864	313	0.30	405	0.69	475	1.16	532	1.57	<u>592</u>	<u>2.06</u>	<u>644</u>	<u>2.59</u>	693	3.17									
16000	988	358	0.44	443	0.88	509	1.43	562	1.91	613	2.40	<u>665</u>	<u>2.94</u>	<u>713</u>	<u>3.55</u>	757	4.18	799	4.84					
18000	1111	403	0.63	483	1.14	542	1.69	596	2.30	641	2.81	<u>686</u>	<u>3.36</u>	<u>734</u>	<u>3.98</u>	<u>777</u>	<u>4.63</u>	<u>818</u>	<u>5.32</u>	894	6.79			
20000	1235	448	0.87	525	1.45	577	1.98	630	2.71	675	3.33	715	3.90	755	4.51	<u>798</u>	<u>5.17</u>	<u>839</u>	<u>5.89</u>	<u>913</u>	<u>7.39</u>	982	9.03	
22000	1358	493	1.16	567	1.83	614	2.35	664	3.11	709	3.87	749	4.55	785	5.17	821	5.82	860	6.54	<u>934</u>	<u>8.09</u>	<u>1001</u>	<u>9.75</u>	
24000	1481	537	1.50	610	2.27	653	2.81	698	3.53	743	4.41	783	5.22	818	5.92	852	6.62	885	7.32	<u>955</u>	<u>8.87</u>	<u>1022</u>	<u>10.58</u>	
26000	1605	582	1.91	652	2.77	694	3.36	734	4.03	776	4.93	817	5.90	853	6.75	885	7.50	916	8.24	978	9.81	<u>1044</u>	<u>11.54</u>	
28000	1728	627	2.39	695	3.35	736	4.01	772	4.66	811	5.52	850	6.54	887	7.57	920	8.46	950	9.28	1007	10.88			
30000	1852	672	2.94	737	3.99	779	4.75	812	5.40	847	6.20	884	7.22	920	8.34	954	9.42	984	10.36	1040	12.12			
32000	1975	716	3.56	780	4.72	821	5.55	854	6.27	885	7.02	919	7.99	953	9.12	987	10.33	1018	11.45					
34000	2099	761	4.27	822	5.51	864	6.46	896	7.23	925	7.99	955	8.87	988	10.00	1020	11.23	1052	12.52					
36000	2222	806	5.08	865	6.41	906	7.44	938	8.29	966	9.08	994	9.95	1024	10.99	1054	12.20							
38000	2346	851	5.97	908	7.41	949	8.54	980	9.45	1008	10.30	1034	11.16											
40000	2469	896	6.97	951	8.50	991	9.71	1023	10.74	1050	11.63													
42000	2593	940	8.05	994	9.69	1034	11.01																	
44000	2716	985	9.26	1037	10.99																			
46000	2840	1030	10.59																					
50000	3086																							
54000	3333																							

## TCWPX 54BC6 – 20° Blade Angle

Wheel Diameter: 54.5" Outlet Area: 16.20 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
12000	741	201	0.15	297	0.51																			
14000	864	235	0.24	321	0.65	<u>389</u>	<u>1.12</u>																	
16000	988	268	0.35	346	0.81	410	1.33																	
18000	1111	302	0.51	373	1.02	432	1.57	485	2.19															
20000	1235	335	0.69	400	1.26	456	1.85	506	2.50	<u>553</u>	<u>3.22</u>													
22000	1358	369	0.92	428	1.54	481	2.18	529	2.88	573	3.62	<u>615</u>	<u>4.42</u>											
24000	1481	402	1.19	457	1.86	508	2.57	553	3.30	595	4.08	634	4.90	<u>672</u>	<u>5.77</u>									
26000	1605	436	1.52	487	2.25	534	2.99	578	3.78	618	4.59	656	5.46	692	6.36	<u>727</u>	<u>7.30</u>							
28000	1728	469	1.89	517	2.68	562	3.48	603	4.30	642	5.17	678	6.05	713	7.00	746	7.97	<u>779</u>	<u>9.00</u>					
30000	1852	503	2.34	547	3.16	590	4.03	630	4.91	667	5.81	702	6.74	735	7.70	767	8.71	798	9.76					
32000	1975	536	2.83	578	3.71	618	4.62	657	5.57	692	6.50	726	7.48	758	8.48	790	9.56	819	10.61	<u>860</u>	<u>12.01</u>			
34000	2099	570	3.40	609	4.32	647	5.29	684	6.28	719	7.30	751	8.30	782	9.34	813	10.45	842	11.57	<u>877</u>	<u>12.88</u>	<u>951</u>	<u>16.35</u>	
36000	2222	604	4.04	641	5.03	677	6.04	712	7.08	745	8.12	777	9.21	807	10.29	836	11.40	865	12.58	919	14.99	970	17.49	
38000	2346	637	4.74	673	5.80	707	6.86	740	7.94	772	9.03	803	10.17	832	11.29	861	12.48	888	13.65	941	16.14	991	18.75	
40000	2469	671	5.55	704	6.62	737	7.75	769	8.89	800	10.05	830	11.23	858	12.40	886	13.63	912	14.83	964	17.41	1012	20.04	
42000	2593	704	6.40	736	7.55	768	8.74	798	9.92	828	11.13	857	12.36	885	13.61	912	14.88	937	16.11	987	18.73	1035	21.49	
44000	2716	738	7.38	768	8.56	798	9.78	828	11.06	856	12.29	884	13.56	912	14.90	938	16.20	963	17.51	1011	20.18	1058	23.02	
46000	2840	771	8.41	801	9.69	829	10.94	858	12.27	885	13.56	912	14.88	939	16.26	964	17.59	989	18.99	1036	21.76			
50000	3086	838	10.80	865	12.16	892	13.56	918	14.96	944	16.40	969	17.81	994	19.27	1018	20.71							
54000	3333	905	13.61	931	15.11	955	16.57	980	18.11	1003	19.59	1027	21.15	1050	22.67									

Underlined figures indicate maximum static efficiency.

# Performance Data – Belt Driven

## TCWPX 60BC6 – 10° Blade Angle

Wheel Diameter: 60.5" Outlet Area: 19.96 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14000	701	266	0.22	362	0.63	437	1.06	501	1.54	<u>557</u>	<u>2.07</u>												
16000	801	304	0.33	393	0.80	460	1.28	522	1.78	<u>577</u>	<u>2.35</u>	<u>626</u>	<u>2.95</u>	672	3.60								
18000	902	342	0.47	425	1.00	486	1.53	545	2.08	598	2.67	<u>646</u>	<u>3.30</u>	<u>690</u>	<u>3.96</u>	732	4.68	773	5.45				
20000	1002	380	0.64	457	1.23	515	1.82	569	2.43	620	3.04	<u>667</u>	<u>3.70</u>	<u>710</u>	<u>4.39</u>	<u>751</u>	<u>5.13</u>	790	5.92	863	7.58		
22000	1102	418	0.85	489	1.50	546	2.15	595	2.81	643	3.47	689	4.15	<u>731</u>	<u>4.87</u>	<u>771</u>	<u>5.64</u>	<u>809</u>	<u>6.44</u>	880	8.16	946	9.99
24000	1202	456	1.11	522	1.81	578	2.53	624	3.23	668	3.95	712	4.68	754	5.44	793	6.23	<u>830</u>	<u>7.06</u>	<u>899</u>	<u>8.81</u>		
26000	1302	494	1.41	556	2.17	609	2.94	654	3.70	695	4.48	736	5.26	777	6.07	815	6.87	851	7.72	<u>919</u>	<u>9.53</u>		
28000	1403	532	1.76	590	2.58	641	3.41	685	4.22	725	5.07	762	5.89	801	6.76	838	7.60	874	8.49	<u>940</u>	<u>10.33</u>		
30000	1503	569	2.16	625	3.05	674	3.94	717	4.81	755	5.70	791	6.60	826	7.49	862	8.41	897	9.33				
32000	1603	607	2.62	660	3.57	707	4.52	749	5.46	786	6.39	821	7.35	854	8.30	887	9.26	921	10.25				
36000	1803	683	3.73	731	4.81	773	5.85	813	6.92	849	7.97	883	9.05	913	10.09	943	11.17						
40000	2004	759	5.12	802	6.30	842	7.49	879	8.67	913	9.83	946	11.03										
44000	2204	835	6.81	875	8.13	911	9.41	946	10.73														
48000	2404	911	8.85	947	10.26																		
52000	2605																						
56000	2805																						

## TCWPX 60BC6 – 20° Blade Angle

Wheel Diameter: 60.5" Outlet Area: 19.96 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14000	701	191	1.00	288	0.61																		
16000	801	218	0.25	308	0.75	373	1.27																
18000	902	245	0.36	326	0.90	389	1.47																
20000	1002	272	0.49	346	1.08	409	1.74	459	2.37														
22000	1102	299	0.65	368	1.29	429	2.02	477	2.72	<u>523</u>	<u>3.46</u>												
24000	1202	327	0.85	391	1.54	448	2.32	496	3.09	538	3.86												
26000	1302	354	1.08	415	1.84	467	2.64	516	3.51	556	4.32	594	5.16										
28000	1403	381	1.35	439	2.17	486	2.98	535	3.94	576	4.85	611	5.69	<u>647</u>	<u>6.63</u>								
30000	1503	408	1.66	464	2.55	508	3.40	554	4.39	596	5.41	631	6.34	664	7.28	<u>697</u>	<u>8.27</u>						
32000	1603	436	2.02	488	2.95	530	3.86	573	4.88	615	5.98	651	7.01	682	7.97	713	8.99	<u>745</u>	<u>10.10</u>				
36000	1803	490	2.87	538	3.94	577	4.95	614	6.01	653	7.21	690	8.45	722	9.60	751	10.70	779	11.83	835	14.24		
40000	2004	544	3.93	589	5.14	626	6.28	659	7.41	692	8.60	727	9.95	761	11.34	791	12.65	818	13.90	869	16.41	919	19.06
44000	2204	599	5.25	640	6.57	675	7.83	706	9.06	736	10.34	766	11.67	798	13.16	829	14.68	858	16.19	907	18.91	953	21.66
48000	2404	653	6.80	691	8.24	725	9.66	754	10.98	782	12.35	809	13.74	838	15.28	867	16.89	896	18.57	947	21.72		
52000	2605	708	8.67	743	10.22	775	11.76	804	13.26	830	14.70	855	16.17	880	17.68	906	19.31	933	21.06				
56000	2805	762	10.81	795	12.49	825	14.13	853	15.77	878	17.33	902	18.91	925	20.49	949	22.18						
60000	3005	817	13.32	848	15.13	876	16.87	903	18.65	927	20.32	950	22.01										
64000	3206	871	16.14	900	18.05	927	19.94	953	21.85														
68000	3406	926	19.39	953	21.40																		
72000	3606																						

Underlined figures indicate maximum static efficiency.

# Performance Data – Belt Driven

## TCWPX 66BC6 – 10° Blade Angle

Wheel Diameter: 66.5" Outlet Area: 24.29 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	659	226	0.14	340	0.63	<u>420</u>	<u>1.17</u>	489	1.80	554	2.55	611	3.34										
18000	741	254	0.20	359	0.73	438	1.34	<u>501</u>	<u>1.97</u>	562	2.73	620	3.58	671	4.45	717	5.35						
20000	823	283	0.28	379	0.85	456	1.52	<u>518</u>	<u>2.20</u>	<u>573</u>	<u>2.94</u>	628	3.80	680	4.73	728	5.71	771	6.70				
22000	906	311	0.37	400	0.98	475	1.71	536	2.45	<u>589</u>	<u>3.22</u>	639	4.07	689	5.02	736	6.02						
24000	988	339	0.49	423	1.14	493	1.90	554	2.72	<u>607</u>	<u>3.55</u>	<u>653</u>	<u>4.39</u>	699	5.32	745	6.36						
26000	1070	368	0.62	446	1.32	513	2.12	573	3.01	624	3.87	<u>671</u>	<u>4.78</u>	<u>713</u>	<u>5.70</u>	<u>755</u>	<u>6.71</u>						
28000	1153	396	0.77	471	1.53	533	2.36	591	3.29	642	4.23	689	5.20	<u>731</u>	<u>6.18</u>	<u>770</u>	<u>7.18</u>						
32000	1317	452	1.15	520	2.02	575	2.90	629	3.91	680	5.02	725	6.10	766	7.16								
36000	1482	509	1.64	571	2.62	622	3.60	670	4.65	717	5.81	762	7.06										
40000	1647	565	2.25	622	3.33	671	4.43	714	5.53	757	6.74												
44000	1811	622	3.00	674	4.17	720	5.38	761	6.59														
48000	1976	679	3.90	727	5.18	770	6.48																
52000	2141	735	4.94	780	6.33																		
56000	2305																						
60000	2470																						
64000	2635																						

## TCWPX 66BC6 – 20° Blade Angle

Wheel Diameter: 66.5" Outlet Area: 24.29 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	659	162	0.12	<u>270</u>	<u>0.62</u>	355	1.31																
18000	741	182	0.17	281	0.71	362	1.42	430	2.27														
20000	823	202	0.23	294	0.81	<u>370</u>	<u>1.56</u>	436	2.43	495	3.43												
22000	906	222	0.30	308	0.94	<u>379</u>	<u>1.71</u>	443	2.61	500	3.62	553	4.76										
24000	988	243	0.40	322	1.07	390	1.88	<u>451</u>	<u>2.81</u>	506	3.84	557	4.98	606	6.26								
26000	1070	263	0.50	337	1.22	401	2.06	<u>460</u>	<u>3.03</u>	514	4.10	563	5.24	610	6.52	655	7.91						
28000	1153	283	0.63	352	1.37	414	2.27	<u>470</u>	<u>3.27</u>	<u>522</u>	<u>4.36</u>	570	5.54	615	6.81	658	8.17	700	9.67				
32000	1317	323	0.93	385	1.77	442	2.77	493	3.83	<u>540</u>	<u>4.96</u>	<u>586</u>	<u>6.20</u>	630	7.55	670	8.93	709	10.40				
36000	1482	364	1.33	420	2.27	471	3.32	519	4.48	563	5.69	<u>605</u>	<u>6.98</u>	<u>646</u>	<u>8.36</u>	<u>686</u>	<u>9.84</u>	723	11.35				
40000	1647	404	1.82	455	2.85	501	3.96	547	5.24	588	6.52	628	7.90	<u>666</u>	<u>9.33</u>	<u>703</u>	<u>10.83</u>	<u>739</u>	<u>12.41</u>				
44000	1811	445	2.44	492	3.57	534	4.74	576	6.08	616	7.50	653	8.92	689	10.43	<u>724</u>	<u>12.01</u>	<u>758</u>	<u>13.65</u>				
48000	1976	485	3.16	529	4.40	568	5.66	606	7.02	644	8.53	680	10.09	714	11.66	747	13.30	<u>779</u>	<u>15.00</u>				
52000	2141	526	4.03	566	5.34	603	6.71	638	8.12	674	9.72	708	11.36	741	13.05	772	14.75						
56000	2305	566	5.02	604	6.45	639	7.91	671	9.37	705	11.04	737	12.75	769	14.57								
60000	2470	606	6.16	642	7.70	675	9.26	706	10.83	737	12.52	768	14.34										
64000	2635	647	7.49	681	9.15	712	10.79	741	12.44	770	14.18												
68000	2800	687	8.97	719	10.72	749	12.48	777	14.24														
72000	2964	728	10.68	758	12.51																		
76000	3129	768	12.53																				
80000	3294																						

Underlined figures indicate maximum static efficiency.

# Performance Data – Belt Driven

## TCWPX 72BC6 – 10° Blade Angle

Wheel Diameter: 72.5" Outlet Area: 28.87 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	693	234	0.19	345	0.79	<u>425</u>	<u>1.47</u>	492	2.24	556	3.14												
22500	779	263	0.27	365	0.92	443	1.68	<u>506</u>	<u>2.47</u>	565	3.37	622	4.40										
25000	866	292	0.37	386	1.08	462	1.91	<u>524</u>	<u>2.76</u>	<u>578</u>	<u>3.67</u>	631	4.69										
27500	953	321	0.50	408	1.25	482	2.16	543	3.09	<u>595</u>	<u>4.03</u>	<u>644</u>	<u>5.06</u>										
30000	1039	351	0.65	432	1.46	501	2.41	562	3.44	614	4.45												
32500	1126	380	0.83	457	1.71	521	2.68	581	3.79	632	4.87												
35000	1212	409	1.03	482	1.98	542	2.98	600	4.15	651	5.34												
37500	1299	438	1.27	508	2.29	564	3.32	620	4.55														
40000	1386	468	1.54	534	2.63	588	3.73	640	4.96														
42500	1472	497	1.85	560	3.00	612	4.16																
45000	1559	526	2.19	586	3.40	637	4.64																
47500	1645	555	2.57	613	3.86																		
50000	1732	584	3.00	640	4.36																		
52500	1818	614	3.49																				
55000	1905	643	4.00																				
57500	1992																						

## TCWPX 72BC6 – 20° Blade Angle

Wheel Diameter: 72.5" Outlet Area: 28.87 ft<sup>2</sup>

CFM	OV	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	693	167	0.16	<u>273</u>	<u>0.78</u>	356	1.61																
22500	779	188	0.22	285	0.89	364	1.76	432	2.81														
25000	866	209	0.31	299	1.04	<u>373</u>	<u>1.94</u>	438	3.01														
27500	953	230	0.41	313	1.19	<u>383</u>	<u>2.14</u>	446	3.24	502	4.47												
30000	1039	251	0.53	328	1.36	394	2.35	<u>454</u>	<u>3.49</u>	509	4.76	559	6.14										
32500	1126	272	0.67	344	1.56	407	2.61	<u>464</u>	<u>3.78</u>	<u>517</u>	<u>5.08</u>	566	6.50	612	8.03								
35000	1212	292	0.83	360	1.77	420	2.87	<u>475</u>	<u>4.10</u>	<u>526</u>	<u>5.44</u>	574	6.89	618	8.42								
37500	1299	313	1.03	377	2.02	435	3.19	486	4.43	<u>535</u>	<u>5.80</u>	<u>582</u>	<u>7.30</u>	626	8.90								
40000	1386	334	1.25	394	2.29	449	3.50	499	4.81	<u>546</u>	<u>6.23</u>	<u>591</u>	<u>7.75</u>	<u>634</u>	<u>9.38</u>								
42500	1472	355	1.50	412	2.60	464	3.85	513	5.24	558	6.69	<u>601</u>	<u>8.24</u>	<u>643</u>	<u>9.91</u>								
45000	1559	376	1.78	430	2.94	480	4.24	527	5.68	570	7.16	<u>612</u>	<u>8.77</u>	<u>652</u>	<u>10.46</u>								
47500	1645	397	2.09	449	3.32	496	4.66	541	6.14	584	7.72	624	9.35										
50000	1732	418	2.44	468	3.74	512	5.09	556	6.64	597	8.26	636	9.94										
52500	1818	439	2.83	487	4.19	529	5.59	571	7.17	612	8.89	649	10.59										
55000	1905	460	3.26	506	4.68	546	6.11	587	7.76	626	9.51												
57500	1992	481	3.72	525	5.20	564	6.70	603	8.38	641	10.18												
60000	2078	501	4.21	544	5.76	582	7.33	619	9.02														
65000	2251	543	5.36	583	7.04	619	8.74	653	10.50														
70000	2425	585	6.70	622	8.50																		
75000	2598	627	8.25																				

Underlined figures indicate maximum static efficiency.

# Performance Data – Direct Drive

## TCWPX 24DE4

Wheel Diameter: 24" Outlet Area: 3.21 ft<sup>2</sup>

PROP	RPM	HP	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
24DE412	860	1/12	2614	0.06	1643	0.07																			
24DE416	860	1/12	3303	0.08	2403	0.09																			
24DE420	860	1/8	3854	0.11	2961	0.12																			
24DE424	860	1/6	4398	0.14	3508	0.16																			
24DE428	860	1/4	4872	0.18	3968	0.20																			
24DE432	860	1/4	5372	0.24	4474	0.25																			
24DE412	1170	1/6	3557	0.15	2916	0.16	2096	0.16																	
24DE416	1170	1/4	4494	0.20	3882	0.23	3144	0.24																	
24DE420	1170	1/3	5243	0.27	4650	0.30	3913	0.31	<u>2882</u>	<u>0.31</u>															
24DE424	1170	1/2	5983	0.35	5373	0.39	4654	0.41	<u>3704</u>	<u>0.41</u>															
24DE428	1170	1/2	6628	0.46	6020	0.49	5282	0.51	4417	0.51															
24DE432	1170	3/4	7309	0.60	6685	0.63	5974	0.64	5134	0.64															
24DE412	1750	1/2	5320	0.51	4925	0.53	4476	0.54	3979	0.55	3427	0.55													
24DE416	1750	3/4	6722	0.68	6325	0.72	5908	0.75	5466	0.78	4966	0.80	4386	0.79	<u>3661</u>	<u>0.77</u>									
24DE420	1750	1	7842	0.89	7468	0.94	7059	0.99	6596	1.02	6096	1.04	5565	1.06	<u>4904</u>	<u>1.06</u>									
24DE424	1750	1 1/2	8950	1.18	8556	1.23	8139	1.28	7694	1.32	7212	1.34	6665	1.37	6043	1.37	5313	1.35							
24DE428	1750	2	9914	1.55	9525	1.60	9108	1.65	8652	1.67	8148	1.69	7624	1.70	7068	1.70	6399	1.70							
24DE432	1750	2	10932	2.02	10528	2.06	10103	2.09	9654	2.12	9175	2.14	8661	2.15	8119	2.14	7470	2.12	<u>6528</u>	<u>2.08</u>					

## TCWPX 30DE4

Wheel Diameter: 30" Outlet Area: 5.03 ft<sup>2</sup>

PROP	RPM	HP	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP			
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
30DE412	860	1/4	5418	0.25	4534	0.27																				
30DE416	860	1/2	6581	0.32	5691	0.36	4688	0.37																		
30DE420	860	1/2	7670	0.41	6866	0.46	5885	0.48																		
30DE424	860	3/4	8770	0.53	7916	0.59	6900	0.62	<u>5483</u>	<u>0.62</u>																
30DE428	860	3/4	9894	0.69	9016	0.74	7978	0.77	6553	0.78																
30DE432	860	1	10817	0.88	9836	0.90	8735	0.93	7261	0.93																
30DE412	1170	3/4	7371	0.62	6750	0.67	6061	0.69	5288	0.70																
30DE416	1170	1	8953	0.81	8303	0.87	7644	0.90	6941	0.93	6090	0.94														
30DE420	1170	1 1/2	10435	1.02	9866	1.10	9244	1.16	8551	1.19	7755	1.23	<u>6730</u>	<u>1.24</u>												
30DE424	1170	1 1/2	11932	1.35	11325	1.42	10668	1.48	9942	1.53	9142	1.56	8201	1.58	6780	1.55										
30DE428	1170	2	13461	1.74	12836	1.81	12162	1.87	11425	1.92	10591	1.95	9587	1.97	<u>8284</u>	<u>1.95</u>										
30DE432	1170	3	14716	2.21	14012	2.24	13267	2.28	12481	2.32	11606	2.34	10549	2.35	<u>9268</u>	<u>2.33</u>										
30DE412	1750	3	11025	2.09	10620	2.17	10198	2.23	9757	2.28	9294	2.30	8806	2.31	8297	2.32	7737	2.33								
30DE416	1750	3	13391	2.72	12959	2.80	12523	2.88	12082	2.95	11642	3.00	11199	3.04	10733	3.08	10237	3.12	9703	3.15						
30DE420	1750	5	15608	3.43	15236	3.54	14850	3.65	14449	3.74	14031	3.83	13593	3.90	13133	3.96	12646	4.01	12127	4.06	10951	4.15	<u>9358</u>	<u>4.12</u>		
30DE424	1750	5	17846	4.50	17449	4.62	17039	4.73	16614	4.83	16172	4.92	15711	5.00	15228	5.07	14722	5.12	14192	5.18	13066	5.27	<u>11568</u>	<u>5.28</u>		
30DE428	1750	7 1/2	20134	5.81	19725	5.92	19302	6.03	18865	6.13	18412	6.22	17941	6.30	17451	6.37	16938	6.44	16394	6.49	15173	6.57	13701	6.60		
30DE432	1750	7 1/2	22012	7.38	21548	7.44	21073	7.50	20586	7.55	20086	7.61	19573	7.66	19050	7.71	18511	7.77	17942	7.81	16654	7.87	15131	7.85		

## TCWPX 36DE4

Wheel Diameter: 36" Outlet Area: 7.22 ft<sup>2</sup>

PROP	RPM	HP	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP				
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
36DE412	860	1/2	7418	0.42	6210	0.42	4695	0.41																			
36DE416	860	3/4	9205	0.52	8056	0.55	6710	0.56																			
36DE420	860	3/4	11298	0.67	10243	0.73	8883	0.76	7127	0.75																	
36DE424	860	1	13097	0.85	11996	0.93	10634	0.97	9069	1.00																	
36DE428	860	1 1/2	14913	1.13	13796	1.20	12419	1.25	10844	1.28	<u>8522</u>	<u>1.25</u>															
36DE432	860	1 1/2	16642	1.48	15485	1.54	14123	1.58	12384	1.59	<u>9953</u>	<u>1.55</u>															
36DE412	1170	1	10091	1.07	9208	1.07	8311	1.07	7297	1.05																	
36DE416	1170	1 1/2	12523	1.30	11697	1.35	10828	1.39	9889	1.41	8773	1.42	<u>7392</u>	<u>1.38</u>													
36DE420	1170	2	15370	1.68	14631	1.78	13806	1.85	12841	1.89	11744	1.91	10485	1.90	<u>9002</u>	<u>1.87</u>											
36DE424	1170	3	17818	2.15	17040	2.27	16188	2.36	15219	2.42	14143	2.45	13032	2.49	11692	2.50	9825	2.44									
36DE428	1170	3	20289	2.84	19498	2.94	18635	3.03	17665	3.11	16555	3.18	15415	3.22	14148	3.24	<u>12335</u>	<u>3.17</u>									
36DE432	1170	5	22641	3.71	21817	3.81	20930	3.89	19959	3.96	18877	3.99	17638	4.01	16149	3.99	<u>14352</u>	<u>3.93</u>	12133	3.85							
36DE412	1750	5	15094	3.58	14507	3.58	13914	3.58	13317	3.58	12722	3.57	12098	3.56	11427	3.54	10694	3.50	9826	3.44							
36DE416	1750	5	18730	4.34	18186	4.43	17629	4.50	17058	4.57	16476	4.62	15883	4.67	15263	4.71	14593	4.73	13868	4.74	12194	4.69	<u>10242</u>	<u>4.56</u>			
36DE420	1750	7 1/2	22990	5.63	22509	5.78	22007	5.91	21480	6.04	20925	6.15	20333	6.24	19692	6.30	19005	6.34	18285	6.37	16714	6.39	14919	6.34			
36DE424	1750	10	26651	7.20	26143	7.38	25615	7.54	25067	7.70	24494	7.83	23893	7.95	23249	8.04	22561	8.10	21843	8.14	20389	8.26	18828	8.38			
36DE428	1750	10	30347	9.49	29829	9.65	29293	9.80	28737	9.94	28157	10.08	27550	10.21	26908	10.33	26218	10.45	25483	10.55	23960	10.71	22415	10.81			
36DE432	1750	15	33864	12.43	33324	12.58	32768	12.72	32192	12.85	31596	12.97	30977	13.08	30331	13.18	29655	13.26	28945	13.32	27400	13.40	25617	13.41			

Underlined figures indicate maximum static efficiency.

# Performance Data – Direct Drive

## TCWPX 42DE4

Wheel Diameter: 42" Outlet Area: 9.79 ft<sup>2</sup>

PROP	RPM	HP	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP			
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
42DE412	860	1½	13985	1.21	12747	1.29	11408	1.31	9873	1.32																
42DE416	860	2	17074	1.56	15814	1.65	14534	1.72	13149	1.77																
42DE420	860	3	20159	1.97	19055	2.11	17834	2.22	16447	2.29	4851	2.35	12802	2.35												
42DE424	860	3	23132	2.58	21953	2.73	20667	2.85	19229	2.93	17656	2.99	15814	3.03	13085	2.97										
42DE428	860	5	26159	3.34	24954	3.48	23642	3.60	22184	3.70	20539	3.77	18632	3.80	16081	3.76										
42DE432	860	5	28752	4.28	27418	4.36	25991	4.44	24461	4.51	22750	4.56	20684	4.57	18163	4.52										
42DE412	1170	5	19027	3.05	18132	3.17	17201	3.25	16232	3.29	15206	3.31	14105	3.32												
42DE416	1170	5	23229	3.92	22308	4.06	21374	4.18	20432	4.28	19489	4.35	18484	4.41	17387	4.47	16136	4.50								
42DE420	1170	7½	27426	4.97	26631	5.16	25796	5.34	24915	5.50	23975	5.63	22966	5.72	21881	5.80	20710	5.88	19407	5.93						
42DE424	1170	7½	31471	6.50	30620	6.70	29731	6.89	28800	7.06	27817	7.21	26767	7.32	25656	7.41	24498	7.50	23287	7.58	20174	7.60				
42DE428	1170	10	35588	8.42	34718	8.61	33811	8.80	32861	8.96	31860	9.12	30798	9.25	29665	9.36	28454	9.45	27158	9.52	24096	9.57	20017	9.36		
42DE432	1170	15	39117	10.77	38150	10.89	37149	11.00	36112	11.11	35033	11.21	33916	11.31	32747	11.39	31492	11.46	30104	11.50	26856	11.47	22774	11.25		
42DE412	1750	15	28458	10.22	27867	10.40	27265	10.57	26653	10.71	26028	10.83	25392	10.93	24746	11.00	24087	11.03	23409	11.05	21985	11.10	20448	11.10		
42DE416	1750	15	34744	13.12	34131	13.33	33514	13.54	32893	13.72	32268	13.90	31639	14.06	31008	14.21	30381	14.35	29753	14.46	28463	14.66	27065	14.85		
42DE420	1750	20	41022	16.63	40497	16.93	39962	17.22	39414	17.49	38855	17.76	38281	18.01	37693	18.24	37090	18.46	36468	18.66	35165	18.99	33774	19.24		
42DE424	1750	25	47072	21.74	46509	22.05	45936	22.36	45352	22.65	44757	22.93	44149	23.20	43527	23.46	42892	23.70	42241	23.93	40881	24.31	39442	24.61		
42DE428	1750	30	53230	28.18	52655	28.47	52070	28.76	51473	29.04	50865	29.31	50244	29.57	49610	29.82	48962	30.07	48299	30.30	46920	30.72	45461	31.08		
42DE432	1750	40	58508	36.05	57867	36.23	57217	36.40	56557	36.57	55887	36.74	55206	36.91	54513	37.07	53809	37.22	53092	37.37	51622	37.66	50104	37.94		

## TCWPX 48DE4

Wheel Diameter: 48" Outlet Area: 12.76 ft<sup>2</sup>

PROP	RPM	HP	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
48DE412	860	2	17582	1.79	15979	1.79	14348	1.78	12468	1.75															
48DE416	860	3	21818	2.17	20319	2.26	18740	2.33	17009	2.37	14925	2.36	12354	2.30											
48DE420	860	3	26780	2.82	25437	2.98	23927	3.11	22149	3.17	20122	3.20	17773	3.18	14943	3.10									
48DE424	860	5	31044	3.60	29631	3.80	28075	3.96	26291	4.05	24331	4.11	22278	4.18	19685	4.18									
48DE428	860	5	35350	4.75	33912	4.92	32337	5.08	30550	5.22	28516	5.33	26440	5.40	23972	5.40	20570	5.28							
48DE432	860	7½	39447	6.22	37952	6.38	36333	6.52	34555	6.63	32557	6.69	30236	6.71	27431	6.66	23998	6.55							
48DE412	1170	5	23919	4.51	22748	4.51	21561	4.51	20375	4.50	19138	4.48	17783	4.44	16225	4.37									
48DE416	1170	7½	29683	5.47	28594	5.60	27473	5.71	26318	5.81	25138	5.88	23886	5.94	22505	5.97	20977	5.97	19224	5.91					
48DE420	1170	7½	36434	7.09	35470	7.32	34450	7.53	33363	7.71	32190	7.86	30896	7.95	29495	8.01	28010	8.05	26399	8.04	22725	7.95			
48DE424	1170	10	42235	9.06	41217	9.35	40149	9.60	39024	9.83	37831	10.02	36532	10.15	35131	10.22	33684	10.30	32233	10.41	29012	10.56	24645	10.40	
48DE428	1170	15	48093	11.95	47056	12.20	45972	12.43	44831	12.65	43626	12.86	42331	13.06	40915	13.23	39411	13.37	37890	13.49	34751	13.64	30400	13.44	
48DE432	1170	20	53667	15.65	52586	15.89	51461	16.10	50287	16.30	49056	16.47	47760	16.62	46384	16.74	44915	16.82	43335	16.87	39675	16.86	35174	16.66	

## TCWPX 54DC6

Wheel Diameter: 54.5" Outlet Area: 16.20 ft<sup>2</sup>

PROP	RPM	HP	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
54DC605	880	5	30853	4.04	29328	4.39	27718	4.68	25996	4.93	24191	5.03	22328	4.90	20194	4.80	17827	4.70	15147	4.43					
54DC610	880	7½	39305	6.61	36689	6.75	34761	6.83	33257	6.85	31737	6.91	29782	7.14	27596	7.40	25700	7.36	23670	7.18					
54DC615	880	10	46106	9.48	44329	9.58	42479	9.70	40526	9.84	38424	10.04	36459	10.15	34735	10.18	33005	10.15	31002	10.08					
54DC620	880	15	52488	12.51	50897	12.79	49236	13.03	47493	13.22	45645	13.33	43681	13.38	41640	13.38	39539	13.35	37318	13.27	32271	13.03			
54DC625	880	20	57729	16.57	55142	16.77	52925	16.90	50981	16.97	49287	17.01	47649	17.02	45907	16.96	44091	16.81	42180	16.60	36780	16.26			

## TCWPX 60DC6

Wheel Diameter: 60.5" Outlet Area: 19.96 ft<sup>2</sup>

PROP	RPM	HP	0" SP		0.125" SP		0.25" SP		0.375" SP		0.5" SP		0.625" SP		0.75" SP		0.875" SP		1" SP		1.25" SP		1.5" SP		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM
60DC605	880	7½	37303	5.30	34776	5.44	32405	5.58	30155	5.71	28006	5.74	25787	5.72	23218	5.69	20719	5.62	17465	5.34					
60DC610	880	10	46359	7.98	44298	8.27	42209	8.51	40080	8.70	37924	8.84	35838	8.96	33802	9.07	31449	9.02	28552	8.71	22024	8.16			
60DC615	880	15	54860	11.65	52751	11.99	50673	12.28	48635	12.54	46677	12.78	44677	12.96	42456	13.00	40013	12.89	37627	12.72	32949	12.23			
60DC620	880	20	64655	16.64	62462	16.89	60302	17.10	58174	17.28	56148	17.45	54161	17.59	52011	17.68	49359	17.68	46326	17.54	41212	17.12			
60DC625	880	25	72012	22.34	70379	22.65	68626	22.90	66724	23.10	64623	23.20	62084	23.12	59154	22.86	56466	22.70	54008	22.61	48504	22.13			

Underlined figures indicate maximum static efficiency.

S.O. NO. TAG

JOB

LOCATION

SIZE DISCH. TYPE  HORIZ.  VERT.

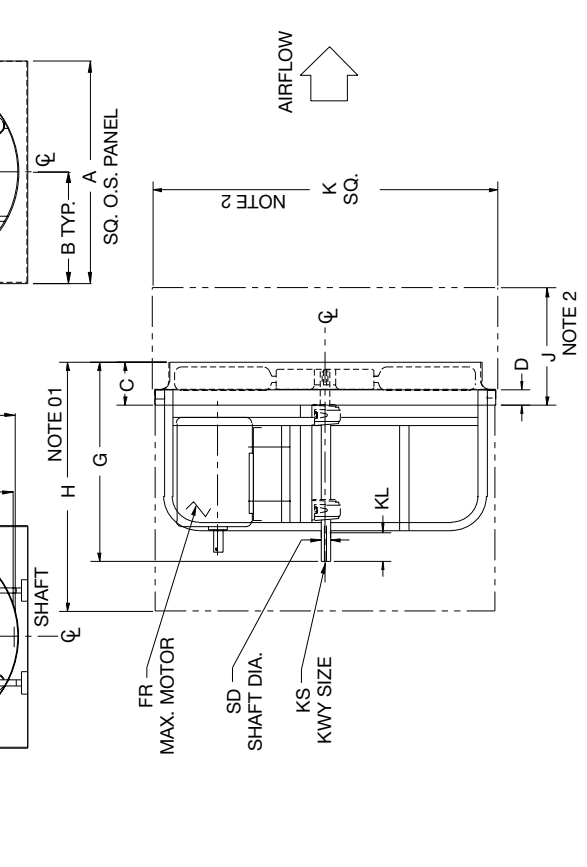
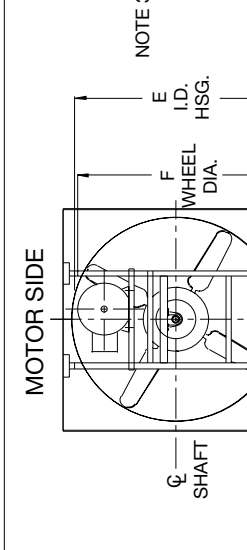
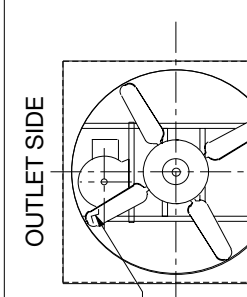
CFM SP RPM BHP OV TS

BLADE PITCH:

MOTOR SPECIFICATIONS

HP/RPM VOLTAGE PHASE/HZ ENCLOSURE FRAME

ACCESSORIES



DIM.	SIZE							
	24BE4	30BE4	36BE4	42BE4	48BE4	54.00	7.50	2.75
A	30.00	36.00	42.00	48.00	54.00	54.00	7.50	2.75
B	15.00	18.00	21.00	24.00	27.00	27.00	7.50	2.75
C	6.38	6.50	7.00	7.50	7.50	7.50	7.50	2.75
D	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
E	24.88	30.88	36.88	42.88	48.88	48.88	48.88	48.88
F	24.00	30.00	36.00	42.00	48.00	48.00	48.00	48.00
FR	145T	184T	215T	215T	256T	256T	256T	256T
G	19.38	24.88	25.38	25.38	30.75	30.75	30.75	30.75
H	24.75	30.25	30.75	30.75	36.25	36.25	36.25	36.25
J	13.50	14.00	14.00	14.00	16.00	16.00	16.00	16.00
K	30.38	36.44	42.44	48.44	54.44	54.44	54.44	54.44
KL	2.75	3.38	3.38	3.38	4.00	4.00	4.00	4.00
KS	.25 x .13	.25 x .13	.25 x .13	.38 x .19	.38 x .19	.38 x .19	.38 x .19	.38 x .19
SD	1.000	1.187	1.187	1.187	1.437	1.437	1.437	1.437

NOTES:

- "H" DIMENSION FOR OPTIONAL MOTOR SIDE WIRE GUARD.
- "J" & "K" DIMENSION FOR OPTIONAL WALL BOX.
- TYPE "E" ADJUSTABLE PITCH WHEEL

**TWIN CITY FAN & BLOWER**  
MINNEAPOLIS, MN 55442

REV. A

REVISION PER ECN

DATE 6/16/97

DRAWN BY: SCOTT W.

DATE: 4/6/95

CHECKED BY:

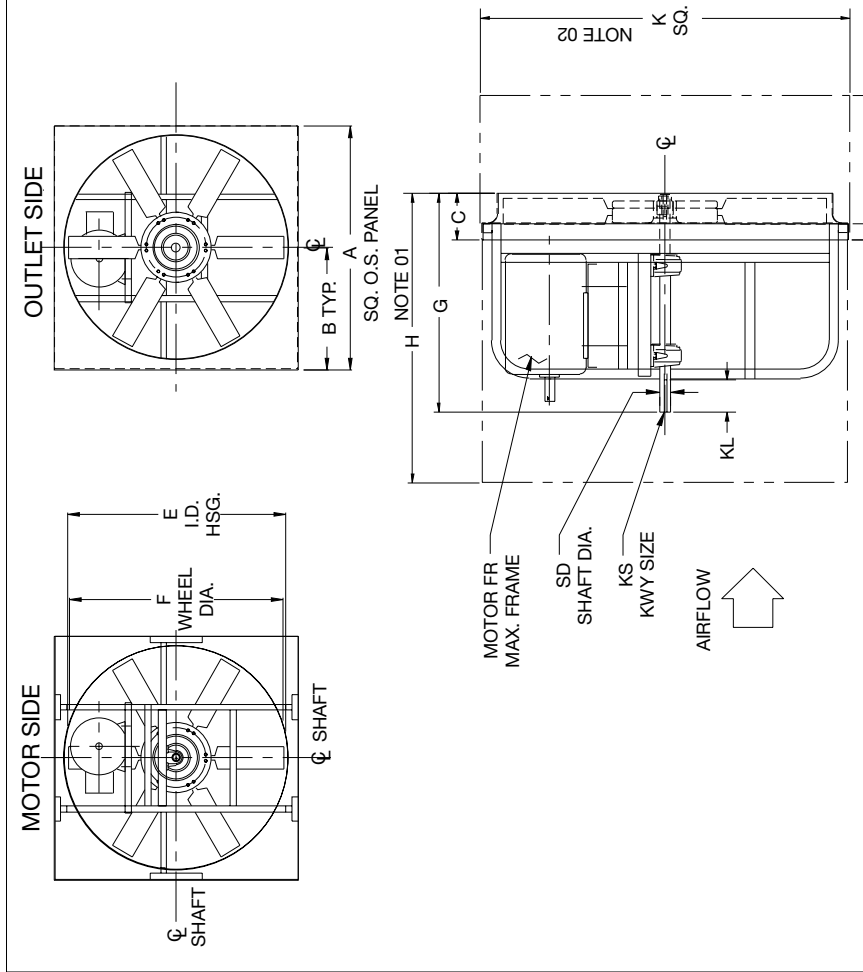
DATE:

TITLE

TWCPX - ARR. 9  
STANDARD FLOW

DWG. NO. AC15318A


S.O. NO.		TAG	
JOB			
LOCATION			
SIZE	DISCH. TYPE	<input type="checkbox"/> HORIZ.	<input type="checkbox"/> VERT.
CFM	RPM	BHP	OV
SP			TS
BLADE ANGLE			
MOTOR SPECIFICATIONS			
HP/RPM	VOLTAGE	PHASE/HZ	ENCLOSURE
			FRAME
ACCESSORIES (ONLY MARKED ACCESSORIES ARE SUPPLIED)			
① <input type="checkbox"/> V-BELT GUARD <input type="checkbox"/> FIXED PITCH <input type="checkbox"/> ADJUSTABLE PITCH			
② <input type="checkbox"/> WIRE GUARD, FAN SIDE			
③ <input type="checkbox"/> WIRE GUARD, MOTOR SIDE			
④ <input type="checkbox"/> SHUTTER/DAMPER    SEE DRAWING NO.			
⑤ <input type="checkbox"/> WALL BOX ADAPTER PANEL    SEE DRAWING NO.			
ADDITIONAL OPTIONS			
NOTES:			
01 "H" DIMENSION FOR OPTIONAL MOTOR SIDE WIRE GUARD.			
02 "J" & "K" DIMENSION FOR OPTIONAL WALL BOX.			

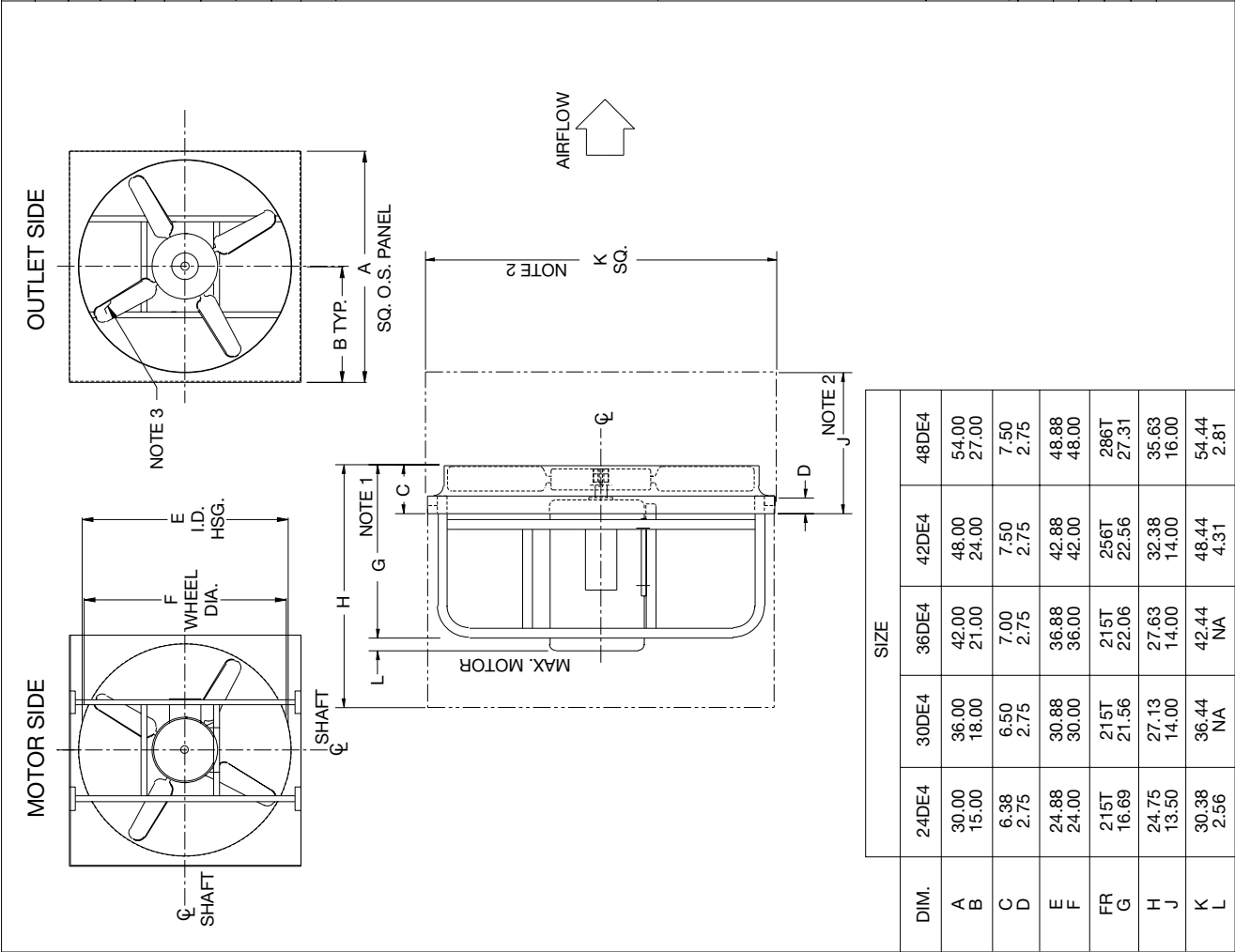


FAN SIZE	54BC6	60BC6	66BC6	72BC6
A	60.00	66.00	72.00	84.50
B	30.00	33.00	36.00	42.25
C	7.75	8.25	9.00	9.00
D	2.75	2.75	2.75	2.75
E	55.00	61.00	66.75	72.75
F	54.50	60.50	66.25	72.25
FR	286T	286T	286T	286T
G	34.25	34.75	35.50	35.50
H	39.75	40.75	41.00	41.00
J	16.00	16.00	16.00	16.00
K	60.44	66.50	72.50	85.00
KL	4.63	4.63	4.63	4.63
KS	.50 X .25	.50 X .25	.50 X .25	.50 X .25
SD	1.937	1.937	1.937	1.937

TWIN CITY FAN & BLOWER MINNEAPOLIS, MN 55442	
REV.	DATE
REVISION	DATE
DRAWN BY: MAKI	DATE: 6/6/92
	DATE:
TITLE	DWG. NO.
TCWPX - ARR. 9 ADJUSTABLE PITCH	AC14378


DRAWING IS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWING AVAILABLE UPON REQUEST.

S.O. NO.		TAG	
JOB			
LOCATION			
SIZE -		DISCH. TYPE <input type="checkbox"/> HORIZ. <input type="checkbox"/> VERT.	
CFM	SP	RPM	BHP
			OV
			TS
MOTOR SPECIFICATIONS -			
HP/RPM	VOLTAGE	PHASE/HZ	ENCLOSURE
			FRAME
ADDITIONAL OPTIONS			
<p>NOTES:</p> <ol style="list-style-type: none"> <li>"H" DIM. FOR OPTIONAL MOTOR SIDE WIRE GUARD.</li> <li>"J" &amp; "K" DIM. FOR OPTIONAL WALL BOX.</li> <li>TYPE "E" ADJUSTABLE PITCH WHEEL</li> </ol>			
 <b>TWIN CITY FAN &amp; BLOWER</b> MINNEAPOLIS, MN 55442		DRAWN BY: SCOTT W. DATE: 6/13/97 CHECKED BY: DATE:	
TITLE: TCWPX - ARR. 4 STANDARD FLOW		DWG. NO. AC14457	



DRAWING IS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWING AVAILABLE UPON REQUEST.

S.O. NO.	TAG	
JOB		
LOCATION		
SIZE	DISCH. TYPE <input type="checkbox"/> HORIZ. <input type="checkbox"/> VERT.	
CFM	SP	RPM BHP OV TS
BLADE ANGLE		
MOTOR SPECIFICATIONS		
HP/RPM	VOLTAGE	PHASE/HZ ENCLOSURE FRAME
ACCESSORIES (ONLY MARKED ACCESSORIES ARE SUPPLIED)		
①	<input type="checkbox"/> WIRE GUARD, FAN SIDE	
②	<input type="checkbox"/> WIRE GUARD, MOTOR SIDE	
③	<input type="checkbox"/> SHUTTER/DAMPER	SEE DRAWING NO.
④	<input type="checkbox"/> WALL BOX ADAPTER PANEL	SEE DRAWING NO.
ADDITIONAL OPTIONS		

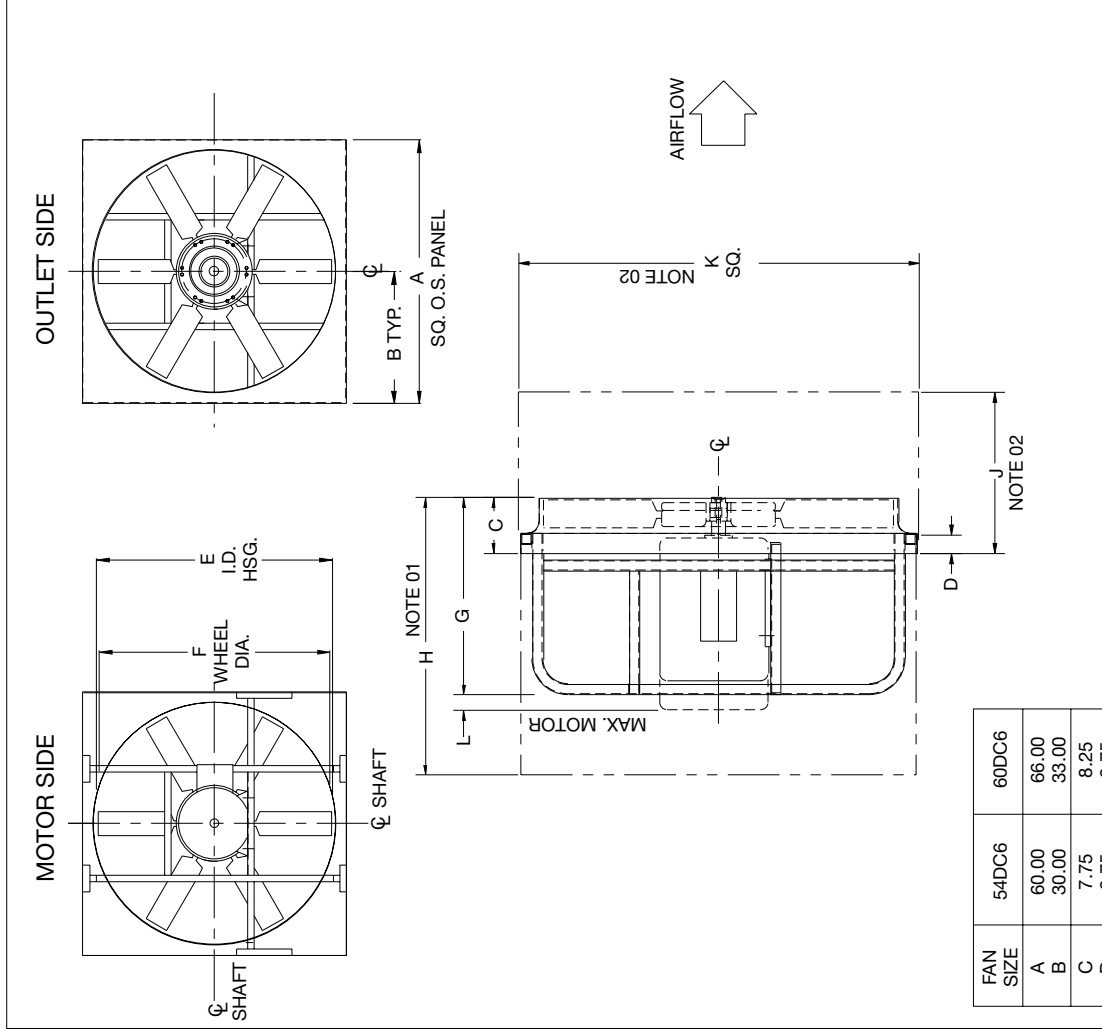


**TWIN CITY FAN & BLOWER**  
MINNEAPOLIS, MN 55442

REV.	REVISION	DATE	DRAWN BY: MAK1
			DATE: 7/6/92
			CHECKED BY:
			DATE:

TITLE: **TCWPX - ARR. 4**  
**ADJUSTABLE PITCH**

DWG. NO. **AC14460**



FAN SIZE	54DC6	60DC6
A	60.00	66.00
B	30.00	33.00
C	7.75	8.25
D	2.75	2.75
E	55.00	61.00
F	54.50	60.50
FR	326T	326T
G	29.63	30.13
H	35.13	35.63
J	16.00	16.00
K	60.44	66.50
L	2.75	2.25

NOTES:  
01 "H" DIMENSION FOR OPTIONAL MOTOR SIDE WIRE GUARD.  
02 "J" & "K" DIMENSION FOR OPTIONAL WALL BOX.

DRAWING IS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWING AVAILABLE UPON REQUEST.

# Typical Specifications

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## Belt Drive - Arrangement 9

Fans shall be Type TCWPX Adjustable Propeller Fans as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

**PROPELLERS** — Propellers shall be cast aluminum alloy construction positively attached to the shaft via a taper lock or Trantorque bushing to assure positive rotation. Propellers shall be machined to the proper diameter and statically balanced.

**PANEL** — Panel shall be constructed of heavy gauge steel with square flanged edges. A deep-throated orifice shall be provided for smooth, efficient airflow. Heavy gauge steel tubing shall support the motor and the shaft and bearing assembly.

**BEARINGS** — The rotating assembly shall be supported by two heavy-duty pillow block ball or roller type bearings. The bearings shall be of a self-aligning type and designed for a minimum average life of 200,000 hours based on AFBMA rating designations.

**SHAFT** — The fan shaft shall be ground and polished, hot-rolled steel precisely turned and ring gauged for accuracy. The entire rotating assembly shall be designed to limits that insure the critical speed of at least 42% greater than the fan operating speed.

**DRIVES** — The fan shall be equipped with (fixed, adjustable) pitch V-belt drive for operation at the required RPM. V-belt drive is to be selected with a (1.2, 1.5) safety factor based on the fan brake horsepower.

**MOTORS** — Fan motors shall be standard NEMA design in an (ODP, TEFC, explosion-proof, etc.) type enclosure. If a fan cooled motor is utilized, the motor's fan must create airflow in the same direction as the propeller fan in order to avoid hot spotting on the motor and premature motor failure.

Motor horsepower rating shall be greater than the fan brake horsepower rating as motor service factor cannot be utilized to achieve horsepower requirements. V-belt drive losses must be taken into account in the sizing of motor horsepower.

**ACCESSORIES** — Accessories such as wire guards, wall box enclosures, power roof vent construction, etc., shall be provided by the fan manufacturer, maintaining proper sizing and fit-up along with one-source responsibility.

**COMPLETED FAN UNITS** — All fans prior to shipment shall be completely assembled and test run as a unit at the operating speed. Final balance of the completed fan assembly shall be taken by electronic type equipment and records maintained of the vibration readings in the axial, vertical, and horizontal planes on each of the bearings. A written copy of this record shall be available upon request.

## Direct Drive - Arrangement 4

Fans shall be Type TCWPX Adjustable Propeller Fans as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

**PROPELLERS** — Propellers shall be cast aluminum alloy construction positively attached to the shaft via a taper lock or Trantorque bushing to assure positive rotation. Propellers shall be machined to the proper diameter and statically balanced.

**PANEL** — The panel shall be constructed of heavy gauge steel with square flanged edges. A deep-throated orifice shall be provided for smooth, efficient airflow. Heavy gauge steel tubing shall support the motor.

**MOTORS** — Fan motors shall be standard NEMA design in an (ODP, TEFC, explosion-proof, etc.) type enclosure. If a fan cooled motor is utilized, the motor's fan must create airflow in the same direction as the propeller fan in order to avoid hot spotting on the motor and premature motor failure.

**ACCESSORIES** — Accessories such as wire guards, wall box enclosures, power roof vent construction, etc., shall be provided by the fan manufacturer, maintaining proper sizing and fit-up along with one-source responsibility.

**COMPLETED FAN UNITS** — All fans prior to shipment shall be completely assembled and test run as a unit at the operating speed. Final balance of the completed fan assembly shall be taken by electronic type equipment and records maintained of the vibration readings in the axial, vertical, and horizontal planes on each of the bearings. A written copy of this record shall be available upon request.

# Unlimited Options...

## Commercial Fans

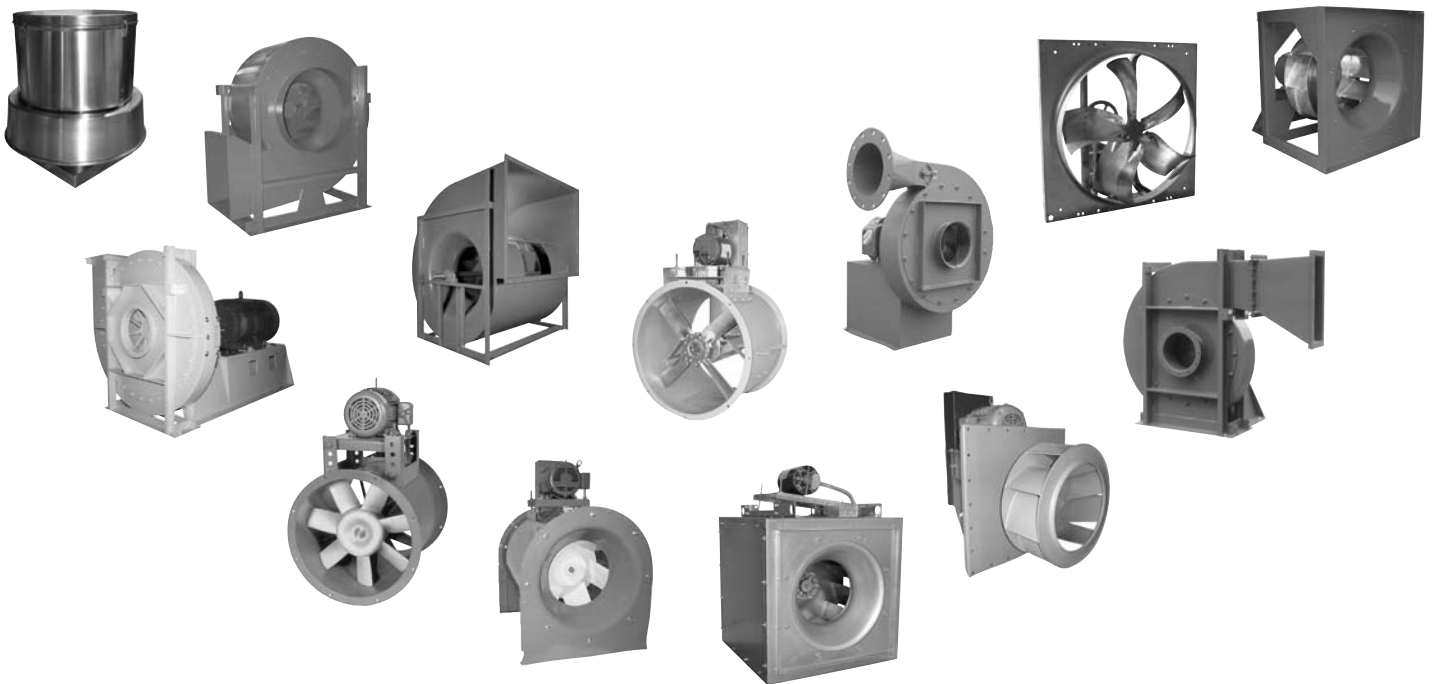
Centrifugal Fans • Utility Sets • Inline Centrifugal Fans • Plenum Fans  
Radial Bladed Fans • Centrifugal Roof & Wall Exhausters • Filtered Supply Fans  
Gravity Relief Ventilators • Ceiling & Cabinet Ventilators • Propeller Wall Fans  
Tubeaxial Fans • Vaneaxial Fans • Propeller Roof Ventilators  
Fume Hood/Smoke & Heat Exhaust Fans • Mancoolers • Fiberglass Fans

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Inlet Box Dampers • Independent Bearing Pedestals • Split Housings • Bolted Housings  
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Sleeve Oil Bearings • Volume Control Dampers • Inlet Vane Control with External Mechanisms



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