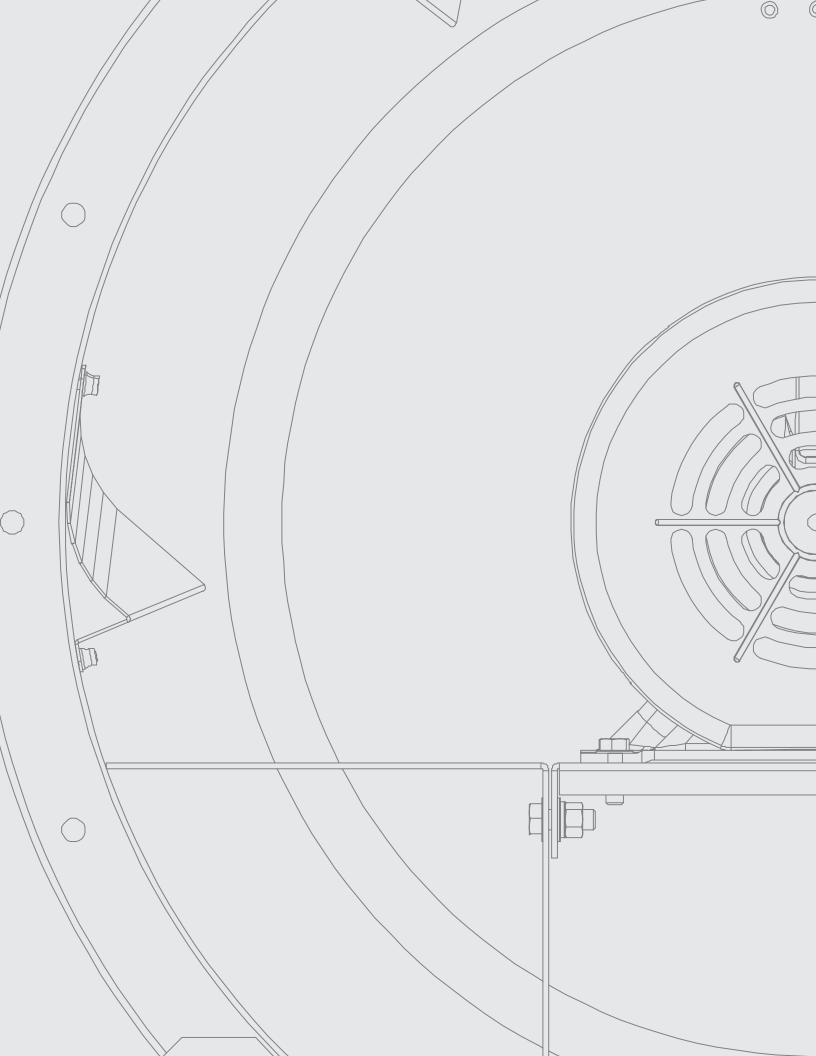


**Ventilador Centrífugo Tubular** 







## Información general

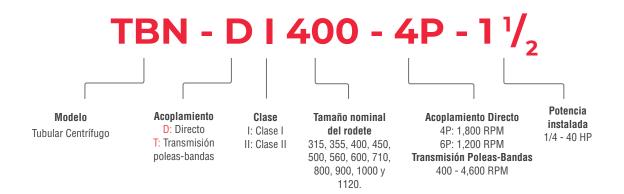


\*La puerta de mantenimiento es un accesorio.

Un equipo tubular centrífugo construido con rodete de álabes curvos atrasados, con un nivel de alta eficiencia y un bajo nivel sonoro. Integrado por 12 tamaños nominales que van del 315 al 1120.

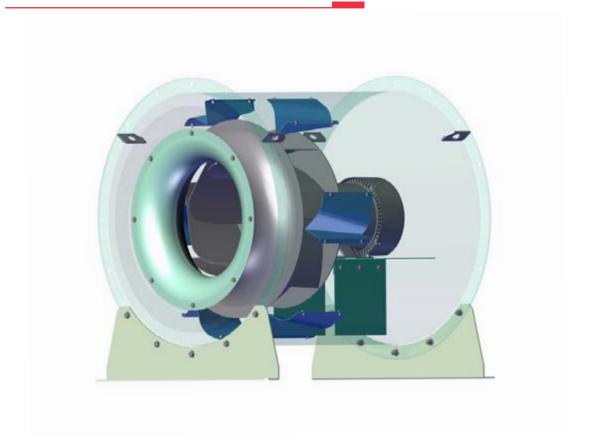
Esta serie está disponible en acoplamiento directo, transmisión poleas-bandas y motor conmutado electrónicamente. Sus aplicaciones van desde comerciales hasta industriales, donde se requiere el manejo de aire limpio con hasta 500 mg por m³ de polvo.

#### Nomenclatura





## Características constructivas



Carcasa con vanos que reducen la turbulencia e incrementan la eficiencia, soportes de sujeción que facilitan la instalación y base motor fabricados en acero con acabado en pintura de polvo poliéster de aplicación electrostática.

Rodetes de álabes atrasados curvos fabricados en acero al carbón, dinámicamente balanceados a grado G 6.3 siguiendo lo establecido por la normativa: ISO 1940 o AMCA 204, acabado en pintura de polvo poliéster y con giro CW.

Oído de aspiración con diseño aerodinámico que permite aspiración de aire con menor turbulencia.

Los **motores** son bajo **especificación NEMA** y cuentan con alta eficiencia en su desempeño para cada operación. Están diseñados para ser arrancados directos en línea de alimentación y capaces de soportar variaciones de  $\pm$  10% en la tensión de alimentación (por periodos cortos de tiempo), y de  $\pm$  5% de forma constante, sin presentar variaciones en su operación (Aplica para TBN –D y TBN –T).

Chumaceras de bolas con sistema de fijación de anillo concéntrico para brindar mejor agarre y menos vibración durante su funcionamiento. La fuerza de sujeción de 360° reduce la vibración por medio de una concentricidad mejorada. La clase I utiliza rodamientos para servicio de uso general. Mientras que la Clase II para servicio semipesado (Aplica para TBN –T).

**Extensión de graseras** que facilitan la lubricación de los rodamientos (Aplica para TBN –T).

Los **ejes** se fabrican en acero AISI C°1045, utilizando un proceso automático para el posicionamiento y corte de los cuñeros. Así mismo, son revestidos con un barniz anticorrosivo (Aplica para TBN –T).

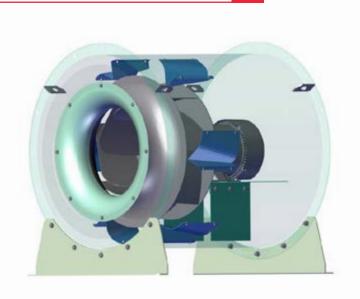


# TBN-D

Equipos de acoplamiento directo



## Características TBN-D



Clase	Acoplamiento	Modelos	Prestaciones de caudal
I	Directo	TBN-D 315, 355, 400, 450 y 500	740 m³/hr (436 CFM) hasta 10,400 m³/hr (6,121 CFM).

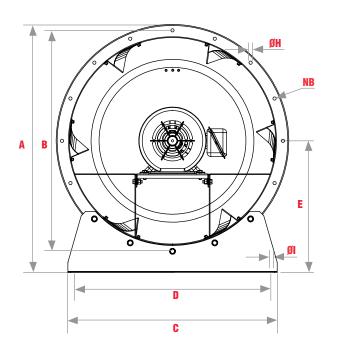
#### Equipos de acoplamiento directo

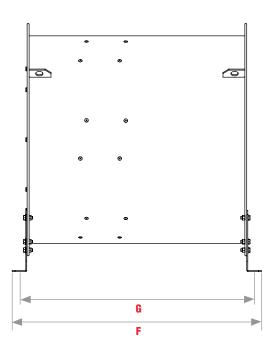
		EQUIPOS DIRECTO	OS TBN-D	
Clase	Modelo	RPM	НР	Armazón Máximo Motor
	315	1800	1/2	56
	355	1200	1/4	56
	300	1800	1	143T
I	400	1200	1/2	143T
	100	1800	1 1/2	145T
	450	1200	1	145T
		1800	3	182T
	500	1200	1 1/2	182T
		1800	5	!84T





## Dimensiones TBN-D





#### Dimensiones nominales en milímetros

Modelo	A	В	С	D	E	F	G	Н	I	Número de Barrenos
TBN D-315	573	500	548	488	299	680	650	11.1	13.4	12
TBN D-355	623	550	578	518	323	713	683	11.1	13.4	12
TBN D-400	680	610	650	550	355	738	708	11.1	13.4	12
TBN D-450	753	680	720	620	393	844	814	11.1	13.4	12
TBN D-500	815	760	800	740	415	894	864	11.1	13.4	16



#### Características técnicas 1200 RPM

TBN-D I	355 - 6P -	1/4HP										
					PRESIÓN	ESTÁTICA in	wg / mmca					
RPM	0.175 " /	4.445 mm	0.335 " / 8	3.509 mm	0.5 " / 1	0.5 " / 12.7 mm		17.01 mm	0.825 " / 2	0.955 mm	0.99 " / 25	5.146 mm
nrw	CFM BHP	m³/hr LwA	CFM m³/hr BHP LwA				CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA
1200	1,473	2,503	1,373	2,333	1,248	2,120	1,052	1,787	791	1,344	388	659
1200	0.18	72.5	0.21	72.5	0.23	72.5	0.24	72.2	0.24	71.92	0.17	72.81

TBN-D I	400 - 6P -	1/2HP													
					PRESIÓN	ESTÁTICA in	wg / mmca								
DDM	0.26 " / 6	6.604 mm	0.46 " / 11	0.46 " / 11.684 mm						1 " / 25.4 mm 1.25 " / 31.75 mm					
RPM	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA			
1200	2,082	3,537	1,938	3,293	1,748	2,970	1,472	2,501	1,227	2,085	592	1,006			
1200	0.34	76.5	0.38	76.7	0.41	76.4	0.43	75.9	0.44	75.7	0.33	76.9			

TBN-D I	450 - 6P -	1HP											
					PRESIÓN	ESTÁTICA in	wg / mmca						
RPM	0.4 " / 1	0.16 mm	0.625 " / 1	15.87 mm	0.85 " / 2	1.59 mm	1 " / 25	i.4 mm	1.25 " / 3	1.75 mm	1.5 " / 38.1 mm		
nrivi	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	
1200	2,909	4,942	2,722	4,625	2,487	4,225	2,276	3,867	1,783	3,029	1,165	1,979	
1200	0.63	80.7	0.70	80.5	0.75	80.0	0.77	80.0	0.79	80.0	0.71	81	

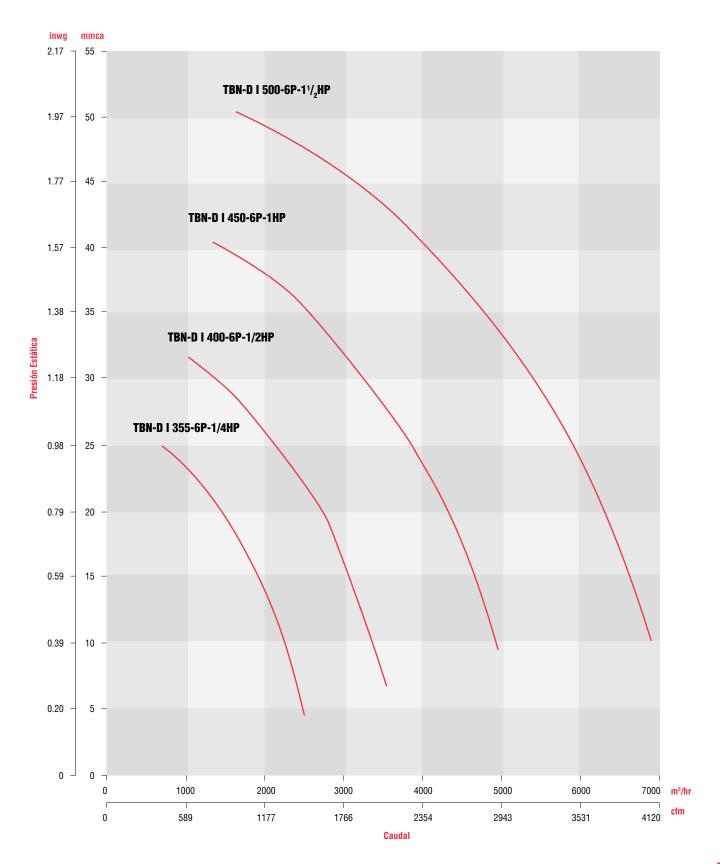
TBN-D I	500 - 6P -	1 1/ <sub>2</sub> HP											
					PRESIÓN	ESTÁTICA in	wg / mmca						
DDM	0.4 " / 1	D.16 mm	0.75 " / 1	9.05 mm	1 " / 25	i.4 mm	1.375 " /	34.92 mm	1.65 " / 4	1.91 mm	1.96 " / 49.784 mm		
RPM	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	
1200	4,071	6,917	3,755	6,380	3,476	5,906	2,842	4,829	2,175	3,695	1,112	1,889	
1200	1.03	84.0	1.17	83.6	1.25	83.3	1.32	82.7	1.33	82.7	0.98	84.2	







#### Curvas características 1200 RPM





#### Características técnicas 1800 RPM

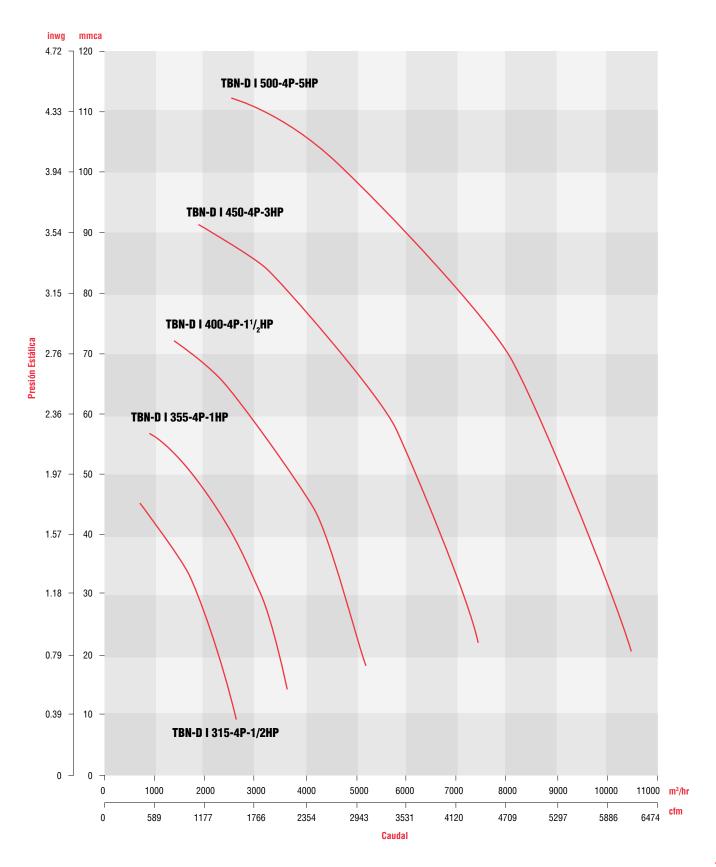
					PRESIÓN	ESTÁTICA ir	iwg / mmca						
RPM	0.5 " / 1	2.7 mm	1 " / 25	5.4 mm	1.25 " / 3	31.75 mm	1.5 " / 3	8.10 mm	1.625 " / 4	11.275 mm	1.75 " / 4	14.45 mm	
u w	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/h	
	1,475	2,506	1,242	2,110	1,045	1,775	787	1,337	639	1,086	419	712	
800	0.37	78.5	0.43	77.4	0.44	77.3	0.44	77.4	0.41	77.7	0.33	78.3	
BN-D I	355 - 4P -	1HP			pprojón	FOTÁTIOA :-	/						
	0.56 " / 1	4.224 mm	1 " / 25	5.4 mm		ESTÁTICA ir 31.75 mm	1.5 " / 1	8.10 mm	2 " / 5	0.8 mm	2.24 " / 5	6.896 mm	
RPM	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/l Lw/	
	2,142	3,639	1,941	3,298	1,791	3,043	1,585	2,693	1,004	1,706	536	911	
1800	0.65	82.4	0.74	82.0	0.78	81.4	0.8	81.4	0.78	81.4	0.57	82.0	
BN-D I	400 - 4P -	1 1/2HP											
						ESTÁTICA ir					2.84 " / 72.136 mm		
RPM	0.71 " / 1	8.304 mm	1.135 " / 2	8.829 mm	1.5 " / 3	38.1 mm	2 " / 5	D.8 mm	2.5 " / 6	33.5 mm	2.84 " / 7	2.136 mm	
	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/l Lw/	
1000	3,065	5,207	2,854	4,849	2,628	4,465	2,159	3,668	1,495	2,540	785	1,33	
1800	1.18	85.4	1.31	85.3	1.4	85.0	1.46	84.9	1.44	85.1	1.04	85.9	
BN-D I	450 - 4P -	3НР			DRESIÓN	ESTÁTICA ir	wa / mmea						
	0.875 " /	22.22 mm	1.5 " / 3	8.1 mm		0.8 mm		63.5 mm	3 " / 7	6.2mm	3.5 " / 8	38.9 mm	
RPM	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/l	
	4,377	7,437	4,025	6,838	3,657	6,213	3,115	5,292	2,391	4,062	1,454	2,47	
800	2.12	89.2	2.39	89.0	2.54	88.8	2.62	88.1	2.65	88.6	2.15	89.	
BN-D I	500 - 4P -	5HP			pprojón	FOTÁTIOA :-	(						
	0.79 " / 2	0.066 mm	1.5 " / 3	8.1 mm		ESTÁTICA ir 57.15 mm		6.2 mm	3.75 " / 9	95.25 mm	4.44 " / 1	13.03 mm	
RPM	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/hr LwA	CFM BHP	m³/ Lw	
	6,169	10,481	5,752	9,773	5,214	8,859	4,396	7,469	3,198	5,433	1,520	2,58	
800													







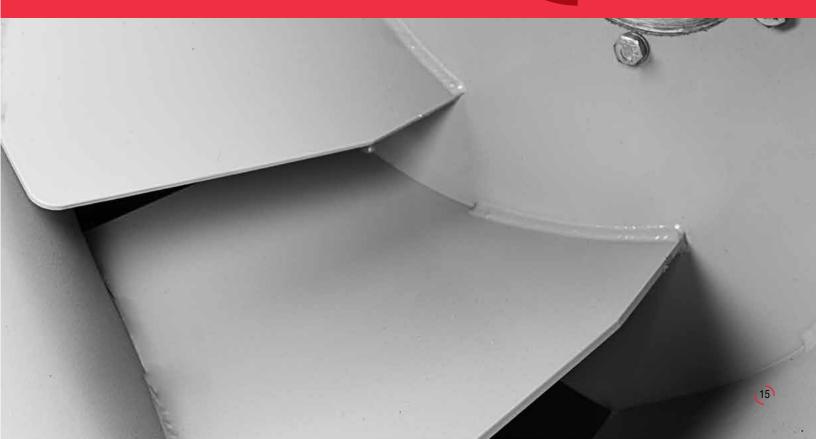
#### Curvas características 1800 RPM





# TBN-T

Equipos con transmisión poleas-bandas





## Características TBN-T

Clase	Transmisión	Modelos	Prestaciones de caudal
I		TBN-T 315, 355, 400, 450, 500, 560, 630, 710, 800, 900, 1000 y 1120	550 m³/hr (324 CFM) hasta 54,000 m³/hr (31,783 CFM)
II	Poleas-bandas	TBN-T 315, 355, 400, 450, 500, 560 y 630	1,450 m³/hr (853 CFM) hasta 23,200 m³/hr (13,655 CFM)

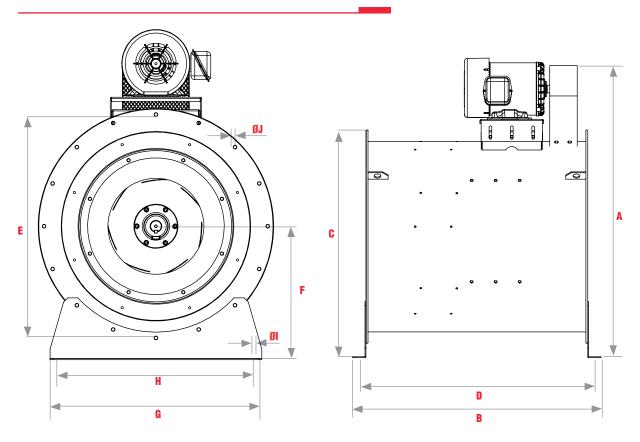
#### Equipos con transmisión poleas-bandas

		EQUIPOS CON TRANSMISIÓN PO	DLEAS-BANDAS TBN - T	
Clase	Modelo	RPM MÁXIMAS	HP MÁXIMA	Armazón Máximo Motor
1	315	3,900	5	184T
II	313	4,600	7.5	213T
I	355	3,300	7.5	213T
II	333	4,150	10	215T
I	400	2,950	7.5	213T
II	400	3,400	10	215T
I	450	2,600	10	215T
II	450	3,200	15	254T
1	500	2,300	10	215T
II	500	2,680	15	254T
1	500	2,150	15	254T
II	560	2,440	20	256T
1		1,950	20	254T
II	630	2,000	20	256T
		4.040		256T
	710	1,640	20	256T
				284T
	800	1,450	25	284T
1				286T
	900	1,270	30	286T
				324T
	1000	1,170	40	324T
				256T
	1120	770	20	256T





### **Dimensiones TBN-T**



#### Dimensiones nominales en milímetros

Modelo	A	В	C	D	E	F	G	Н	I	J	Número de Barrenos
TBN T-315	782	680	573	650	500	299	548	488	13.4	11.1	12
TBN T-355	834	713	623	683	550	323	578	518	13.4	11.1	12
TBN T-400	898	738	680	708	610	355	650	550	13.4	11.1	12
TBN T-450	990	844	753	814	680	393	720	620	13.4	11.1	12
TBN T-500	1,060	894	815	864	760	415	800	740	13.4	11.1	16
TBN T-560	1,166	943	920	913	850	475	880	820	13.4	11.1	16
TBN T-630	1,360	1,084	1,021	1,034	960	524	990	930	13.4	13.4	16
TBN T-710	1,432	1,148	1,127	1,112	1,060	571	1,112	972	14.2	13.4	16
TBN T-800	1,567	1,152	1,256	1,122	1,180	640	1,220	1,120	14.2	13.4	20
TBN T-900	1,685	1,666	1,377	1,586	1,310	696	1,355	1,215	16	13.4	20
TBN T-1000	1,837	1,725	1,528	1,645	1,470	772	1,505	1,365	16	16	24
TBN T-1120	2,139	1,795	1,728	1,715	1,520	835	1,705	1,565	16	16	24

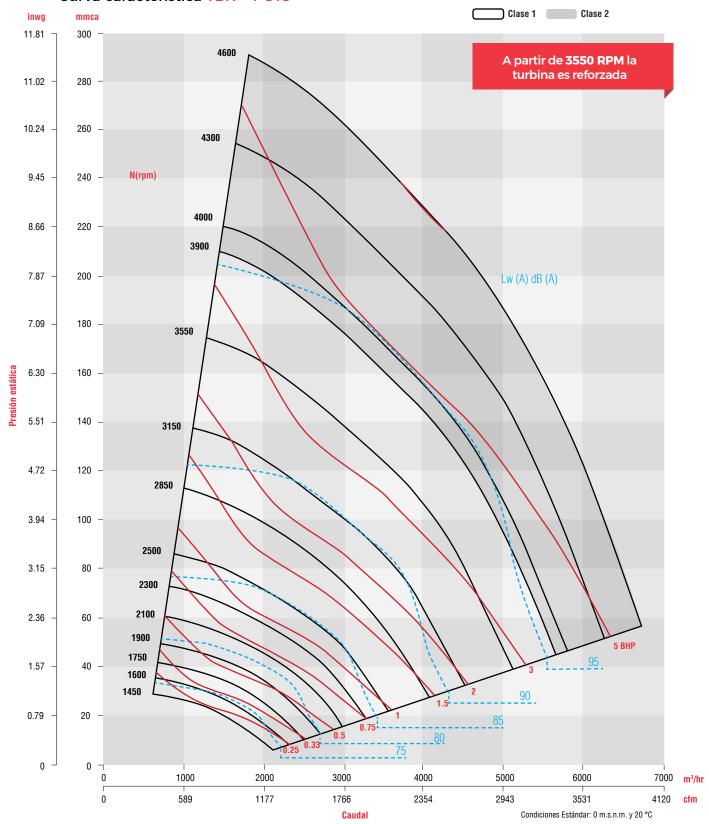


TBN-T 315																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	0.75"/1	9.05mm	1.25"/3	1.75mm	1.5"/3	8.1mm	2"/50	.8mm	2.5"/6	3.5mm	3"/76	.2mm	3.5"/8	8.9mm	3.75"/9	5.25mm	4.25"/10	7.95mm	4.75"/12	0.65mm	5"/12	27mm	5.25"/13	3.35mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
1450	909	1544 72.5																						
1800	1374	2334	1045	1775	787	1337																		
	0.4 1750	78.1 2973	0.44 1568	77.3 2664	0.44	77.5 2450	1066	1811	493	838														
2150	0.63	82.3	0.71	81.6	0.74	81.3	0.76	81	0.56	82.6														
2500			1968	3344	1890	3211	1691	2873 83.8	1390	2362 84.9	1007	1711 85.2												
0050			1.04	85.7 3969	1.09 2275	85.3 3865	1.15 2140	3636	1.19 1969	3345	1732	2943	1423	2418	1254	2131	847	1439						
2850			1.46	88.6	1.52	88.5	1.62	88.2	1.7	87.6	1.75	87.5	1.78	87.5	1.76	87.6	1.5	88.5						
3200			2690 1.97	4570 91.1	2639	4484 91.1	2530 2.18	4298 91.1	2408	4091 90.8	2262	3843 90.3	2075	3525 90.2	1961	3332 90.2	1692 2.51	2875 90.2	1394	2368 90.3	1232	2093	1047	1779 90.8
3550					2992	5083	2898	4924	2799	4756	2690	4570	2564	4356	2492	4234	2324	3948	2114	3592	1995	3390	1867	3172
0000					2.68	93.2	2.83	93.3	2.98	93.0 5384	3.11	92.8 5230	3.22	92.5 5063	3.26 2927	92.3 4973	3.33	92.2	3.38	92.3 4543	3.41 2596	92.3	3.43 2511	92.3
3900							3.62	95.2	3.79	95.2	3.95	95.1	4.1	95.0	4.16	94.8	4.28	94.5	4.37	94.3	4.4	94.3	4.43	94.3
4250							3604	6123	3527	5992	3448	5858	3366	5719	3322	5644	3230	5488	3128	5314	3073	5221	3014	5121
							4.54	96.8	4.73 3879	96.9 6590	4.91 3808	96.9 6470	5.09 3735	96.8 6346	5.17 3697	96.7 6281	5.33	96.5 6149	5.46 3536	96.5 6008	5.52 3492	96.3 5933	5.58 3446	96.4 5855
4600									5.82	98.5	6.02	98.6	6.22	98.6	6.32	99.3	6.51	98.3	6.68	98.4	6.76	98.4	6.84	98.4

TBN-T 315																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	5.5"/1	39.7mm	6"/152	2.4mm	6.5"/10	65.1mm	6.75"/17	1.45mm	7.25"/18	84.15mm	7.5"/1	90.5mm	8"/20	3.2mm	8.5"/21	15.9mm	9"/228	3.6mm	9.5"/24	11.3mm	10"/2	54mm	10.25"/26	60.35mm
de salida RPM	CFM BHP	m³/h LwA																						
3200	790	1342																						
0200	1.9	91.1																						
3350	1277	2170	862	1465																				
0000	2.75	91.4	2.24	91.9																				
3500	1627	2764	1336	2270	954	1621																		
0000	3.28	92.0	3.14	92.3	2.63	92.7																		
3650	1945	3305	1687	2866	1408	2392	1250	2124	767	1303														
0000	3.72	92.8	3.72	92.9	3.58	93.1	3.4	93.4	2.62	93.8														
3800	2238	3802	2006	3408	1758	2987	1628	2766	1344	2283	1173	1993												
0000	4.15	93.7	4.2	93.7	4.2	93.8	4.16	93.8	3.89	94.3	3.62	94.4												
4000	2583	4389	2395	4069	2180	3704	2065	3508	1827	3104	1703	2893	1434	2436	1081	1837								
4000	4.78	94.9	4.83	95.0	4.89	94.9	4.91	94.9	4.9	95.0	4.84	95.1	4.57	95.4	3.91	95.6								
4100	2737	4650	2570	4366	2375	4035	2269	3855	2044	3473	1928	3276	1686	2865	1415	2404	1042	1770						
4100	5.11	95.5	5.17	95.5	5.23	95.5	5.26	95.5	5.29	95.5	5.28	95.5	5.17	95.7	4.83	96.0	4.07	96.1						
4300	3019	5129	2885	4902	2729	4637	2642	4489	2451	4164	2348	3989	2133	3624	1908	3242	1670	2837	1394	2368	985	1674		
4000	5.8	96.7	5.89	96.7	5.95	96.6	5.98	96.6	6.04	96.5	6.07	96.5	6.1	96.5	6.06	96.7	5.86	96.9	5.39	97.0	4.45	97.1		
4450	3214	5461	3097	5262	2965	5038	2891	4912	2727	4633	2637	4480	2443	4151	2236	3799	2021	3434	1794	3048	1543	2622	1396	2372
7700	6.35	97.6	6.45	97.5	6.54	97.5	6.57	97.4	6.64	97.4	6.67	97.3	6.73	97.2	6.76	97.2	6.74	97.4	6.57	97.7	6.19	97.7	5.87	97.7
4600	3399	5775	3296	5600	3180	5403	3117	5296	2977	5058	2900	4927	2731	4640	2544	4322	2345	3984	2138	3632	1923	3267	1809	3073
4000	6.91	98.3	7.04	98.4	7.14	98.4	7.19	98.4	7.26	98.3	7.3	98.2	7.36	98.0	7.42	98.0	7.47	98.0	7.46	98.2	7.33	98.4	7.2	98.5









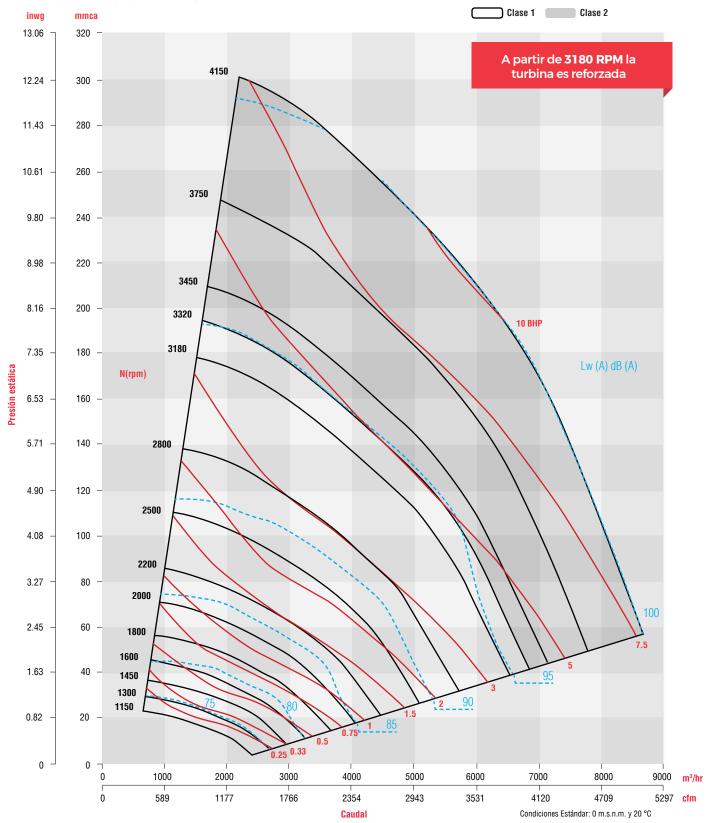
BN-T 355																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	0.75"/1	9.05mm	1.25"/3	1.75mm	1.75"/4	4.45mm	2.25"/57	7.15mm	2.5"/6	3.5mm	3"/76	6.2mm	3.5"/8	8.9mm	4"/10	1.6mm	4.5"/11	4.3mm	5"/12	27mm	5.5"/1	39.7mm	5.75"/14	46.05mm
de salida RPM	CFM BHP	m³/h LwA																						
1150	772	1312																						
1130	0.2	71.04																						
1450	1493	2537	886	1505																				
1450	0.4	76.8	0.42	76.7																				
1800	2061	3502	1791	3043	1313	2231	492	836																
1000	0.69	82.4	0.78	81.4	0.81	81.3	0.55	82																
2150			2393	4066	2158	3666	1800	3058	1565	2659	1020	1733												
2100			1.22	85.9	1.32	85.4	1.37	85.4	1.39	85.3	1.24	85.5												
2500			2924	4968	2762	4693	2564	4356	2442	4149	2124	3609	1717	2917	1249	2122								
2000			1.8	89.0	1.94	88.9	2.05	88.5	2.09	88.4	2.15	88.5	2.18	88.5	2	88.8								
2800			3359	5707	3224	5478	3076	5226	2992	5083	2797	4752	2543	4321	2215	3763	1839	3124	1416	2406	514			
2000			2.41	91.4	2.58	91.6	2.74	91.5	2.81	91.3	2.92	91.1	2.99	91.0	3.04	91.0	3.05	91.0	2.83	91.3	1.95			
3150					3740	6354	3619	6149	3555	6040	3416	5804	3256	5532	3064	5206	2824	4798	2531	4300	2202	3741	2030	3449
3130					3.5	94.7	3.69	94.7	3.79	94.5	3.95	94.3	4.09	93.7	4.19	93.5	4.26	93.5	4.33	93.6	4.36	93.6	4.34	93.6
3450					4170	7085	4063	6903	4008	6810	3893	6614	3768	6402	3627	6162	3466	5889	3274	5563	3043	5170	2911	4946
3430					4.45	96.3	4.66	96.4	4.77	96.4	4.97	96.2	5.16	96.0	5.32	95.8	5.45	95.6	5.54	95.6	5.61	95.7	5.65	95.7
3800							4569	7763	4520	7679	4421	7511	4318	7336	4208	7149	4088	6946	3955	6720	3804	6463	3721	6322
3000							6	98.0	6.12	98.1	6.36	98.0	6.59	98.1	6.8	98.0	6.99	97.9	7.15	97.9	7.29	97.8	7.34	97.8
4150							5066	8607	5022	8532	4934	8383	4843	8228	4749	8069	4651	7902	4546	7724	4433	7532	4373	7430
4100							7.6	100.0	7.72	100.0	7.98	100.0	8.24	100.0	8.49	100.0	8.73	100.0	8.95	100.0	9.15	100.0	9.24	100.0

TBN-T 355																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	6"/15	2.4mm	6.25"/15	58.75mm	6.75"/1	71.45mm	7.25"/18	4.15mm	7.5"/19	90.5mm	8"/20	3.2mm	8.5"/2	15.9mm	9"/22	8.6mm	9.25"/23	4.95mm	9.75"/24	17.65mm	10.25"/2	60.35mm	10.5"/2	66.7mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA																				
3150	1851 4.3	3145 93.67	1658 4.1	2817 93.7	1140 3.35	1937 93.76																		
3250	2176 4.78	3697 94.4	2006 4.73	3408 94.3	1632 4.41	2773 94.4	1072 3.5	1821 94.5																
3350	2482 5.24	4217 95.1	2323 5.24	3947 95.1	1994 5.14	3388 95.1	1618 4.74	2749 95.1	1379 4.33	2343 95.1														
3450	2771 5.68	4708 95.7	2624 5.71	4458 95.8	2317 5.72	3937 95.7	1992 5.57	3384 95.6	1814 5.38	3082 95.7	1369 4.63	2326 95.7												
3600	3170 6.38	5386 96.6	3044 6.42	5172 96.6	2770 6.48	4706 96.6	2477 6.51	4208 96.6	2327 6.48	3954 96.6	2008 6.26	3412 96.6	1633 5.68	2774 96.6										
3700	3409 6.88	5792 97.2	3299 6.91	5605 97.2	3052 6.99	5185 97.2	2780 7.05	4723 97.2	2638 7.07	4482 97.2	2345 7.01	3984 97.2	2031 6.75	3451 97.2	1660 6.13	2820 97.2	1415 5.59	2404 97.3						
3800	3631 7.39	6169 97.8	3534 7.44	6004 97.8	3316 7.51	5634 97.8	3068 7.59	5213 97.8	2935 7.62	4987 97.8	2659 7.66	4518 97.8	2372 7.58	4030 97.8	2064 7.29	3507 97.8	1893 7.02	3216 97.8	1461 6.08	2482 98.0				
3900	3838 7.93	6521 98.4	3752 7.98	6375 98.4	3559 8.07	6047 98.5	3338 8.15	5671 98.5	3217 8.18	5466 98.4	2959 8.25	5027 98.4	2689 8.27	4569 98.4	2407 8.18	4089 98.4	2260 8.05	3840 98.4	1938 7.58	3293 98.4	1520 6.62	2582 98.6	1190 5.84	2022 98.7
4000	4033 8.48	6852 99.0	3956 8.54	6721 99.0	3785 8.64	6431 99.1	3589 8.73	6098 99.1	3481 8.77	5914 99.1	3245 8.85	5513 99.0	2991 8.91	5082 99.0	2726 8.92	4631 99.0	2590 8.89	4400 99.0	2307 8.68	3920 99.0	1992 8.19	3384 99.0	1809 7.78	3073 99.1
4150	4310 9.33	7323 100.0	4243 9.41	7209 100.0	4097 9.54	6961 100.0	3933 9.65	6682 100.0	3842 9.69	6528 100.0	3643 9.78	6189 100.0	3420 9.86	5811 100.0	3178 9.94	5399 100.0	3053 9.96	5187 100.0	2796 9.96	4750 100.0	2530 9.83	4298 100.0	2390 9.69	4061 99.9











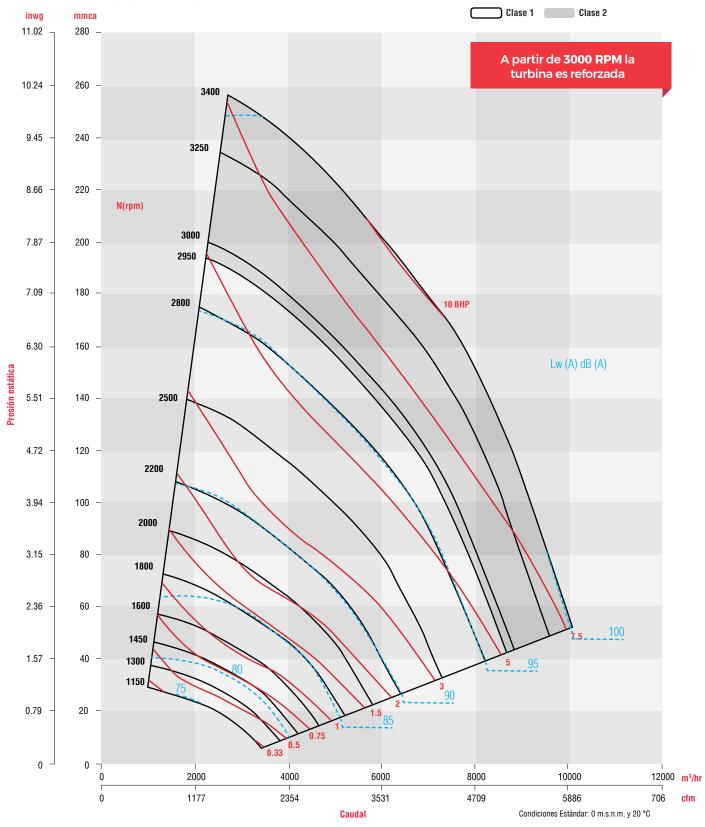
BN-T 400																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	1.25"/3	1.75mm	1.5"/3	8.1mm	2"/50	I.8mm	2.5"/6	3.5mm	3"/76	i.2mm	3.5"/8	88.9mm	4"/10	1.6mm	4.5"/11	14.3mm	5"/12	7mm	5.5"/13	39.7mm	5.75"/1	16.05mm	6"/152	2.4mm
de salida RPM	CFM BHP	m³/h LwA																						
1450	1807	3070	1417	2407																				
	0.8	80.4	0.77	80.3																				
1600	2281	3875	2021	3434	1287	2187																		
	0.99	82.2	1.02	81.7	1	82.5																		
1750	2670	4536	2492	4234	1960	3330	1230	2090																
	1.25	84.4	1.3	84.3	1.35	84.1	1.24	85																
1900	3020	5131	2883	4898	2513	4270	1952	3316	1243	2112														
	1.54	86.2	1.6	86.3	1.69	86.1	1.74	86.0	1.52	86.5														
2100	3461	5880	3351	5693	3091	5252	2729	4637	2219	3770	1617	2747												
2100	1.98	88.6	2.07	88.6	2.21	88.7	2.29	88.6	2.34	88.6	2.23	88.7												
2250	3779	6421	3682	6256	3465	5887	3191	5422	2813	4779	2318	3938	1755	2982										
2200	2.36	90.1	2.46	90.2	2.63	90.3	2.76	90.3	2.83	90.3	2.89	90.3	2.75	90.3										
2400	4091	6951	4003	6801	3813	6478	3590	6099	3306	5617	2927	4973	2455	4171	1931	3281	1184	2012						
2400	2.79	91.5	2.9	91.5	3.1	91.6	3.26	91.6	3.38	91.4	3.45	91.6	3.5	91.6	3.38	91.6	2.62	91.6						
2550	4400	7476	4318	7336	4147	7046	3955	6720	3728	6334	3441	5846	3070	5216	2623	4456	2135	3627	1528	2596				
2000	3.28	92.6	3.39	92.8	3.61	92.8	3.81	92.8	3.96	92.7	4.07	92.8	4.15	92.8	4.2	94.4	4.1	92.8	3.51	92.8				
2700	4705	7994	4628	7863	4471	7596	4301	7307	4109	6981	3880	6592	3596	6110	3238	5501	2817	4786	2362	4013	2117	3597	1840	3126
2100	3.82	93.9	3.94	93.9	4.18	94.0	4.4	93.0	4.59	94.0	4.74	94.0	4.84	94.0	4.92	94.1	4.99	94.1	4.92	94.1	4.76	94.1	4.47	94.0
2900	5108	8678	5037	8558	4893	8313	4743	8058	4580	7781	4398	7472	4185	7110	3929	6675	3614	6140	3241	5506	3040	5165	2833	4813
2900	4.64	95.5	4.76	95.6	5.02	95.6	5.27	95.7	5.51	95.6	5.71	95.6	5.87	95.6	5.98	95.5	6.07	95.6	6.15	95.6	6.18	95.7	6.18	95.6

TBN-T 400																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	ı										
Velocidad	6.25"/1	58.75mm	6.5"/16	5.1mm	7"/17	7.8mm	7.25"/18	4.15mm	7.5"/19	00.5mm	7.75"/1	96.85mm	8"/20	3.2mm	8.25"/20	19.55mm	8.5"/21	5.9mm	8.75"/22	2.25mm	9"/228	3.6mm	9.5"/24	1.3mm
de salida RPM	CFM BHP	m³/h LwA																						
2800	2128 5.3	3615 94.6	1851 4.91	3145 95.0																				
2850	2383 5.72	4049 95.3	2141 5.51	3638 95.4	1503 4.55	2554 95.4																		
2900	2620 6.13	4451 95.6	2398 6.01	4074 95.7	1885 5.4	3203 95.7	1526 4.79	2593 96																
3000	3068 6.84	5213 96.3	2866 6.83	4869 96.3	2442 6.62	4149 96.3	2207 6.37	3750 96.3	1939 5.96	3294 96.4	1593 5.33	2707 96.6												
3050	3283 7.17	5578 96.6	3088 7.19	5247 96.7	2684 7.1	4560 96.6	2469 6.95	4195 96.6	2238 6.68	3802 96.7	1974 6.27	3354 96.8	1637 5.63	2781 97.0										
3150	3691 7.84	6271 97.3	3513 7.88	5969 97.3	3138 7.92	5331 97.2	2944 7.89	5002 97.3	2745 7.8	4664 97.3	2536 7.64	4309 97.3	2311 7.36	3926 97.4	2057 6.94	3495 97.7	1741 6.31	2958 97.9						
3200	3884 8.18	6599 97.6	3716 8.23	6313 97.6	3356 8.3	5702 97.6	3168 8.3	5382 97.6	2977 8.27	5058 97.6	2780 8.18	4723 97.6	2575 8	4375 97.7	2353 7.73	3998 97.8	2105 7.31	3576 98.0	1800 6.68	3058 98.3				
3250	4069 8.54	6913 97.9	3911 8.58	6645 98.0	3567 8.67	6060 97.9	3386 8.7	5753 98.0	3202 8.7	5440 97.9	3013 8.66	5119 97.9	2819 8.56	4789 98.0	2616 8.39	4445 98.0	2399 8.11	4076 98.2	2156 7.69	3663 98.5	1863 7.08	3165 98.7		
3350	4414 9.27	7499 98.6	4276 9.32	7265 98.6	3971 9.42	6747 98.6	3805 9.46	6465 98.6	3633 9.5	6172 98.9	3457 9.53	5873 98.6	3277 9.52	5568 98.6	3094 9.48	5257 98.6	2906 9.38	4937 98.7	2709 9.2	4603 98.8	2500 8.92	4248 99.1	1999 7.93	3396 99.6
3400	4575 9.65	7773 99.0	4447 9.71	7555 98.9	4161 9.8	7070 98.9	4005 9.85	6804 98.9	3841 9.9	6526 99.0	3671 9.94	6237 98.5	3497 9.96	5941 98.9	3320 9.96	5641 98.9	3139 9.91	5333 99.0	2953 9.81	5017 99.1	2760 9.63	4689 99.1	2330 8.96	3959 99.7











## **TBN - T - VENTILADOR CENTRÍFUGO TUBULAR TBN - T 450**

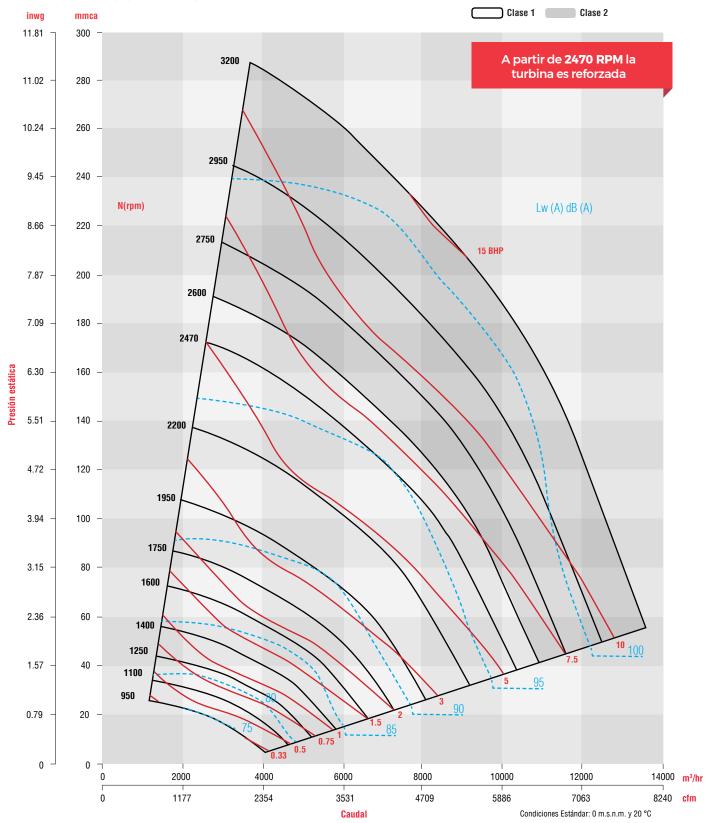
TBN-T 450																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	0.75"/1	9.05mm	1.25"/3	1.75mm	1.5"/3	8.1mm	2"/50	.8mm	2.5"/6	3.5mm	3"/76	6.2mm	3.25"/8	2.55mm	3.75"/9	5.25mm	4.25"/10	7.95mm	4.5"/11	14.3mm	5"/1	27mm	5.25"/13	33.35mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
1100	2230 0.6	3789 76.5	1102 0.55	1872 78.2																				
	2935	4987	2344	3982	1863	3165																		
1300	0.89	82.1	0.98	81.3	1	81.5																		
4550	3707	6298	3360	5709	3132	5321	2448	4159	1511	2567														
1550	1.39	86.1	1.57	85.3	1.62	85.0	1.69	85	1.53	86.0														
1800			4174	7092	4025	6838	3657	6213	3115	5292	2391	4062	1983	3369										
1000			2.29	89.1	2.39	89.1	2.54	88.7	2.62	87.9	2.65	88.6	2.53	89.0										
2000			4783	8126	4660	7917	4385	7450	4039	6862	3561	6050	3261	5540	2591	4402	1778	3021						
			2.99	91.3	3.12	91.3	3.33	91.4	3.49	90.9	3.59	90.5	3.63	90.3	3.63	90.6	3.12	91.5		E 400		4005		0777
2250					5415 4.21	9200 94.1	5196 4.49	8828 94.0	4950 4.73	93.9	4656 4.92	7911	4481	7613 93.4	4052 5.1	6884 92.7	3513 5.18	5969 92.8	3217 5.2	5466 93.1	2587 5.02	4395 93.6	2223 4.71	3777 93.9
					6148	10445	5960	10126	5761	9788	5541	93.5	5420	9209	5145	8741	4811	8174	4613	7837	4155	7059	3900	6626
2500					5.56	96.3	5.87	96.4	6.18	96.4	6.45	96.3	6.57	96.0	6.77	95.6	6.91	95.5	6.97	95.3	7.07	95.2	7.11	95.3
					0.00			11135	6377	10835	6189	10515		10345		9977	5625	9557	5485	9319	5166	8777	4982	8464
2700							7.17	98.3	7.51	98.2	7.83	98.1	7.99	97.9	8.26	97.6	8.48	97.5	8.57	97.3	8.72	97.0	8.77	96.9
2052							7283	12374	7125	12105	6962	11828	6878	11686	6701	11385	6509	11059	6406	10884	6181	10502	6057	10291
2950							9.06	100.4	9.43	100.4	9.81	100.4	9.99	100.3	10.33	100.0	10.64	99.7	10.78	99.6	11.03	99.4	11.13	99.2
3200										13351 102.1		13103 102.0		12975 101.9										

TBN-T 450																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	5.5"/1	39.7mm	6"/152	2.4mm	6.5"/1	65.1mm	6.75"/17	1.45mm	7.25"/1	84.15mm	7.5"/19	90.5mm	8"/20	3.2mm	8.5"/21	15.9mm	9"/228	3.6mm	9.25"/23	34.95mm	9.75"/24	17.65mm	10.25"/2	60.35mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
2300	2250 5.0	3823 94.5																						
2400	2991 6.23	5082 95.0	2330 5.66	3959 95.3																				
2500	3634 7.14	6174 95.4	3079 7.02	5231 95.7	2443 6.42	4151 95.3	2022 5.77	3435 96.3																
2600	4232 7.97	7190 96.0	3727 8.03	6332 96.2	3190 7.89	5420 96.4	2902 7.67	4930 96.6	2197 6.66	3733 97.0														
2700	4780 8.83	8121 96.8	4330 8.94	7357 96.8	3840 8.99	6524 97.0	3586 8.95	6093 97.1	3047 8.62	5177 97.3	2746 8.25	4665 97.5	1919 6.77	3260 98.0										
2800	5272 9.75	8957 97.7	4887 9.87	8303 97.6	4447 9.98	7555 97.6	4213 10.02	7158 97.7	3728 9.99	6334 97.8	3476 9.88	5906 97.8	2927 9.32	4973 98.2	2205 7.99	3746 98.7								
2900	5716 10.72	9711 98.5	5391 10.86	9159 98.4	5010 10.98	8512 98.5	4801 11.04	8157 98.4	4355 11.13	7399 98.5	4123 11.14	7005 98.4	3644 11	6191 98.6	3125 10.49	5309 98.9	2481 9.31	4215 99.4	2013 8.28	3420 99.7				
3000	6124	10405 99.6	5846 11.91	9932 99.2	5522 12.04	9382 99.3	5341 12.1	9074 99.2	4944 12.22	8400 99.3	4732 12.28	8040 99.3	4289 12.33	7287 95.0	3828 12.21	6504 99.3	3335 11.76	5666 99.6	3061 11.34	5201 99.9	2376 9.86	4037 100.3		
3100	6505 12.79	11052		10641	5986 13.16	10170		9909	5488	9324	5300 13.43	9005	4896 13.54	8318	4469	7593 100.0	4025	6838	3795	6448	3301 12.75	5608 100.5	2701 11.49	4589
3200	6867 13.88	11667 101.2		11303 101.0		10892 100.9	6278 14.42	10666					5465 14.77	9285 100.8	5074 14.89	8621 100.7	4661 14.97	7919 100.6	4449 14.96	7559 100.7	4013 14.78	6818 100.8	3547 14.26	6026











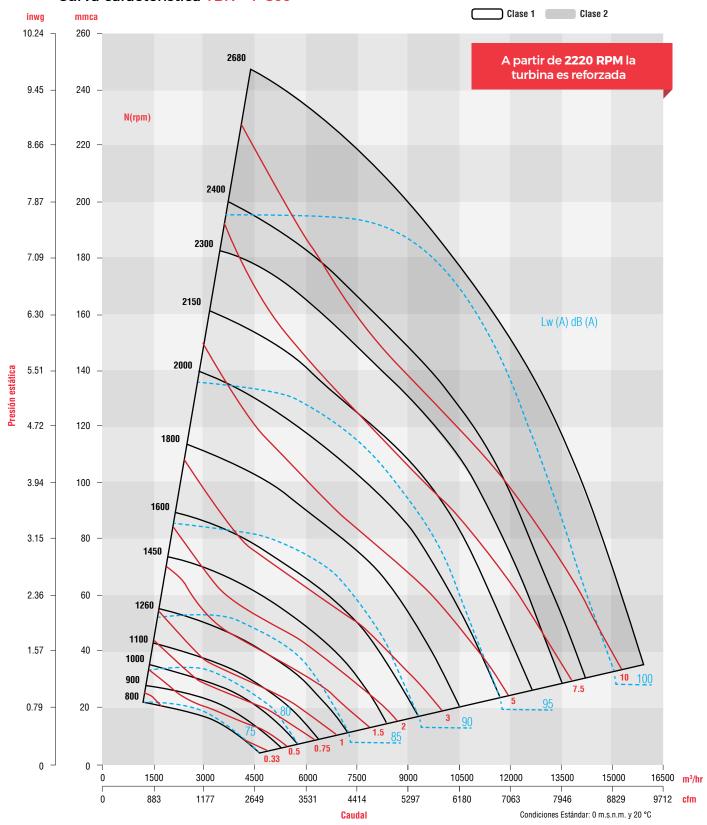
TBN-T 500																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	1.5"/3	8.1mm	1.9"/48	3.26mm	2.2"/5	5.88mm	2.5"/6	3.5mm	2.58"/7	2.39mm	3.2"/8	1.28mm	3.5"/8	8.9mm	3.85"/9	7.79mm	4.15"/10	5.41mm	4.5"/11	14.3mm	4.75"/1	20.65mm	5.1"/12	9.54mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA										
1100	1657 0.98	2815 81.2																						
1250	2943 1.49	5000 83.6	1984 1.46	3371 83.9																				
1450	4158 2.22	7064 87.1	3620 2.31	6150 86.8	3063 2.35	5204 86.8	2431 2.31	4130 87	1405 1.77	2387 88														
1600	4877 2.86	8286 89.5	4513 3.01	7668 89	4155 3.08	7059 89	3696 3.13	6280 88.9	3060 3.17	5199 89	2351 2.98	3994 89.8	1399 2.26	2377 90.4										
1750	5539 3.58	9411 91.6	5255 3.79	8928 91.5	5004 3.91	8502 91.3	4701 4	7987 91.1	4253 4.07	7226 90.9	3704 4.13	6293 90.9	3189 4.13	5418 91.1	2525 3.86	4290 91.5	1701 3.11	2890 92.1						
1950	6378 4.72	10836 94.3	6150 4.98	10449 94.1	5963 5.15	10131 94	5755 5.31	9778 93.9	5476 5.45	9304 93.6	5138 5.55	8729 93.6	4789 5.62	8137 93.5	4310 5.7	7323 93.3	3859 5.74	6556 93.4	3304 5.64	5613 93.5	2871 5.39	4878 93.9	2073 4.53	3522 94.5
2100	6988 5.72	11873 95.9	6786 6.01	11529 95.8	6625 6.21	11256 95.7	6452 6.41	10962 95.6	6231 6.6	10586 95.5	5980 6.77	10160 95.6	5732 6.88	9739 95.5	5391 6.97	9159 95.3	5048 7.04	8577 95.3	4594 7.12	7805 95.2	4245 7.16	7212 95.2	3737 7.11	6349 95.3
2250	7590 6.86	12895 97.3	7405 7.17	12581 97	7261 7.4	12336 97.1	7111 7.63	12082 97	6924 7.87	11764 97.1	6721 8.08	11419 97.1	6528 8.24	11091 97	6276 8.4	10663 96.9	6028 8.5	10242 96.8	5695 8.6	9676 96.7	5425 8.66	9217 96.7	5005 8.75	8503 96.5
2450	8381 8.62	14239 99.1	8213 8.96	13954 99.1	8086 9.21	13738 99	7955 9.47	13516 99.1	7796 9.75	13245 99	7630 10.03	12963 99.1	7478 10.24	12705 99	7287 10.47	12381 98.9	7109 10.64	12078 98.9	6879 10.81	11687 98.8	6698 10.91	11380 98.8	6414 11.03	10897 98.7
2680	9282 11.03	15770 101	9128 11.38	15508 101	9013 11.65	15313 101	8896 11.93	15114 101	8758 12.26	14880 101	8616 12.58	14639 101	8490 12.85	14425 101	8336 13.1	14163 100.9	8198 13.4	13928 100.9	8026 13.6	13636 100.8	7895 13.8	13414 100.8	7698 14	13079 100.8

									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	ı										
	5.5"/13	9.7mm	5.75"/14	6.05mm	6"/15	2.4mm	6.35"/16	1.29mm	6.7"/17	0.18mm	7"/17	7.8mm	7.25"/18	34.15mm	7.5"/19	0.5mm	7.75"/19	6.85mm	8"/203	3.2mm	8.35"/21	2.09mm	8.6"/21	8.44mm
DDM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
2000																								
2050	527	4293	1773	3012																				
2050 5	5.73	95.4	4.73	95.9																				
2150	599	6115	3206	5447	2753	4677																		
7	7.54	95.8	7.27	96.1	6.75	96.5																		
2200	053	6886	3695	6278	3313	5629	2678	4550																
8	3.21	96.1	8.09	96.3	7.82	96.1	7.03	97.2																
2250	486	7622	4149	7049	3800	6456	3270	5556	2613	4439														
8	3.81	96.4	8.78	96.5	8.66	96.8	8.24	97.9	7.32	97.9														
2350	303	9010	4999	8493	4685	7960	4231	7188	3753	6376	3299	5605	2852		2233	3794								
9	9.95		10.01	97.4	10.04	97.4	9.98	97.6	9.72	98.1	9.24	98.7	8.55	99	7.45	99.6								
2400	683	9655	5400	9175	5103	8670	4669	7933	4221	7171	3816	6483	3450	5862	3030	5148	2489	4229						
	0.54	97.9	10.6	97.9	10.66	97.8	10.69	97.9	10.6	98.3	10.34	98.7	9.95	99.1	9.32	99.5	8.32	100.1		4000				
2450		10265		9824	5504	9351	5092	8651	4664	7924	4286	7282	3956	6721	3604	6123	3209	5452		4628				
	1.15	97.8			11.28		11.36		11.37		11.26		11.06		10.69	99.6	10.11	100.1		100.3		E000	0070	5054
2550		11377				10615		10007		9353	5160	8767	4864		4563	7753	4251	7222			3414	5800		5051
	2.43	99.5		99.4	12.58		12.68		12.77		12.82		12.82		12.74	99.8	12.57	100.1		100.3		100.6		100.8
2680		12658 100.7												10102		9647		9180		8702 100.6		8016	14.56	7510 100.9











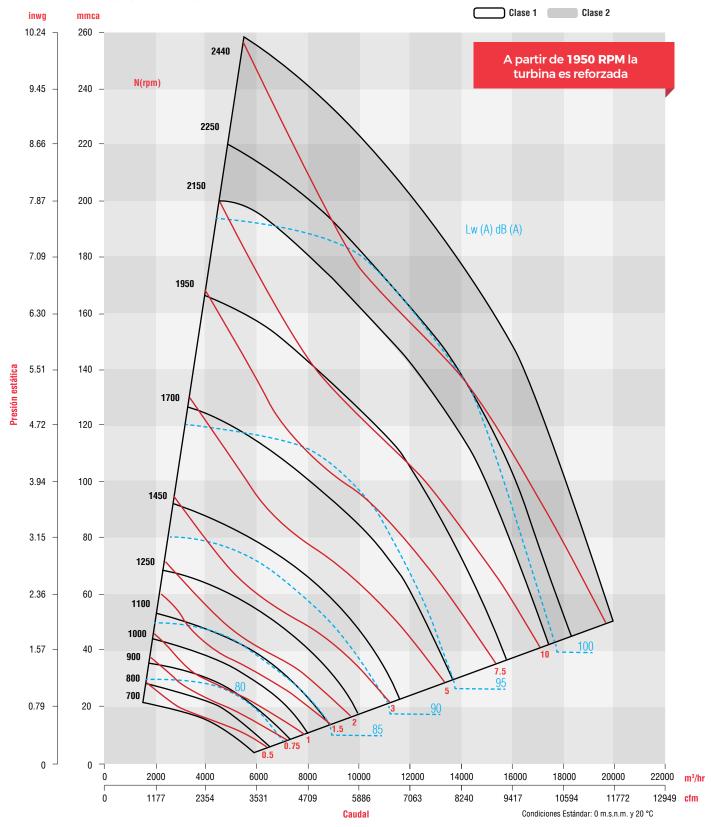
BN-T 560																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	ı										
Velocidad	1.2"/3	D.48mm	1.5"/38	3.10mm	1.75"/4	4.45mm	2"/50	.8mm	2.3"/58	B.42mm	2.65"/6	7.31mm	3"/76	i.2mm	3.25"/8	2.55mm	3.5"/8	3.9mm	3.75"/9	5.25mm	4"/10	1.6mm	4.25"/10	07.95mm
de salida RPM	CFM BHP	m³/h LwA																						
900	2152	3656																						
	0.98	80.7																						
1050	3805	6465	2949	5010	2083	3539																		
1000	1.53	83.8	1.58	83.6	1.46	84.3																		
1250	5293	8993	4884	8298	4429	7525	3842	6528	3031	5150	1745	2965												
1200	2.42	87.5	2.54	87.6	2.6	87.5	2.65	87.5	2.63	87.4	2.02	87.9												
1400	6229	10583	5933	10080	5645	9591	5294	8995	4756	8080	3972	6748	3094	5257	2300	3908								
1400	3.23	90	3.4	90.1	3.52	90.4	3.6	90.3	3.68	90.2	3.74	90.2	3.61	90.2	3.12	90.4								
1550	7113	12085	6872	11676	6653	11303	6408	10887	6064	10303	5560	9446	4917	8354	4394	7465	3842	6528	3243	5510	2486	4224		
1000	4.18	92.4	4.4	92.4	4.57	92.4	4.71	92.4	4.84	92.4	4.95	92.2	5.03	92	5.07	92	5.03	92	4.8	92.2	4.17	92.8		
1750			8051	13679	7876	13381	7693	13070	7454	12664	7139	12129	6768	11499	6456	10969	6094	10354	5682	9654	5230	8886	4754	8077
1750			5.99	95.5	6.2	95.4	6.4	95.4	6.62	95.3	6.83	95.1	6.99	95	7.08	94.9	7.15	94.8	7.22	94.6	7.28	94.5	7.3	94.6
1000			8907	15133	8752	14870	8593	14600	8392	14258	8139	13828	7859	13352	7636	12974	7387	12551	7108	12076	6791	11538	6434	1093
1900			7.42	97	7.66	97	7.88	97	8.15	96.9	8.43	96.9	8.67	96.8	8.81	96.7	8.93	96.6	9.03	96.5	9.12	96.4	9.19	96.4
0050					9608	16324	9465	16081	9288	15780	9072	15413	8841	15021	8664	14720	8473	14396	8267	14046	8042	13663	7793	1324
2050					9.33	98.7	9.58	98.6	9.88	98.6	10.21	98.6	10.51	98.5	10.71	98.4	10.89	98.3	11.05	98.4	11.19	98.2	11.3	98
							10601	18011	10446	17748	10260	17432	10067	17104	9923	16859	9774	16606	9617	16339	9452	16059	9276	1576
2250							12.21	100.7	12.54	100.6	12.93	100.6	13.3	100.5	13.55	100.5	13.79	100.4	14.02	100.4	14.23	100.3	14.42	100.3
							11663	19815	11521	19574	11354	19290	11184	19002	11059	18789	10932	18573	10800	18349	10664	18118	10523	17879
2440							14.16	102.3	15.51	102.3	15.93	102.3	16.35	102.2	16.6	102.2	16.9	102.2	17.2	102.2	17.47	102.1	17.773	102.1

TBN-T 560																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	4.75"/1	20.65mm	5"/12	7mm	5.3"/13	34.62mm	5.7"/144	4.78mm	6"/15	2.4mm	6.3"/16	0.02mm	6.7"/17	0.18mm	7"/17	7.8mm	7.3"/18	5.42mm	7.7"/19	5.58mm	8"/20	3.2mm	8.25"/20	9.55mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
1700	2927 5.74	4973 95.2																						
1750	3730	6337	3110	5284																				
1750	6.95 5025	95.3 8537	6.37 4559	95.6 7746	3961	6730	2961	5031																
1850	8.63	95.8	8.55	95.9	8.23	96.2	7.09	96.7																
1950	6183	10505 96.8	5772 10.08	9807 96.8	5258 10.1	8933 96.9	4539 9.89	7712 97.1	3945 9.41	6703 97.4	3218 8.45	5467 97.8												
2000		11407		10767		9946	5179	8799	4648	7897	4070	6915	3084	5240										
2000	10.73 7668	97.4 13028	10.81	97.3	10.89 6962	97.3 11828	10.87 6369	97.4 10821		97.7 10021	10.18	98 9195	8.77 4731	98.5 8038	4166	7078	3483	5918						
2100	12.26		12.35		12.45		12.57		12.62		12.58		12.25		11.65		10.59	99.5						
2150	8097 13.07	13757 99	7826 13.17	13296 99	7466 13.27	12685 98.9	6924 13.4		6483 13.49			10231 98.9		9149 99.1	4883 13.17	8296 99.3	4338 12.6	7370 99.7	3437 11.12	5839 100.2				
0050		15096				14229								11208				9674		8588	4530	7696	4032	6850
2250	14.75	100.1	14.88	100	15.02	100	15.17	100	15.28	100	15.38	100	15.5	100	15.52	100	15.44	100.2	15.05	100.4	14.43	100.6	13.6	100.8
2300		15721				14933														9703		8904	4825	8198
		100.6 17365				100.6 16733														100.6 12562		100.8		101
2440	18.19	102	18.4		18.62		18.88		19.04					101.9				101.8		101.8		101.7		101.8











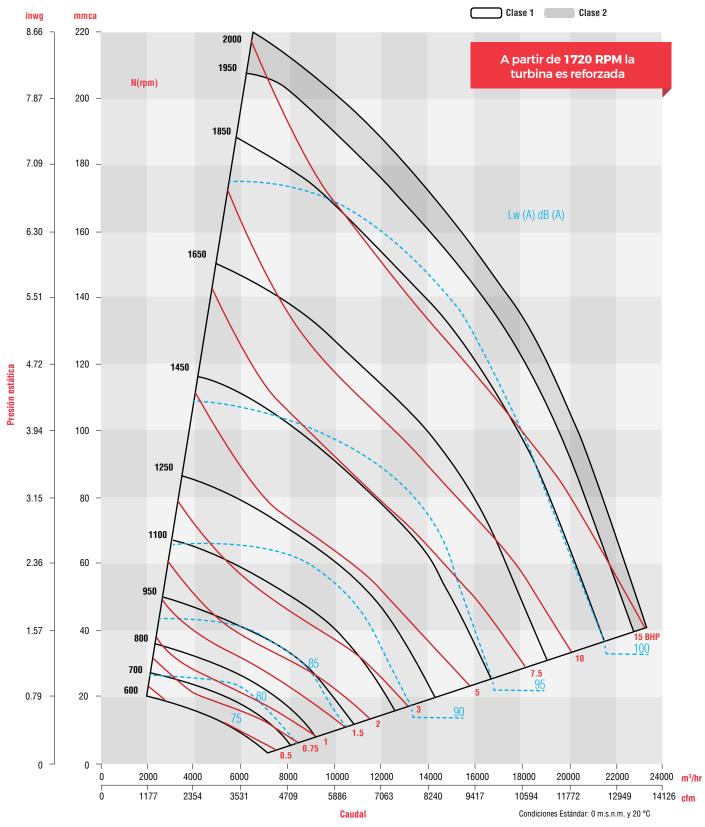
TBN-T 630																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	1.25"/3	1.75mm	1.5"/3	8.1mm	1.75"/4	4.45mm	2"/50	.8mm	2.25"/5	7.15mm	2.5"/6	3.5mm	2.75"/6	9.85mm	3"/76	6.2mm	3.25"/82	2.55mm	3.5"/8	8.9mm	3.75"/9	5.25mm	4"/10	i.6mm
de salida RPM	CFM BHP	m³/h LwA																						
800	2463	4185																						
000	1.20	81.8																						
950	4881	8293	4011	6815	2982	5066																		
950	2.05	85	2.10	85	2.03	85.5																		
1100	6515	11069	6057	10291	5454	9266	4682	7955	3814	6480	2785	4732												
1100	3.02	88.4	3.13	88.1	3.2	87.8	3.26	87.9	3.23	88.4	2.85	89.5												
1000	7435	12632	7089	12044	6674	11339	6152	10452	5495	9336	4735	8045	3916	6653	2919	4959								
1200	3.76	90.4	3.93	90.4	4.05	90.1	4.13	90	4.2	89.9	4.24	90.2	4.14	90.7	3.62	91.2								
1050	8722	14819	8457	14368	8165	13872	7836	13313	7450	12658	6986	11869	6426	10918	5779	9819	5083	8636	4345	7382	3481	5914		
1350	5.07	93	5.29	93	5.49	92.8	5.65	92.7	5.78	92.4	5.88	92.3	5.95	92.3	6.02	92.4	6.04	92.7	5.87	93.1	5.33	93.6		
4500	9954	16912	9731	16533	9496	16134	9245	15707	8971	15242	8667	14725	8319	14134	7917	13451	7446	12651	6904	11730	6308	10717	5680	9650
1500	6.65	95.4	6.91	95.5	7.16	95.4	7.39	95.3	7.6	95.1	7.77	94.9	7.92	94.8	8.03	94.7	8.12	94.8	8.2	94.9	8.27	95.1	8.28	95.3
	10758	18278	10553	17930	10342	17571	10121	17196	9886	16796	9634	16368	9357	15898	9048	15373	8699	14780	8300	14102	7842	13324	7326	12447
1600	7.88	96.7	8.16	96.7	8.44	96.7	8.7	96.6	8.95	96.6	9.17	96.5	9.37	96.4	9.53	96.4	9.67	96.3	9.78	96.2	9.87	96.2	9.96	96.2
			11764	19987	11576	19668	11385	19343	11187	19007	10980	18655	10761	18283	10528	17887	10276	17459	10001	16992	9697	16475	9358	15899
1750			10.32	98.6	10.62	98.7	10.93	98.8	11.22	98.7	11.5	98.6	11.77	98.6	12.01	98.6	12.23	98.6	12.42	98.6	12.57	98.5	12.71	98.4
			12955	22011	12784	21720	12612	21428	12437			20826	12072	20510	11879	20182	11677	19839	11462	19474	11234	19087	10989	18670
1900			12.86	100.5	13.18	100.6	13.51	100.6	13.84	100.6	14.17	100.6	14.48	100.6	14.79	100.6	15.07	100.6	15.33	100.6	15.58	100.6	15.79	100.5
					13580	23072	13418	22797	13254	22519	13087	22235	12917	21946	12741	21647	12560	21339	12370	21017	12172	20680	11962	20323
2000						101.9																		

TBN-T 630																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	ì										
Velocidad	4.25"/1	)7.95mm	4.5"/11	4.3mm	4.75"/1	20.65mm	5"/12	7mm	5.25"/1	33.35mm	5.5"/1	39.7mm	5.75"/14	46.05mm	6"/15	2.4mm	6.25"/15	8.75mm	6.5"/16	65.1mm	6.75"17	1.45mm	7"/17	7.8mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
1450	4009 6.84	6811 95.2	2958 5.8	5026 95.5																				
1500	5023 8.14	8534 95.4	4301 7.70	7307 95.7	3386 6.77	5753 96																		
1550	5921 9.14	10060 95.8	5290 9.02	8988 96	4607 8.63	7827 96.2	3791 7.83	6441 96.5																
1650	7563 10.92	12850 96.9	7022 11	11930 97	6456 11.03	10969 97.1	5871 10.96	9975 97.2	5255 10.68	8928 97.3	4571 10.09	7766 97.5	3714 9	6310 97.9										
1700	8301 11.84	14103 97.6	7816 11.94	13279 97.6	7293 12.02	12391 97.6	6746 12.07	11461 97.7	6182 12.02	10503 97.8	5593 11.79	9503 97.9	4956 11.3	8420 98.1	4208 10.4	7149 98.4	3119 8.81	5299 98.8						
1750	8978 12.82	15254 98.5	8552 12.92	14530 98.3	8082 13.01	13731 98.3	7577 13.1	12873 98.2	7049 13.16	11976 98.3	6504 13.13	11050 98.4		10094 98.5	5341 12.56	9074 98.7	4667 11.81	7929 98.9	3811 10.54	6475 99.3				
1800	9600 13.84	16310 99.1	9229 13.95	15680 99	8815 14.05	14977 99	8361 14.15		7874 14.25	13378 98.9		12510 98.9			6296 14.18	10697 99.1	5728 13.86	9732 99.2	5109 13.25	8680 99.5	4379 12.22	7440 99.8	3342 10.51	5678 100.2
1850		17294		16739 99.8		16124		15444		14698		13900	7688	13062		12199		11312		10393		9412	4891 13.89	8310
1950		19098		18655	10696	18173	10384	17642	10043	17063	9668	16426	9261	15734	8824	14992	8365	14212	7890		7404		6905	
2000						19104 101.5														14807 101.2				-











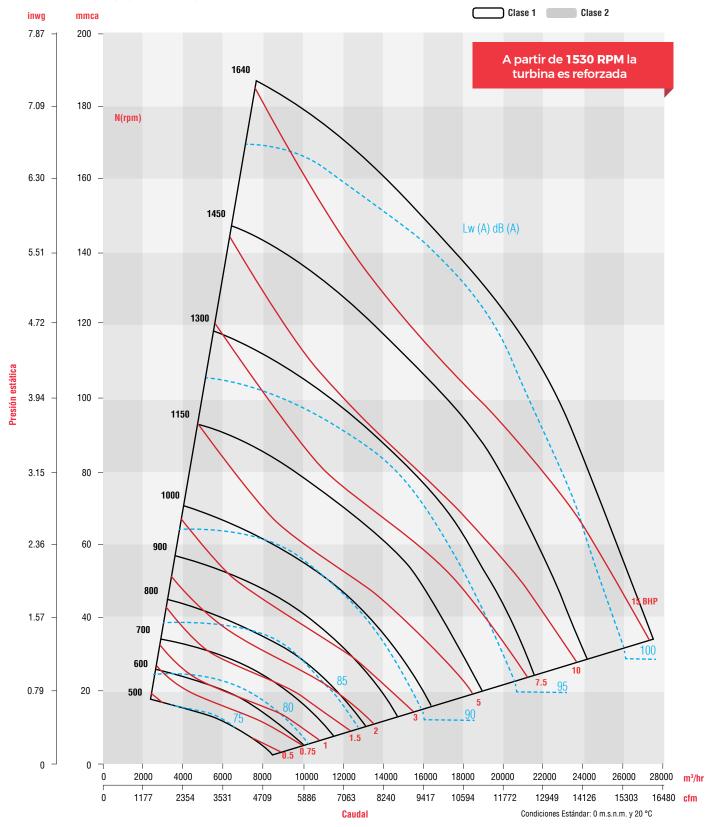
TBN-T 710																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	0.75"/1	9.05mm	1"/25	.4mm	1.5"/3	D.48mm	1.4"/35	.56mm	1.625"/4	1.275mm	1.85"/4	6.99mm	2"/50	).8mm	2.25"/5	7.15mm	2.5"/6	3.5mm	2.75"/6	9.85mm	3"/76	i.2mm	3.125"/7	9.375mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
600	3695 0.96	6278 78.6																						
	5596	9508	4432	7530	3192	5423																		
700	1.46	82.2	1.52	81.9	1.48	84.1																		
	6997	11888		10756		9467	4578	7778	3288	5586														
800	2.06	85.4	2.19	85.3	2.25	84.9	2.29	85	2.13	85.6														
	8246	14010		13196		12404	6705	11392	5823	9893	4776	8114	4017	6825										
900	2.77	88	2.96	87.8	3.08	87.8	3.16	87.6	3.23	87.3	3.25	87.3	3.13	87.6										
	9434	16028	9043	15364	8695	14773	8295	14093	7749	13166	7053	11983	6494	11033	5455	9268	4311	7324	2589	4399				
1000	3.63	90.5	3.87	90.4	4.04	90.4	4.18	90.4	4.3	90.2	4.38	90	4.42	89.9	4.46	89.8	4.24	90.1	3.24	90.6				
			10838	18414	10571	17960	10287	17478	9938	16885	9543	16214	9244	15706	8662	14717	7946	13500	7101	12065	6181	10502	5701	9686
1150			5.53	93.3	5.75	93.2	5.96	93.1	6.18	93.1	6.36	93.1	6.46	93.1	6.58	92.9	6.68	92.7	6.76	92.5	6.78	92.6	6.71	92.3
1000			12568	21353	12341	20967	12109	20573	11837	20111	11548	19620	11343	19272	10972	18641	10552	17928	10066	17102	9495	16132	9172	15583
1300			7.62	95.9	7.88	95.9	8.14	95.8	8.42	95.8	8.69	95.7	8.85	95.7	9.09	95.8	9.29	95.7	9.44	95.6	9.56	95.5	9.62	95.4
1400					13493	22925	13282	22566	13039	22153	12788	21727	12613	21429	12305	20906	11972	20340	11604	19715	11191	19014	10964	18628
1400					9.58	97.4	9.86	97.4	10.17	97.4	10.47	97.4	10.67	97.3	10.97	97.3	11.24	97.4	11.48	97.3	11.67	97.2	11.75	97.2
1550							15005	25493	14792	25132	14576	24765	14428	24513	14176	24085	13912	23636	13633	23162	13335	22656	13178	22389
1330							12.89	99.8	13.24	99.8	13.58	99.7	13.81	99.7	14.19	99.7	14.55	99.7	14.88	99.6	15.19	99.6	15.33	99.6
1640							16025	27226	15825	26887	15623	26543	15487	26312	15256	25920	15017	25514	14769	25093	14509	24651	14374	24421
1040							15	101.1	15.36	101	15.73	101	15.97	101	16.4	100.9	16.8	100.9	17.2	100.9	17.52	100.8	17.69	100.8

TBN-T 710																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	a										
Velocidad	3.5"/8	8.9mm	3.75"/9	5.25mm	4"/10	1.6mm	4.125"/10	4.775mm	4.4"/11	1.76mm	4.625"/11	7.475mm	4.85"/1	23.19mm	5"/1	27mm	5.25"/13	3.35mm	5.5"/13	39.7mm	5.75"/14	16.05mm	6"/152	2.4mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
1150	4001	6798																						
	5.79 5576	93.2 9474	4496	7639																				
1200	7.51	93.8	6.86	94.2																				
4050	6872	11676		10170	4997	8490	4403	7481																
1250	8.72	94.6	8.56	94.8	8.01	95.1	7.49	95.2																
1300	8071	13713	7265	12343	6422	10911	5978	10157	4875	8283	3561	6050												
1000	9.76	95.4	9.81	95.5	9.69	95.6	9.52	95.6	8.72	95.8	7.31	96												
1350	9178	15593		14365		13053		12377		10833		9443	4561	7749	3598	6113								
	10.82	96.1	10.93 9556	96.2 16236	10.99	96.2 15060	10.97	96.2 14440		96.3 13026	10.23	96.4 11827	9.21	96.5	8.07 5665	96.7 9625	4553	7736						
1400	11.95	97	12.07		12.17		12.22		12.25		12.12		11.75		11.32		10.05	97.3						
		18818		17926		16912		16363		15075		13969		12827		12044		10656	5329	9054	4000	6796		
1450	13.15	97.9	13.28	97.7	13.39	97.6	13.45	97.6	13.57	97.6	13.61	97.6	13.56	97.6	13.42	97.7	12.94	97.8	11.97	97.9	10.18	98.1		
1500	11897	20213	11450	19454	10943	18592	10665	18120	10000	16990	9407	15982	8786	14927	8361	14205	7635	12972	6872	11676	6033	10250	5010	8512
1300	14.4		14.56				14.75		14.88		14.99		15.06		15.07		14.96		14.61	98.5	13.88	98.6	12.55	98.8
1550						20114								16907		16241		15096		13915		12692		11387
	15.7	99.5	15.9		16.06		16.13		16.28	99.2		99	16.5	99	16.56	99	16.63		16.58		16.34	99.2	15.8	99.1
1640				23149		22564																		15429
10-10	18.16	100.8	18.43	100.8	18.67	100.7	18.77	100.7	18.97	100.6	19.11	100.5	19.24	100.4	19.3	100.4	19.5	100.3	19.6	100.4	19.67	100.4	19.69	100.4











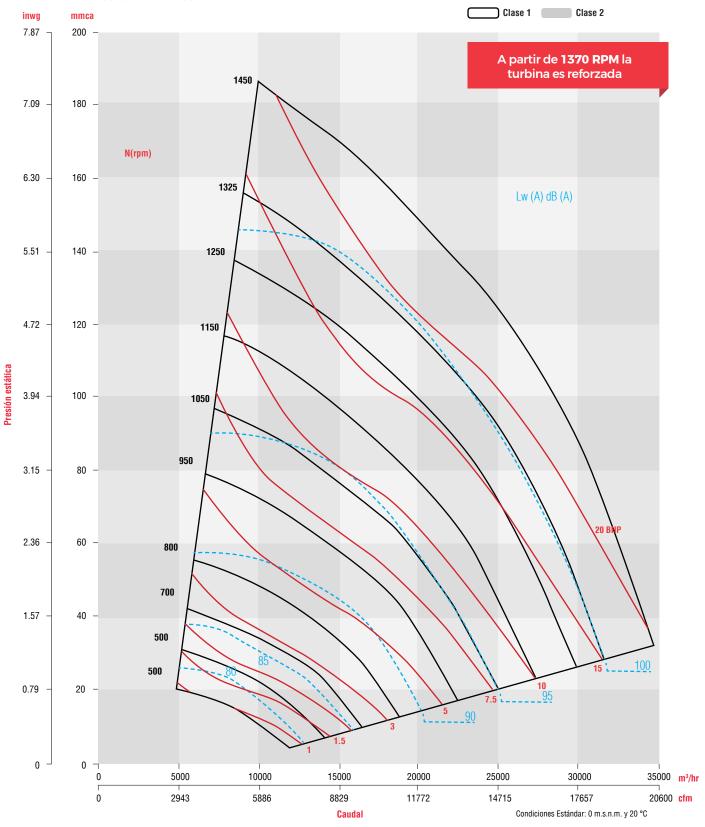
TBN-T 800																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	0.8"/2	0.32mm	1"/25	.4mm	1.25"/3	1.75mm	1.5"/3	B.1mm	1.625"/4	1.275mm	1.75"/4	4.45mm	2"/50	.8mm	2.25"/5	7.15mm	2.5"/6	3.5mm	2.75"/6	9.85mm	3"/76	.2mm	3.15"/8	0.01mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
550	4846 1.3	8233 79.6	2949	5010 80.0																				
650	7520 2.11	12776 84.0		11062 83.2		8062 85.5																		
750		16110 86.7				13456 86.9	6531 3.41	11096 87	5734 3.42	9742 86.9	4884	8298 87.1												
800	10377		9884 3.78	16793 88.3		15503 88.1	8086 4.07	13738 88.1		12627 88.1		11404	5150	8750 88.7										
900		20543		19878 91.4		18956 91.2				17209 90.9		16472 91.1	8635 5.83	14671	7365 5.91	12513 91.1	5980 5.75	10160 91.3	4229 4.88	7185 92.0				
1000	13749 6.37	23360 93.6	13413 6.66	22789 93.6	12971	22038 94.0		21214 93.7		20762 93.6	11932 7.57	20272 93.5	11273 7.76	19153 93.6	10461 7.9	17773 93.5	9461	16074 93.3	8316 8.11	14129 93.3	7091 8.02	12048 93.6	6301 7.76	10705 93.9
1050	14565 7.25	24746 95.0	14249 7.55	24209 95.0	13840 7.92	23514 95.0	13402	22770 95.0	13167 8.43	22371 95.0	12917 8.58	21946 95.0	12364 8.83	21006 95.0	11710 9.02	19895 94.9	10916 9.16	18546 94.8	9960 9.28	16922 94.6	8875 9.38	15079 94.5	8190 9.38	13915 94.5
1150			15894 9.59	27004 97.0	15532 10		15157 10.41	25752 96.6	14962 10.6			25077 96.8							12689 11.88	21559 96.7			11450 12.11	
1250			0.03		17186 12.44	29199		28630		28341	16507	28045 98.7	16145	27430	15760	26776	15343			25290		24420		23842
1325						31277 100.0	18097 15					30208 100.1												26618 100.6

TBN-T 800																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	3.25"/8	2.55mm	3.5"/8	8.9mm	3.75"/9	5.25mm	4"/101	.6mm	4.25"/1	07.95mm	4.5"/1	14.3mm	4.75"/1	20.65mm	5"/12	27mm			5.25"/13	3.35mm	5.5"/13	9.7mm	5.75"/14	46.05mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
1000	5720 7.5	9718 94.1																						
1050	7721	13118	6471 8.91	10994 95.1	4878 7.69	8288 95.5																		
1100	9480 10.77	16107		14253		12291 96	5898 9.59	10021 96.1																
1150	11090 12.16		10122 12.29	17197 96.5	9091 12.33	15446 96.5	8011 12.15	13611 96.6	6829 11.52	11602 96.9	5330 10.09	9056 97.2												
1200	12522 13.66				10796 13.93	18342 97.5	9820 14.01			14956 97.5				11030 97.8	4733 10.48	8041 98.3								
1250	13790 15.26		13121 15.43		12354 15.57	20989 98.5				17962 98.4				14625 98.4			6914 14.31	11747 98.7		10569 98.9				
1300	14937 16.94		14378 17.16			23349 99.5									9490 17.7	16124 99.4		15296 99	8499 17.26	14440 99.4	7400 16.32	12573 99.6	6029 14.59	10243 100.1
1350						25463 100.3																		
1400						27393 100.7																		
1450						29196 101.8																		











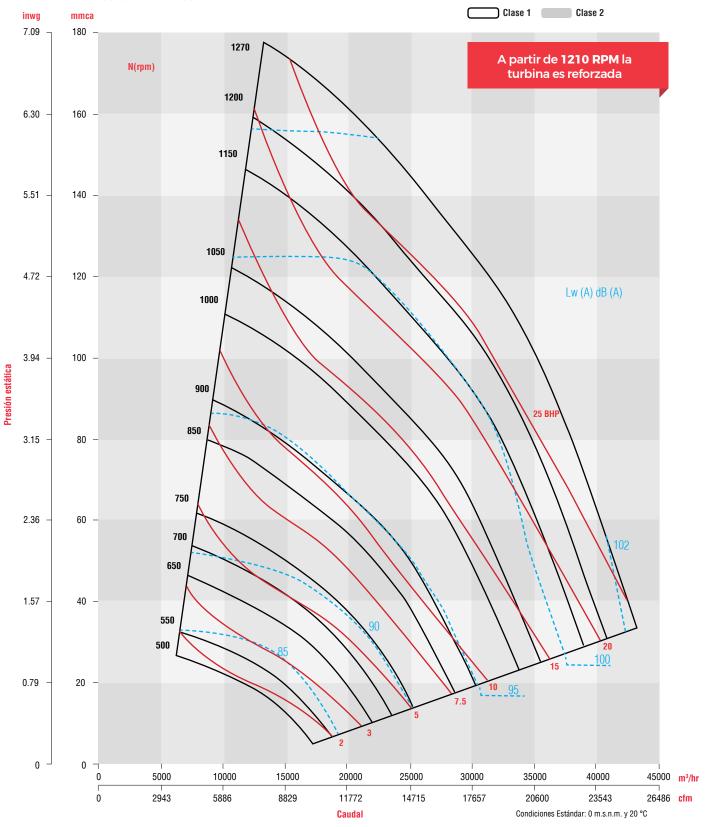
BN-T 900																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	0.75"/1	9.05mm	1"/25	.4mm	1.125"/2	8.575mm	1.25"/3	1.75mm	1.5"/3	8.1mm	1.75"/4	4.45mm	1.85"/4	6.99mm	2"/50	).8mm	2.25"/5	7.15mm	2.325"/5	9.055mm	2.5"/6	3.5mm	2.75"/6	9.85mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/l Lw <i>l</i>																				
500	7121	12099	4444	7550																				
300	1.8	81.9	1.74	82																				
000	10399	17668	9103	15466	8196	13925	7130	12114	4657	7912														
600	2.91	85.6	3.07	85.6	3.12	85.6	3.15	85.7	2.83	86.4														
075	12376	21027	11504	19545	10969	18636	10330	17551	8659	14712	6644	11288	5738	9749	3835	6516								
675	3.92	87.9	4.19	88.1	4.28	88.1	4.36	88.2	4.47	87.9	4.42	88.4	4.21	88.9	3.38	89.7								
750	14225	24168	13538	23001	13154	22349	12727	21623	11690	19861	10295	17491	9634	16368	8576	14571	6666	11326	6002	10197				
750	5.12	90.0	5.47	90.0	5.63	90.0	5.76	90.0	5.95	90.3	6.08	90.4	6.13	90.7	6.17	91.5	5.88	91.0	5.61	91.2				
050	16599	28202	16038	27249	15743	26747	15432	26219	14748	25057	13936	23677	13561	23040	12928	21965	11656	19804	11224	19070	10156	17255	8536	1450
850	7.08	93.3	7.51	93.3	7.72	93.3	7.91	93.3	8.26	93.4	8.53	93.3	8.61	93.7	8.71	93.4	8.85	93.3	8.89	93.4	8.97	93.5	8.86	93.5
0.50			18427	31307	18178	30884	17923	30451	17387	29541	16799	28542	16545	28110	16137	27417	15366	26107	15107	25667	14442	24537	13326	2264
950			10.01	96.2	10.25	96.2	10.49	96.1	10.94	96.2	11.35	96.1	11.5	96.2	11.7	96.3	11.96	96.2	12.03	96.2	12.16	96.2	12.32	96.3
			19599	33299	19365	32901	19128	32498	18637	31664	18112	30772	17890	30395	17538	29797	16894	28703	16683	28344	16152	27442	15279	2595
1000			11.46	97.4	11.71	97.4	11.96	97.4	12.46	97.4	12.92	97.3	13.09	97.3	13.34	97.4	13.68	97.5	13.78	97.5	13.96	97.5	14.17	97.5
					21702	36872	21491	36513	21063	35786	20619	35032	20436	34721	20153	34240	19655	33394	19497	33125	19113	32473	18514	3145
1100					15.06	100.0	15.34	100.0	15.9	99.9	16.44	99.8	16.66	99.7	16.97	99.9	17.45	99.7	17.59	99.8	17.88	99.6	18.25	99.4
							23812	40457	23425	39799	23033	39133	22874	38863	22630	38448	22211	37736	22082	37517	21771	36989	21303	3619
1200							19.34	101.4	19.94	101.4	20.55	101.3	20.79	101.2	21.15	101.2	21.74	101.0	21.91	101.1	22.29	101.0	22.8	100.9
									25055	42568	24689	41947	24541	41695	24317	41315	23935	40666	23818	40467	23540	39994	23126	3929
1270																102.1								

TBN-T 900																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	2.75"/6	9.85mm	3"/76.	20mm	3.25"/8	2.55mm	3.50"/8	B.90mm	3.75"/9	5.25mm	4"/101	.60mm	4.25"/10	07.95mm	4.50"/11	14.30mm	4.75"/12	0.65mm	5"/12	27mm	5.25"/13	3.35mm	5.50"/	139.70
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
800	5352 6.2	9093 92.6																						
850	8536 8.86	14503 93.5	6688 8.1	11363 93.7																				
900	11064 10.63		9559 10.61		7929 10.12		5811 8.61	9873 95.3																
950	13326 12.32	22641 96.3	12031 12.47		10628 12.53		9145 12.25	15537 96.0	7455 11.3	12666 96.3														
1000		25959 97.5					11735 14.61					15101 97.2	7107 12.48											
1050	16979 16.16		16157 16.38		15196 16.56							19693 97.9				14912 98.6								
1100	18514 18.25		17840 18.56			29000 99.1	16180 19													14972 100.1				
1150																				19907 100.2				15279 100.9
1200																				24229 100.7				
1270																				29734 101.6				











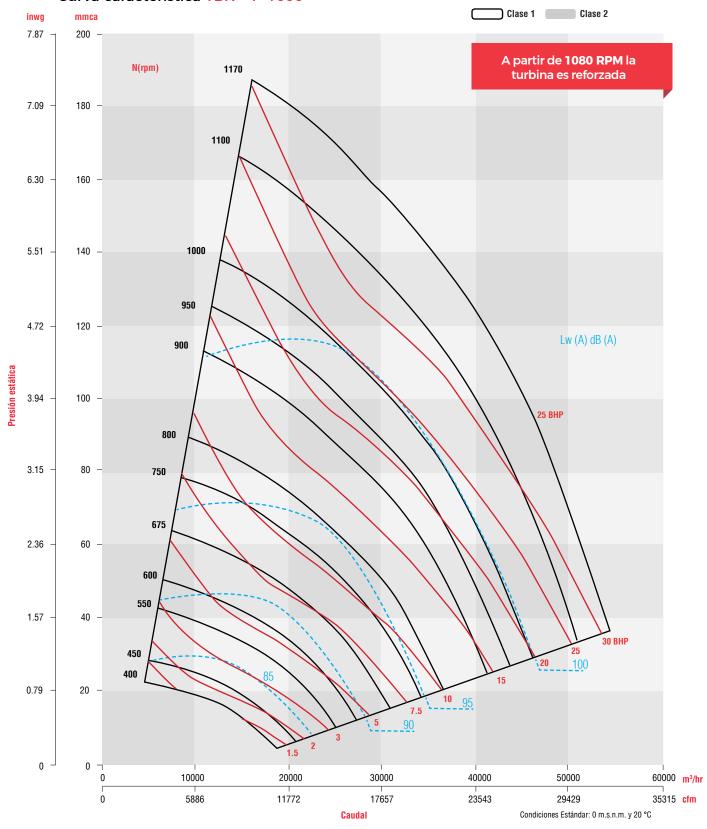
TBN-T 1000																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	ı										
Velocidad	0.75"/1	9.05mm	1"/25	.4mm	1.25"/3	1.75mm	1.5"/38	3.1mm	1.75"/4	4.45mm	2"/50	.8mm	2.125"/	54.1mm	2.25"/5	7.15mm	2.5"/63	3.5mm	2.75"/6	9.85mm	3"/76	i.2mm	3.15"/8	0.0mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
400	5540 1.6	9412 80.2																						
475	10095 2.56	17151 84.4	7329 2.65	12452 84.1																				
575	14133 4.21	24012 88.3	12865 4.48	21858 88.0	11009 4.63	18704 87.7	8504 4.69	14448 87.8	5347 3.91	9085 89.4														
650	16728 5.74	28421 91.1	15813 6.14	26866 91.1	14688 6.44	24955 90.9	13178 6.63	22389 90.8	11149 6.77	18942 90.7	8811 6.69	14970 91.0	7499 6.33	12741 91.5	5822 5.53	9892 92.3								
750	20010	33997 94.7	19297 8.82	32786 94.6	18520 9.29	31465 94.5	17629 9.69	29952 94.4	16551 9.99		15187 10.19		14371 10.27		13472 10.36	22889 93.5			9399 10.05	15969 94.7	6653 8.45	11303 95.7		
850			22588 12.17		21960 12.76		21290 13.31									31855 96.6			16161 14.97			24685 96.4	13485 15.2	
900			24196 14.14		23615 14.77		23008 15.38					36787 97.8							18863 17.5				16716 17.83	
1000					26852 19.44		26330 20.14		25791 20.83			42859 99.9		42358 99.9		41838 99.9							21927 23.73	
1050																44832 101.1								
1170																51729 103.8								

TBN-T 1000																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	3.25"/8	2.55mm	3.50"/88	B.90mm	3.75"/9	5.25mm	4"/101	.60mm	4.25"/1	07.95mm	4.50"/1	14.30mm	4.75"/1	20.65mm	5"/12	27mm	5.25"/13	3.35mm	5.50"/	139.70	5.75"/14	16.05mm	6.0"/15	52.4mm
de salida RPM	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA	CFM BHP	m³/h LwA
775	6130 8.7	10415 96.5																						
800	8937	15184		9509																				
850	11.64 12773 15.18		9.04 10907 14.75			14815 97.8																		
900		27359	14488	24615	12793	21735 97.9			8774 15.41	14907 99.3														
950	19034 20.75					27561 98.8								15486 100.5										
1000	21548 23.85					32796 100.0																		
1050																							7820 21.06	
1100																							13253 31.27	
1150																							17008 37.54	
1170																							18399 39.64	









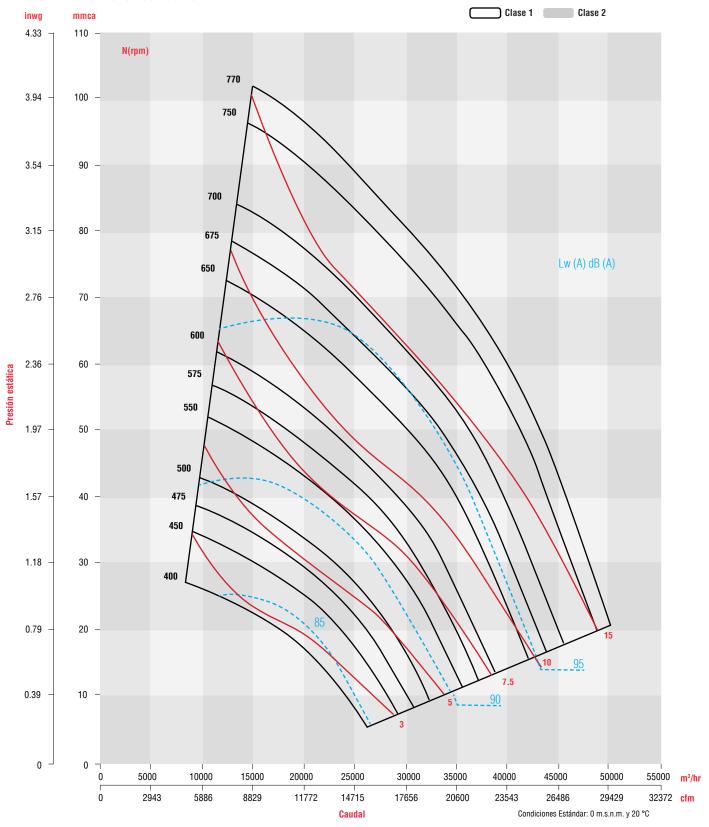
TBN-T 1120																					Clase	1	C	lase 2
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	0.75"/1	9.05mm	0.9"/22	2.86mm	1"/25	i.4mm	1.125"/2	8.58mm	1.25"/3	1.75mm	1.4"/3	5.56mm	1.5"/3	8.1mm	1.625"/4	11.48mm	1.7"/43	.18mm	1.75"/4	4.45mm	1.8"/4	5.72mm	2"/50	.8mm
de salida RPM	CFM BHP	m³/h LwA																						
400	10885 2.7	18494 83.2	8492 2.79	14428 83.7	6675 2.63	11341 85																		
450	14299 3.77	24294 86.4	12838 3.88	21812 86.2	11577 3.93	19669 86.2	9767 3.97	16594 86.3	7783 3.8	13223 86.9														
475	15718 4.33	26705 87.6	14558 4.49	24734 87.4	13581 4.56	23074 87.4	12080 4.63	20524 87.3	10359 4.67	17600 87.4	8097 4.45	13757 87.9	6158 3.87	10462 88.9										
500	17043 4.94	28956 88.7	16076 5.14	27313 88.8	15301 5.24	25996 88.6	14120 5.33	23990 88.5	12672 5.4	21530 88.4	10701 5.45	18181 88.5	9297 5.34	15796 88.9	7257 4.81	12330 89.7								
550	19534 6.28	33188 90.8	18788 6.56	31921 90.7	18232 6.72	30976 90.8	17445 6.88	29639 90.8	16515 7.01	28059 90.9	15150 7.12	25740 90.6	14081 7.19	23924 90.6	12616 7.25	21435 90.9	11696 7.25	19872 90.7	11069 7.21	18806 90.7	10424 7.13	17710 90.9	7356 6.11	12498 91.7
600	21904 7.84	37215 92.8	21278 8.17	36151 92.6	20831 8.38	35392 92.6	20228 8.61	34367 92.6	19559 8.82	33231 92.8	18635 9.01	31661 92.6	17923 9.11	30451 92.6	16899 9.21	28711 92.9	16209 9.27	27539 92.4	15718 9.3	26705 92.3	15207 9.34	25837 92.4	13022 9.42	22124 92.4
650	24207 9.63	41128 94.6	23655 10.01		23273 10.26		22771 10.55		22235 10.81	37777 94.5	21531 11.1		21014 11.26		20299 11.43				19489 11.57		19134 11.62		17516 11.78	29760 94.1
675	25341 10.63	43054 95.4	24818 11.03		24458 11.29	41554 95.4	23991	40761 95.4	23499		22863 12.22		22405 12.41		21783 12.62			36323 95.3	21094 12.8		20795		19445 13.06	33037 95.1
725	27586 12.85	46869	27107 13.27	46055	26782 13.56	45503		44798		44067		43150		42504	24516		24198		23978	40739		40353	22758 15.83	38666
770			29137 15.55		28835 15.85		28454 16.23	48343 98.4	28064 16.6		27580 17.04				26812 17.65		26541 17.84		26355 17.97		26165 18.09		25356 18.52	

TBN-T 1120																								
									PRE	SIÓN E	STÁTIC	A inwg	/ mmca	1										
Velocidad	2"/50	).8mm	2.125"/5	3.975mm	2.25"/5	7.15mm	2.325"/5	9.055mm	2.4"/60	).96mm	2.5"/6	3.5mm	2.625"/60	6.675mm	2.7"/6	B.58mm	2.825"/71	.755mm	2.9"/73	3.66mm	3"/76	.2mm	3.125"/7	9.375mm
de salida RPM	CFM BHP	m³/h LwA																						
550	7356	12498																						
330	6.1	91.7																						
575	10483	17811	8734	14839	6225	10576																		
070	8.07	91.7	7.49	92.4	6.2	93.2																		
600	13022	22124	11577	19669	10013	17012	8944	15196	7648	12994														
000	9.42	92.4	9.3	92.5	8.89	92.9	8.43	93.5	7.72	93.8														
625	15366	26107	14052	23874	12688	21557	11838	20113	10949	18602	9645	16387	7549	12826										
020	10.59		10.65	93.2			10.47			93.8	9.7	94.2	8.46	95.0										
650	17516	29760	16354	27785	15110	25672	14339	24362	13553	23027	12475	21195	11039	18755	10085	17134	8130	13813						
000	11.78		11.88									94.3			10.94	95.1	9.71	95.7						
675	19445	33037	18459	31362	17366	29505	16669	28321	15949	27097	14963	25422	13696	23270	12912	21937	11531	19591	10622	18047	9226	15675		
0.0	13.06															95.2			12.33		11.44	96.3		
700	21176	35978	20348	34571	19422											26178				22814	12378	21030	10939	18585
	14.42		14.54		14.66											95.8			14.75		14.42		13.71	
725	22758	38666	22054				20761									30150					14982	25454	13768	23392
. 20	15.83		15.99		16.13		16.2									96.4			16.62		16.57		16.35	
750	24233	41172	23621	40132	22951											33846				31036	17395	29554	16278	27656
700	17.3		17.5		17.67											97.1			18.31		18.38	97.1	18.4	97.1
770	25356	43080	24801	42137	24200	41116	23814	40460	23406	39767	22825	38780	22034	37436	21523	36568	20612	35020	20032	34034	19225	32663	18177	30883
.,,	18.52	98.4	18.75	98.3	18.96	98.1	19.06	98.3	19.16	98.0	19.28	97.9	19.41	97.8	19.49	97.7	19.61	97.7	19.68	97.7	19.77	97.7	19.87	97.7











## Ejemplo de **Selección de Atenuador**



Se tiene un equipo centrífugo de diámetro nominal 710 con el siguiente espectro sonoro:

Octavas	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
LwA Ventilador	51	77	76	86	86	82	73	72

Se instalará en un recinto donde se requiere un NC 70. El caudal generado por dicho equipo es de 11,033 m³ / hr y la velocidad de salida es menor a 5 m/s. Debemos tomar los valores NC 70 dentro de la tabla de referencia e implementarle en el lugar donde será colocado el equipo de ventilación y el atenuador.

Octavas	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
LwA Ventilador	51	77	76	86	86	82	73	72
NC 70	84	79	75	72	71	70	68	68

Se realiza una resta aritmética de los valores referenciados.

Octavas	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
LwA Ventilador	51	77	76	86	86	82	73	72
NC 70	84	79	75	72	71	70	68	68
LwA Ventilador - NC 70	-33	-2	1	14	15	12	5	4







Localizar en las **tablas de atenuación** de cada modelo, los valores más cercanos en las frecuencias 1 y 2 kHz basados en el diámetro y longitud, y de preferencia en busca del mayor nivel de atenuación.

	ı	Longitud	I	Ø	Ø			Atenuación -			IL (dB) @	) Hz					
Con núcleo	1.0 Ø	1.5 Ø	2.0 Ø	interno mm.	externo mm.	Longitud	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
						1.0 Ø	0	1	4	11	20	18	14	6			
ATN 400	400	600	800	400	540	1.50	0	2	6	15	31	27	19	8			
						2.00	0	2	9	18	34	30	22	9			
						1.00	0	1	6	14	21	19	13	6			
ATN 450	450	675	900	450	610	1.50	0	2	7	19	31	28	18	8			
						2.00	0	2	10	22	34	31	21	8			
						1.00	0	2	5	13	20	16	11	7			
ATN 500	500	750	1000	500	660	1.50	0	3	7	19	29	24	14	7			
						2.00	0	3	10	22	32	27	17	8			
						1.00	0	1	6	15	21	17	11	7			
ATN 560	560	840	1120	560	720	1.50	0	3	9	22	32	27	15	5			
						2.00	0	3	12 6	25 15	35	30	18 10	7 7			
	000	0.45	1000	000	700	1.0 Ø 1.5 Ø	0	2	9	22	19 29	16 23	14				
ATN 630	630	945	1260	630	790	2.00	0	2	12	25	32	23 26	17	6 7			
						1.00	0	2	7	15	20	18	12	7			
ATN 740	740	4005	4.400	740	740	740	740	070	1.0 <i>Ø</i>	0	3	11	22	31	25	13	7
ATN 710	710	1065	1420	710	870	2.00	0	3	14	25	34	28	16	8			
						1.0Ø	0	3	9	12	17	15	9	7			
ATN 000	000	1000	1000	000	000	000	1000	1.5Ø	0	6	13	18	26	22	12	7	
ATN 800	800	1200	1600	800	1000	2.00	0	6	16	21	29	25	15	7			
						1.00	0	4	8	15	16	11	8	7			
ATN 900	900	1350	1800	900	1100	1.50	0	5	12	20	24	16	10	5			
AIN 900	900	1550	1000	900	1100	2.00	0	5	15	23	27	19	13	6			
						1.0 Ø	0	8	14	20	24	21	14	7			
ATN 1000	1000	1500	2000	1000	1200	1.50	0	10	22	30	37	29	16	5			
A111 1000	1000	1500	2000	1000	1200	2.00	0	10	25	33	40	32	19	6			
						1.00	0	7	13	18	22	20	14	7			
ATN 1120	1120	1680	2240	1120	1320	1.50	0	10	20	28	35	17	16	5			
ATTITLO	1120	1000	22-10	1120	1020	2.0 Ø	0	10	23	31	38	20	19	6			
						1.0 Ø	0	7	12	18	19	10	6	6			
ATN 1250	1250	1875	2500	1250	1450	1.50	0	10	18	26	29	14	9	4			
	1200	1010	2000	1200	1400	2.0 Ø	0	10	21	29	32	17	12	5			
						1.00	0	6	11	17	18	10	6	6			
ATN 1400	1400	2100	2800	1400	1600	1.50	0	9	18	25	27	14	9	4			
						2.0 Ø	0	9	21	28	30	17	12	5			

#### Selección

Atenuador tubular de diámetro 1000 mm, con núcleo interno y 1.0 m de longitud con un nivel de atenuación de 20 y 24 dB en las frecuencias 500 Hz y 1kHz.



Una vez elegido el espectro correspondiente, se restarán aritméticamente los valores de atenuación por octavas de banda, del atenuador al espectro sonoro del ventilador.

Octavas	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
LwA Ventilador	51	77	76	86	86	82	73	72
NC 70	0	8	14	20	24	21	14	7
LwA Ventilador - NC 70	51	69	62	66	62	61	59	65

Una vez con el espectro del ventilador atenuado, revisaremos el efecto que se generará por la velocidad de paso dentro del atenuador. Para ello, recurriremos a la tabla de atenuación general y tomaremos el espectro sonoro correspondiente a la velocidad de salida marcada como menor a 5 m/s.

Velocidad de		Nivel de potencia sonora generada por silenciador									
aire		Octavas de banda Hz									
m/sec (ft/min)	63 Hz	63 Hz 125 Hz 250 Hz 500 Hz 1000 Hz 2000 Hz 4000 Hz 8000 Hz									
<5 (<1000)	62	62 43 38 39 36 25 22 28									

Se sumarán logarítmicamente (**LwA Ventilador atenuado + Sonido regenerado)**, hasta obtener el espectro sonoro del ventilador atenuado.

Octavas	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
LwA Ventilador atenuado	51	69	62	66	62	61	59	65
Sonido regenerado	62	43	38	39	36	25	22	28
Suma logarítmica	62	69	62	66	62	61	59	65

Por último, partiendo de un ventilador con espectro sonoro:

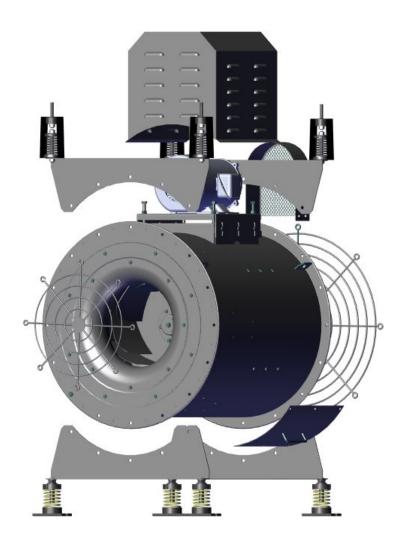
Octavas	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
LwA Ventilador	51	77	76	86	86	82	73	72

Seleccionando y acoplando un atenuador del mismo diámetro y con 1 vez su diámetro de largo, se logra reducir el espectro sonoro de la misma fuente al siguiente espectro. Se demuestra una reducción promedio del nivel sonoro por octavas de banda.

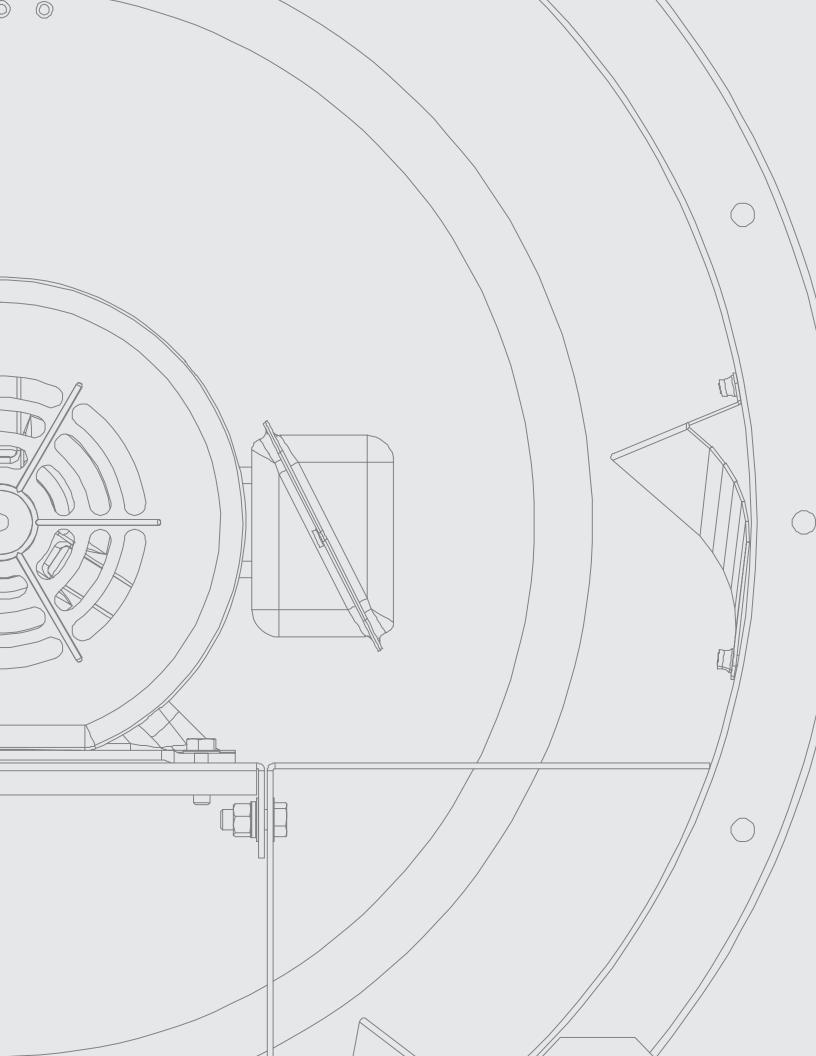
Octavas	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
LwA Ventilador	62	69	62	66	62	61	59	65



### **Accesorios**



- Puerta de inspección
- Cubre banda
- Cubierta motor
- Tubo dren
- Interruptor eléctrico
- Resortes colgantes y de piso
- Mallas de protección en succión y descarga
- Atenuadores





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