MTRU

MEDIUM PRESSURE WITH BACKWARD IMPELLER AND BELT TRASMISSION

MANUFACTURING FEATURES:

• Fan made of Fe360 sheet. The fan paint finish is based on a Qualicoat polyester powder coating stoved at 200ºC, with an average film thickness of 70 microns. Average heat resistence of coating is 180ºC with peaks of 200ºC.
• Fully welded or joined housing.
• Single inlet backward curved impeller made of Fe360 sheet statically and dynamically balanced.
Impellers are painted with epoxy primer that resists temperatures up to 300ºC.
• Motorized fan with basement (configuration 12). Full equipped fans including: motor, pulleys, belts, belts guard and shaft guard. Fitted over a base plate.
• Standard orientation LG270.
• It allows adjusting the orientation locally from models 250 to 630. Models sizes from 710 to 2000 size the orientation is fixed.

APPLICATIONS:

Designed for inline installation, they are suitable for:
• Industrial applications, extraction or injection of air.
• Cooling of machines and parts.
• Clean air and pneumatic transport.
• Dusty air or with low load of granulated materials.
• Maximum working temperature: carried air: 200ºC, ambient: 60ºC.

UNDER REQUEST:

• 60Hz fans and special voltages.
• 2 speed motors.
• Fan with free shaft (configuration 1) or with motor supported on the pedestal side (configuration 9).
• Flameproof or explosionproof fans with ATEX certificated motors.
• Fan for air working temperatures up to 350ºC with R/R (cooling impeller).
• Hot dip galvanised or stainless steel fans.
• Orientation: RD0, RD45, RD90, RD135, RD180, RD225, RD270, RD315, LG0, LG45, LG90, LG135, LG180. LG225, LG315.

Accessories


AC


BAD


EI


INT


JE-45


RA


RI

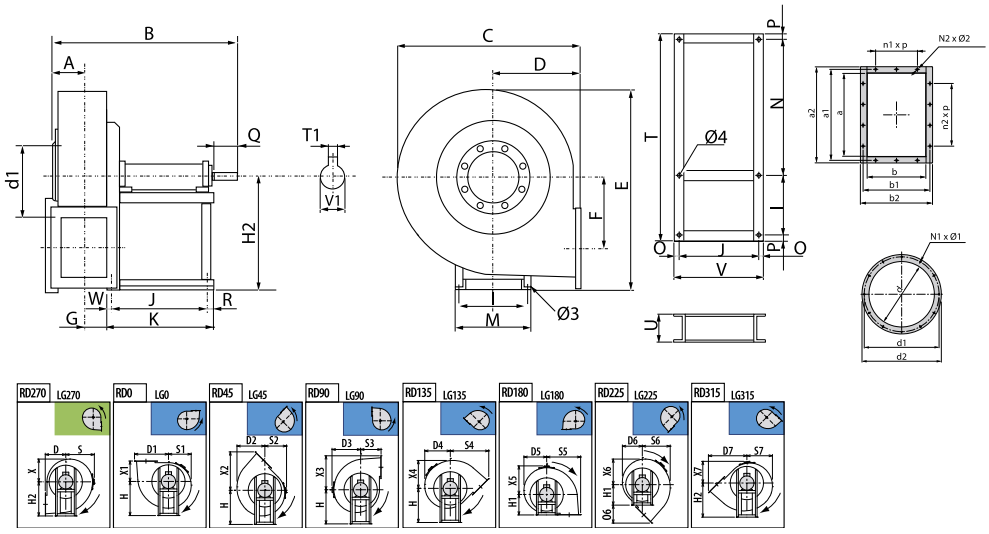
Technical data

Three-phase motor

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight	Connect. diagram
5045025__R___	MTRU 250	3500	-	2,20	1.180	42	30	1
5045028__R___	MTRU 280	3500	-	3	1.660	45	37	1
5045031__R___	MTRU 310	3500	-	4	2.600	45	55	1
5045035__R___	MTRU 350	3500	-	4	3.570	47	72	1
5045040__R___	MTRU 400	3500	-	11	5.020	46	82	1
5045045__R___	MTRU 450	3500	-	18,50	10.690	49	98	1
5045050__R___	MTRU 500	3500	-	22	12.990	56	135	1
5045056__R___	MTRU 560	3500	-	30	17.930	40	182	1
5045063__R___	MTRU 630	3200	-	37	25.140	43	218	1
5045071__R___	MTRU 710	2900	-	55	34.700	38	325	1
5045080__R___	MTRU 800	2600	-	75	46.840	42	400	1
5045090__R___	MTRU 900	2300	-	90	57.790	43	485	1
5045100__R___	MTRU 1000	2000	-	90	66.150	42	710	1
5045112__R___	MTRU 1120	1800	-	90	68.230	41	1.000	1
5045125__R___	MTRU 1250	1650	-	160	95.280	43	1.145	1
5045140__R___	MTRU 1400	1450	-	200	121.900	45	1.740	1
5045160__R___	MTRU 1600	1250	-	200	141.670	47	2.462	1
5045180__R___	MTRU 1800	1100	-	315	192.350	46	2.790	1
5045200__R___	MTRU 2000	950	-	315	225.410	47	4.300	1

Notes:
* Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

Dimensions



Model	A	B	C	D	D1	D2	D3	D4	D5
MTRU 250	86	496	471	195	314	255	276	235	212
MTRU 280	95	592	505	200	353	287	305	262	231
MTRU 310	105	610	557	225	393	316	332	288	256
MTRU 350	115	783	630	255	437	359	375	325	288
MTRU 400	127	820	685	285	487	387	400	353	311
MTRU 450	141	847	765	320	542	435	445	398	354
MTRU 500	157	985	862	360	597	490	502	450	400

Model	D6	D7	E	F	G	H	H1	H2	I
MTRU 250	215	360	527	175	77	315	195	315	228
MTRU 280	226	391	606	202	86	375	200	375	288
MTRU 310	253	437	656	229	96	400	225	400	288
MTRU 350	278	489	738	253	106	450	255	450	355
MTRU 400	306	546	811	286	118	500	285	500	355
MTRU 450	342	609	914	321	132	560	320	560	355
MTRU 500	380	677	1000	355	148	600	360	600	364

Model	J	K	M	N1xØ1	N2xØ2	O	O6	P	Q
MTRU 250	210	288	255	8x8	8x12	17	165	13,5	40
MTRU 280	284	347	324	8x8	8x12	23	191	18	50
MTRU 310	284	347	324	8x10	10x12	23	212	18	50
MTRU 350	407	485	400	8x12	10x12	28	234	22,5	60
MTRU 400	407	485	400	8x12	10x12	28	261	22,5	80
MTRU 450	407	485	400	8x12	10x12	28	289	22,5	80

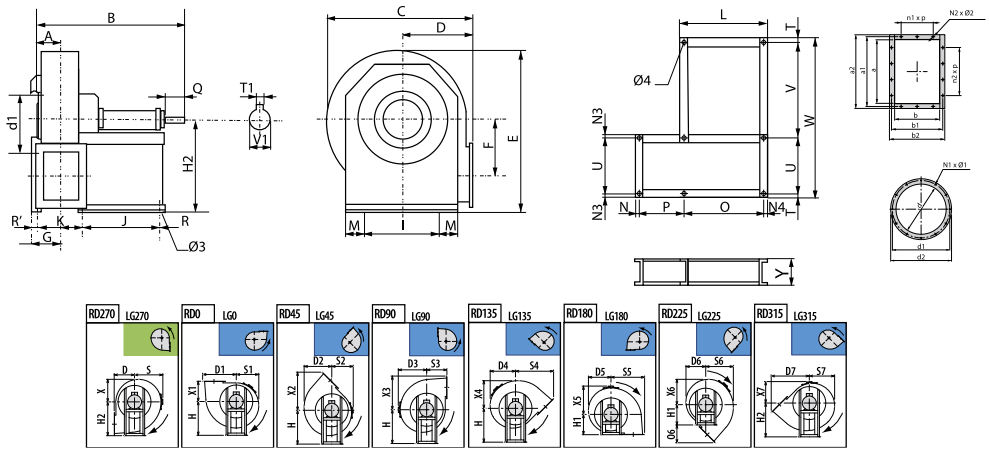
Model	J	K	M	N1xØ1	N2xØ2	O	O6	P	Q
MTRU 500	477	560	418	12x12	14x12	33	317	27	110

Model	R	S	S1	S2	S3	S4	S5	S6	S7
MTRU 250	17	276	212	215	195	360	314	255	235
MTRU 280	23	305	231	226	200	391	353	287	262
MTRU 310	23	332	256	253	225	437	393	316	288
MTRU 350	28	375	288	278	255	489	437	359	325
MTRU 400	28	400	311	306	285	543	487	387	353
MTRU 450	28	445	354	342	320	609	542	435	398
MTRU 500	33	502	400	380	360	676	597	490	450

Model	T	T1	U	V	V1	W	X	X1	X2
MTRU 250	6	6	80	19	19	55	212	195	360
MTRU 280	8	8	100	24	24	40	231	200	391
MTRU 310	8	8	100	24	24	40	256	225	437
MTRU 350	8	8	120	28	28	50	288	255	489
MTRU 400	10	10	120	38	38	50	311	285	543
MTRU 450	10	10	120	38	38	50	354	320	609
MTRU 500	12	12	140	42	42	50	400	360	677

Model	X3	X4	X5	X6	X7	a	a1	a2	b
MTRU 250	314	255	276	235	215	207	241	277	148
MTRU 280	353	287	305	262	226	231	265	301	166
MTRU 310	393	316	332	288	253	258	292	328	185
MTRU 350	437	359	375	325	278	288	332	368	205
MTRU 400	487	387	400	353	306	322	366	402	229
MTRU 450	542	435	445	398	342	361	405	441	256
MTRU 500	597	490	502	450	380	404	448	484	288

Model	b1	b2	d	d1	d2	n1xp	n2xp	Ø3	Ø4
MTRU 250	182	218	205	241	275	1x112	1x112	10	12
MTRU 280	200	236	228	265	298	1x112	1x112	12	15
MTRU 310	219	255	255	292	325	1x112	2x112	12	15
MTRU 350	249	285	285	332	365	1x125	2x125	14	15
MTRU 400	273	309	320	366	400	1x125	2x125	14	15
MTRU 450	300	336	360	405	440	1x125	2x125	14	15
MTRU 500	332	368	405	448	485	2x125	3x125	17	18



Model	A	B	C	D	D1	D2	D3	D4	D5
MTRU 560	180	1058	970	400	657	555	570	542	485
MTRU 630	200	1102	1080	450	733	619	630	603	550

Model	D6	D7	E	F	G	H	H1	H2	I
MTRU 560	425	747	1155	390	161	670	400	670	632
MTRU 630	476	836	1300	439	234	750	450	750	702

Model	J	K	L	M	N1	N1xØ1	N2xØ2	N3	N4
MTRU 560	477	943	543	30	33	12x12	14x12	30	33
MTRU 630	477	983	543	30	33	12x14	14x12	30	33

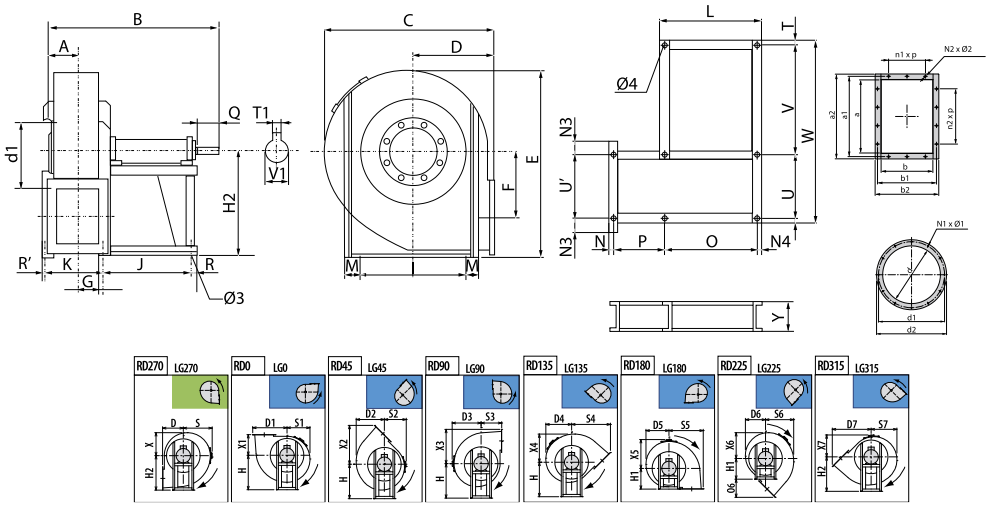
Model	O	O6	P	Q	R	S	S1	S2	S3
MTRU 560	477	347	410	110	33	570	485	425	400
MTRU 630	477	386	450	110	33	630	550	476	450

Model	S4	S5	S6	S7	T	T1	U	V	V1
MTRU 560	747	667	555	542	30	14	632	678	48
MTRU 630	836	733	619	603	30	14	702	708	48

Model	W	X	X1	X2	X3	X4	X5	X6	X7
MTRU 560	1370	485	400	747	657	555	570	542	425
MTRU 630	1470	550	450	836	733	619	630	603	476

Model	Y	a	a1	a2	b	b1	b2	d	d1
MTRU 560	160	453	497	533	361	405	441	455	497
MTRU 630	160	507	551	587	361	405	441	505	551

Model	d2	n1xp	n2xp	Ø3	Ø4
MTRU 560	535	2x125	3x125	17	18
MTRU 630	585	2x125	3x125	17	18



Model	A	B	C	D	D1	D2	D3	D4	D5
MTRU 710	221	1241	1190	500	835	719	690	662	565
MTRU 800	246	1306	1342	560	929	811	782	749	641
MTRU 900	277	1360	1500	630	1038	905	870	835	721
MTRU 1000	308	1565	1686	710	1171	1015	976	936	814
MTRU 1120	350	1780	1884	800	1309	1133	1084	1037	932
MTRU 1250	388	1855	2114	900	1464	1270	1214	1163	1048
MTRU 1400	430	2050	2325	1000	1635	1395	1325	1272	1145
MTRU 1600	604	2378	2620	1120	1824	1572	1500	1434	1276
MTRU 1800	654	2525	2960	1250	2025	1790	1710	1610	1471
MTRU 2000	715	2645	3290	1400	2271	1970	1890	1811	1635

Model	D6	D7	E	F	G	H	H1	H2	I
MTRU 710	497	944	1415	500	262	670	500	670	772
MTRU 800	562	1053	1591	560	307	755	560	950	862
MTRU 900	633	1180	1781	630	334	850	630	850	962
MTRU 1000	718	1330	1994	710	385	950	710	950	1056
MTRU 1120	793	1491	2252	800	419	1060	800	1060	1178
MTRU 1250	898	1671	2548	900	458	1190	900	1190	1310
MTRU 1400	990	1863	2845	1000	531	1320	1000	1320	1450
MTRU 1600	1085	2081	3176	1120	579	1500	1120	1500	1640
MTRU 1800	1300	2312	3591	1244	634	1650	1250	1650	1830

Model	D6	D7	E	F	G	H	H1	H2	I
MTRU 2000	1455	2595	3035	1394	715	1850	1400	1850	2030

Model	J	K	L	M	N	N1	N1xØ1	N2xØ2	N3
MTRU 710	551	497	629	27	27	39	12x14	14x14	71
MTRU 800	551	546	629	32	47	39	12x14	14x14	91
MTRU 900	551	600	629	32	47	39	16x14	16x14	91
MTRU 1000	607	657	697	36	67	45	16x14	14x14	99
MTRU 1120	760	763	850	45	55	45	16x14	18x14	111
MTRU 1250	760	840	850	45	55	45	24x14	18x14	110
MTRU 1400	780	946	890	55	85	55	24x14	20x18	120
MTRU 1600	917	1073	1047	60	75	65	24x17	24x18	120
MTRU 1800	917	1193	1047	60	65	65	32x17	24x18	130
MTRU 2000	917	1315	1047	60	85	65	32x17	28x22	170

Model	N4	O	O6	P	Q	R	R'	S	S1
MTRU 710	39	551	444	497	110	39	27	690	565
MTRU 800	39	551	493	546	110	39	47	782	641
MTRU 900	39	551	550	600	110	39	47	870	721
MTRU 1000	45	607	620	657	140	45	67	976	814
MTRU 1120	45	760	691	763	140	45	55	1084	932
MTRU 1250	45	760	771	840	140	45	55	1214	1048
MTRU 1400	55	780	863	946	170	55	85	1325	1145
MTRU 1600	65	917	961	1073	210	65	75	1500	1276
MTRU 1800	65	917	1062	1193	210	65	65	1710	1471
MTRU 2000	65	917	1195	1315	210	65	85	1890	1635

Model	S2	S3	S4	S5	S6	S7	T	T1	U
MTRU 710	497	500	944	835	719	662	27	14	772
MTRU 800	562	560	1053	929	811	749	32	16	862
MTRU 900	633	630	1180	1038	905	835	32	16	962
MTRU 1000	718	710	1330	1171	1015	936	36	18	1056
MTRU 1120	793	800	1491	1309	1133	1037	45	20	1178
MTRU 1250	898	900	1671	1464	1270	1163	45	20	1310
MTRU 1400	990	1000	1863	1635	1395	1272	55	22	1450
MTRU 1600	1085	1120	2081	1824	1572	1434	60	25	1640
MTRU 1800	1300	1250	2312	2025	1790	1610	60	28	1830
MTRU 2000	1455	1400	2595	2271	1970	1811	60	28	2030

Model	U'	V	V1	W	X	X1	X2	X3	X4
MTRU 710	772	807	48	1633	565	500	944	835	719

Model	U'	V	V1	W	X	X1	X2	X3	X4
MTRU 800	862	842	55	1768	641	560	1053	929	811
MTRU 900	962	987	55	2013	721	630	1180	1038	905
MTRU 1000	1056	1036	65	2164	814	710	1330	1171	1015
MTRU 1120	1178	1066	75	2334	932	800	1491	1309	1133
MTRU 1250	1310	1230	75	2630	1048	900	1671	1464	1270
MTRU 1400	1450	1240	80	2800	1145	1000	1863	1635	1395
MTRU 1600	1640	1205	90	2965	1276	1120	2081	1824	1572
MTRU 1800	1830	1385	100	3335	1471	1250	2312	2025	1790
MTRU 2000	2030	1350	100	3500	1635	1400	2595	2271	1970

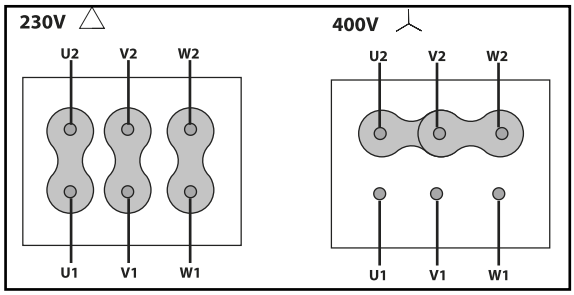
Model	X5	X6	X7	Y	a	a1	a2	b	b1
MTRU 710	690	662	497	180	569	629	669	404	464
MTRU 800	782	749	562	180	638	698	738	453	513
MTRU 900	870	835	633	180	715	775	815	507	567
MTRU 1000	976	936	718	200	801	871	921	569	639
MTRU 1120	1084	1037	793	220	898	968	1018	638	708
MTRU 1250	1214	1163	898	220	1007	1077	1127	715	785
MTRU 1400	1325	1272	990	220	1130	1210	1270	801	881
MTRU 1600	1500	1434	1085	220	1267	1347	1407	898	978
MTRU 1800	1710	1610	1300	250	1421	1501	1561	1007	1087
MTRU 2000	1890	1811	1455	250	1593	1683	1753	1130	1220

Model	b2	d	d1	d2	n1xp	n2xp	Ø3	Ø4
MTRU 710	504	565	629	665	2x160	3x160	19	20
MTRU 800	553	635	698	735	2x160	3x160	19	20
MTRU 900	607	715	775	815	2x160	4x160	19	20
MTRU 1000	689	805	861	905	2x200	3x200	19	20
MTRU 1120	758	905	958	1005	3x200	4x200	24	25
MTRU 1250	835	1007	1067	1107	3x200	4x200	24	25
MTRU 1400	941	1130	1200	1250	3x200	5x200	24	25
MTRU 1600	1038	1260	1337	1380	4x200	6x200	28	30
MTRU 1800	1147	1420	1491	1540	4x200	6x200	28	30
MTRU 2000	1290	1610	1663	1730	5x200	7x200	28	30

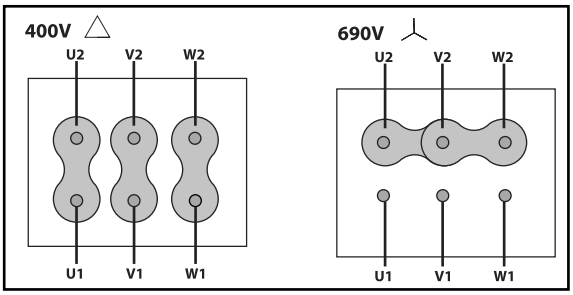
Wiring diagram

DIAGRAM Nº 1

230/400V



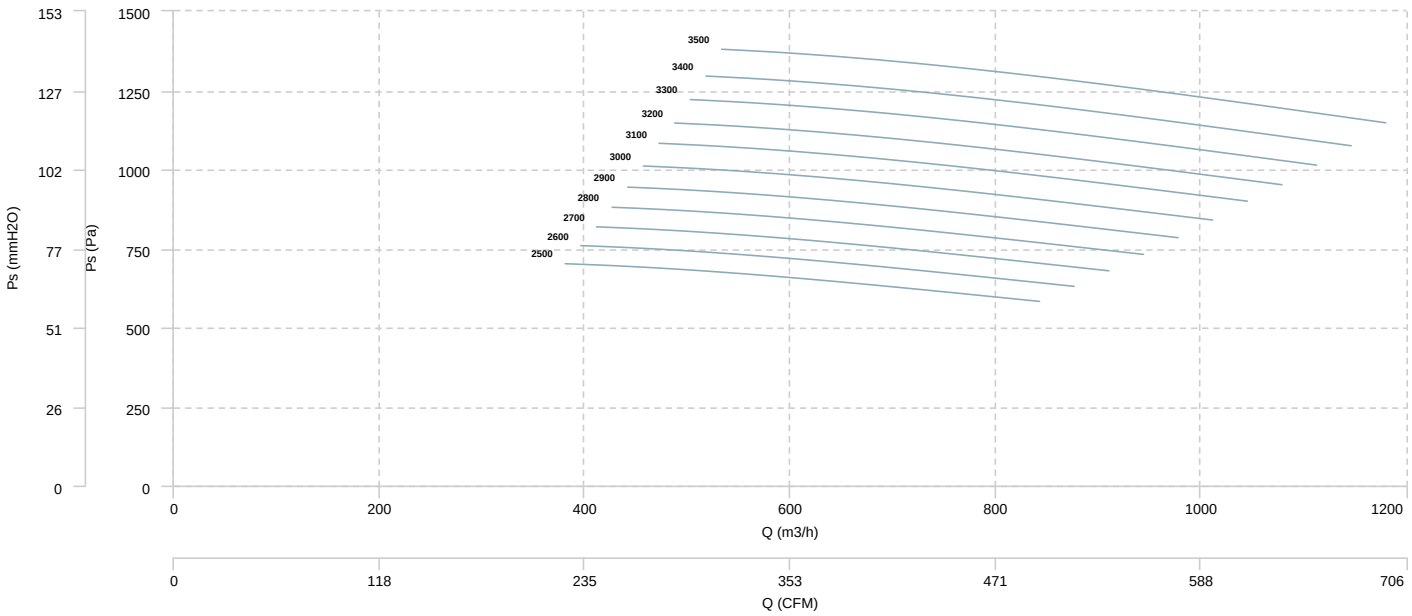
400/690V



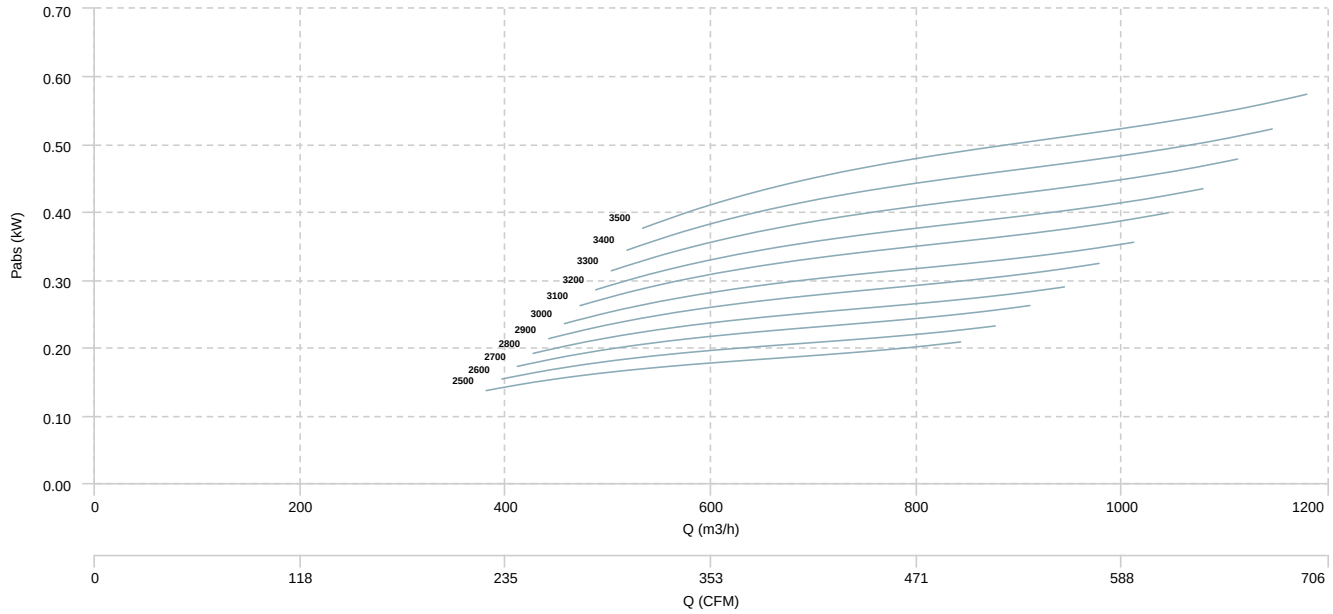
CHARACTERISCTIC CURVE

MTRU 250

AIR FLOW - PRESSURE

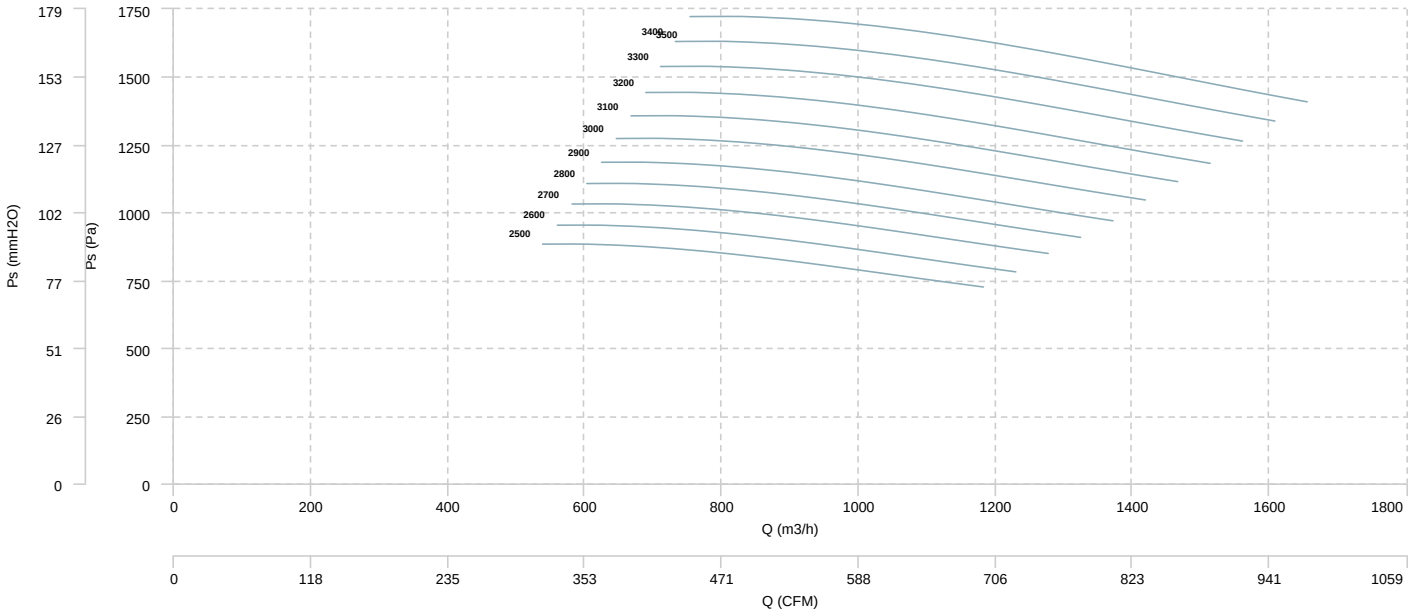


AIR FLOW - MECHANICAL POWER

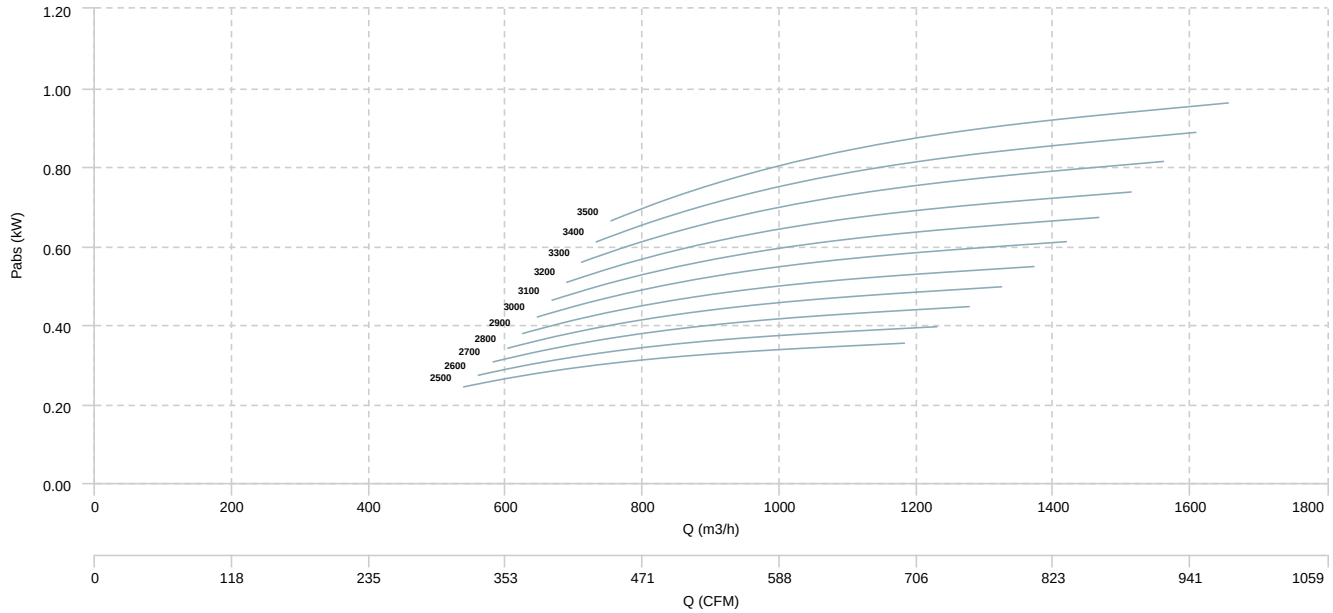


MTRU 280

AIR FLOW - PRESSURE

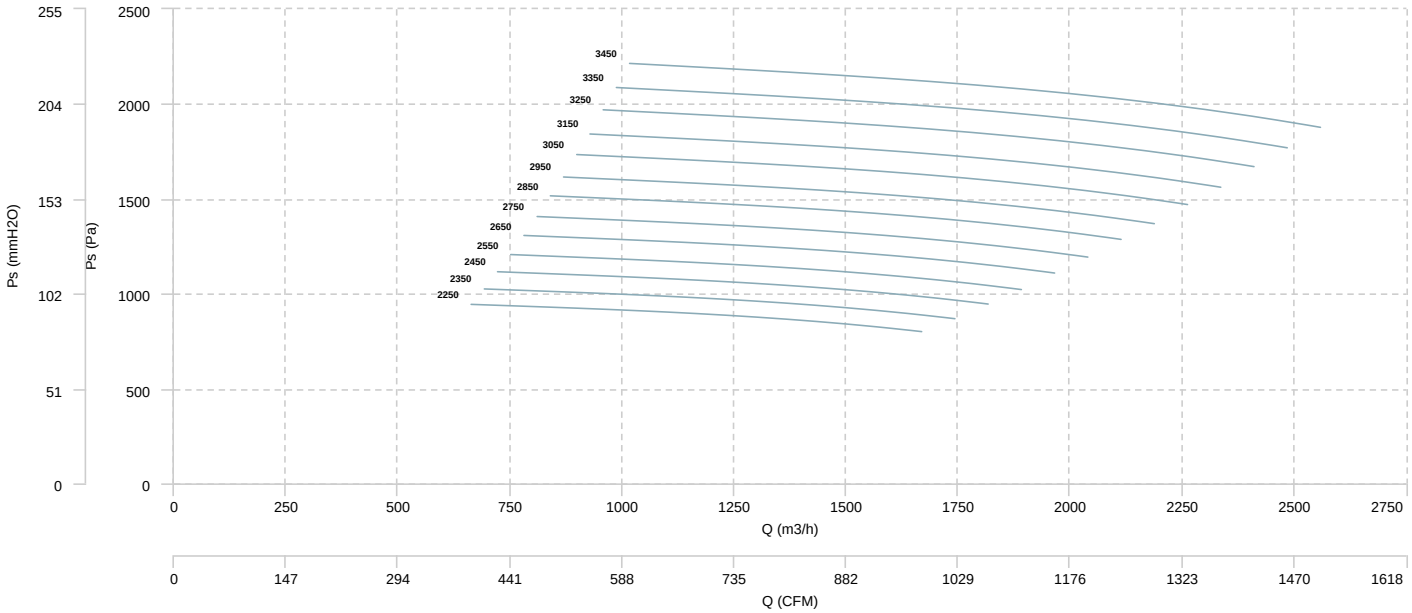


AIR FLOW - MECHANICAL POWER

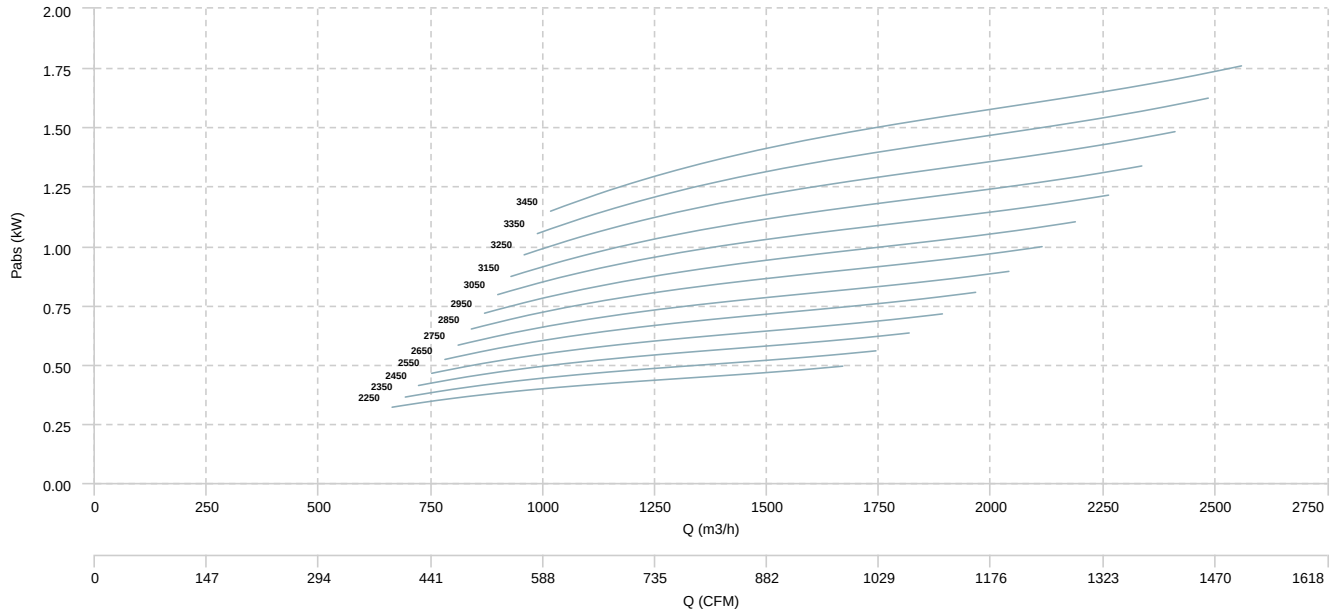


MTRU 310

AIR FLOW - PRESSURE

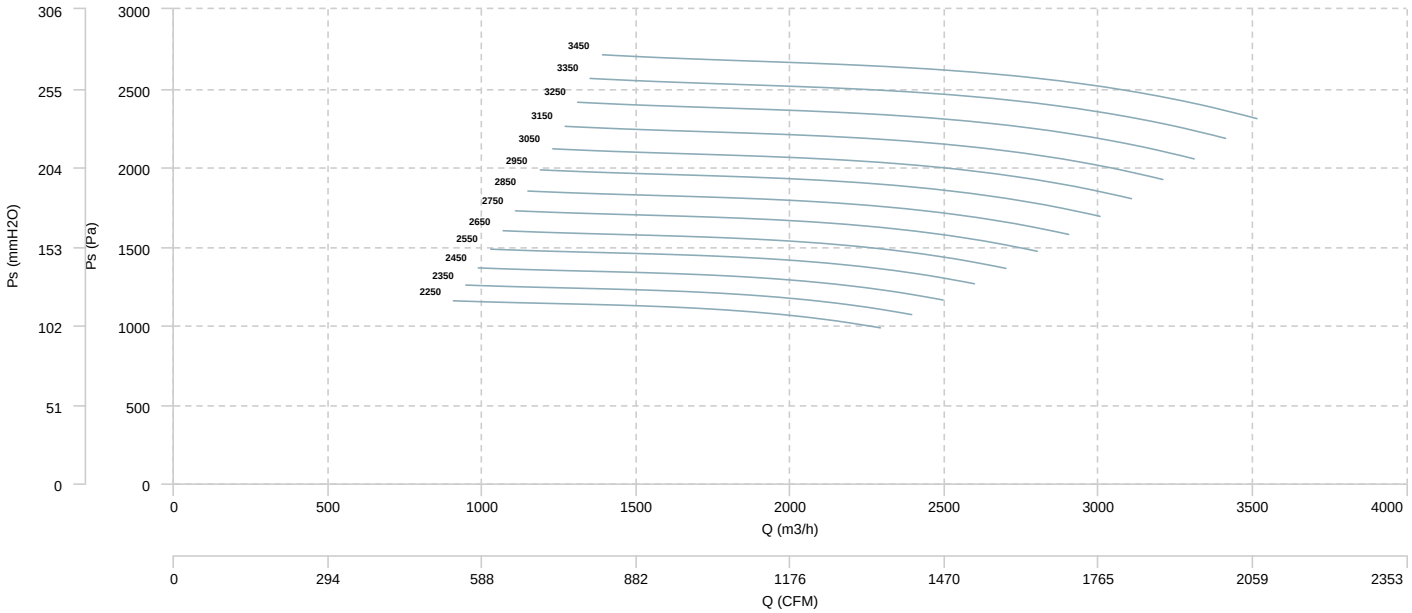


AIR FLOW - MECHANICAL POWER

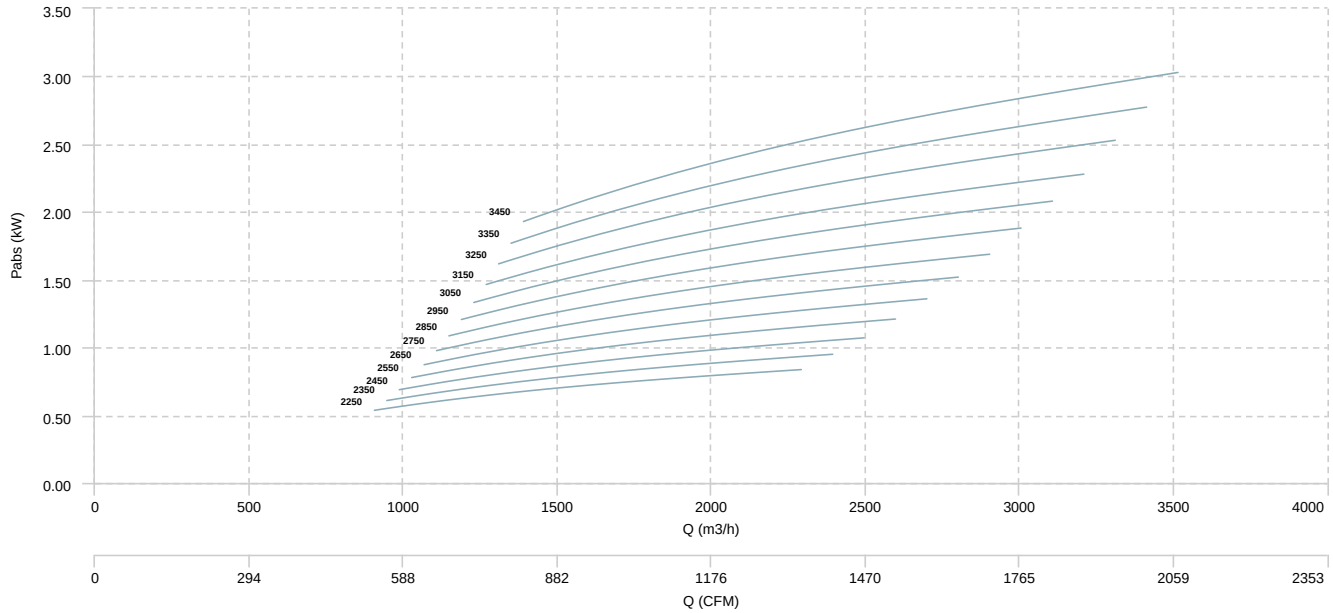


MTRU 350

AIR FLOW - PRESSURE

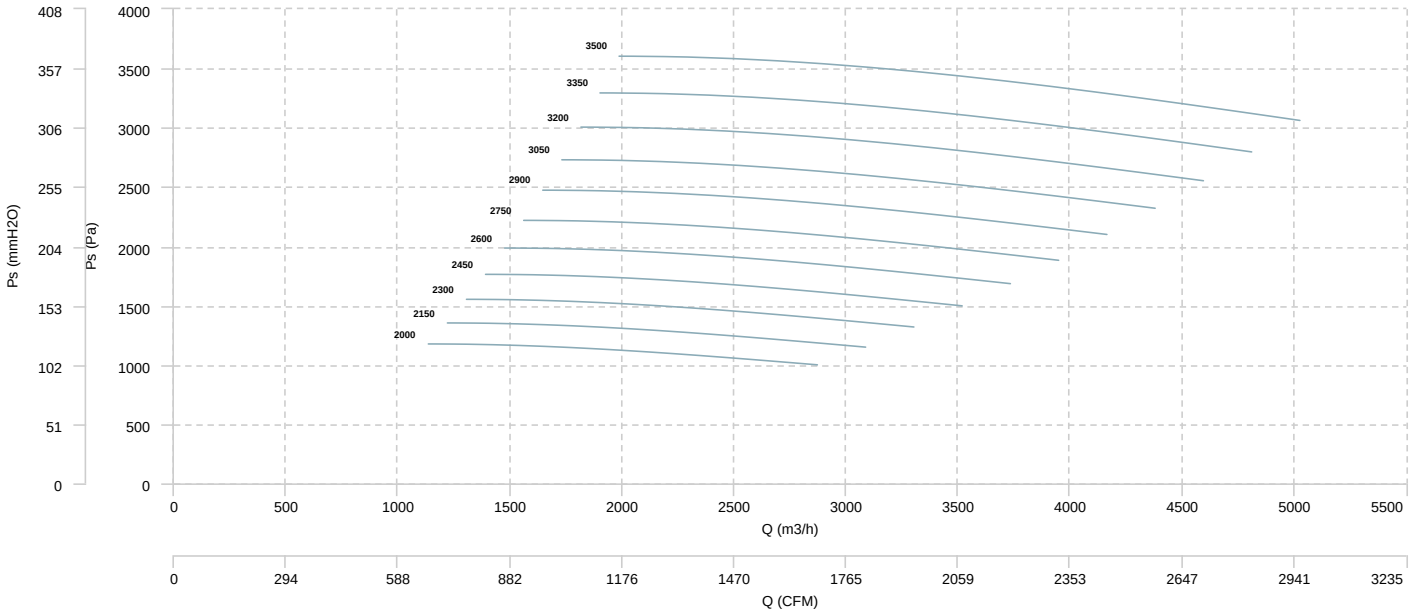


AIR FLOW - MECHANICAL POWER

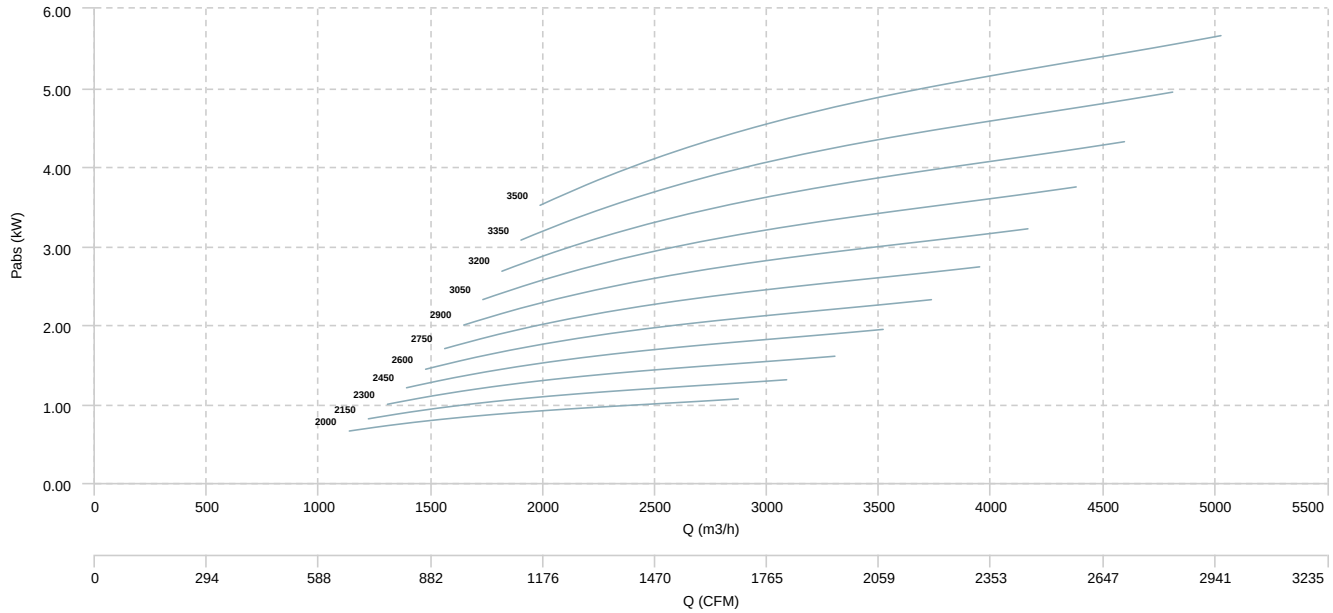


MTRU 400

AIR FLOW - PRESSURE

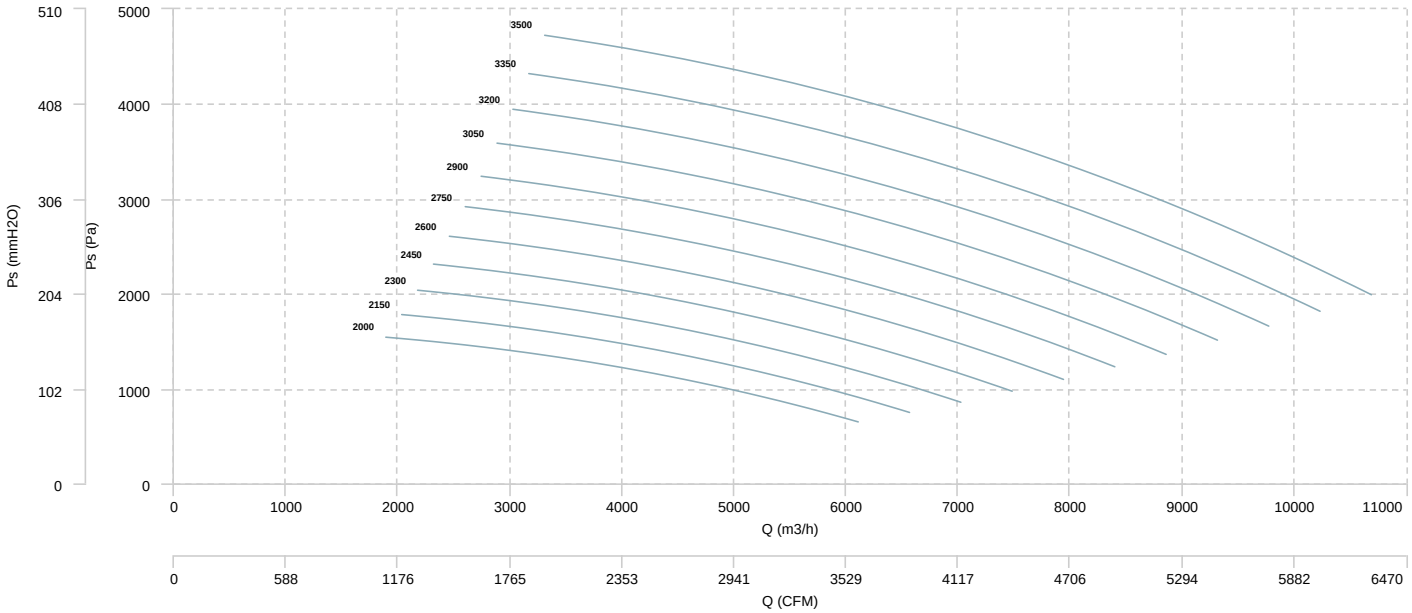


AIR FLOW - MECHANICAL POWER

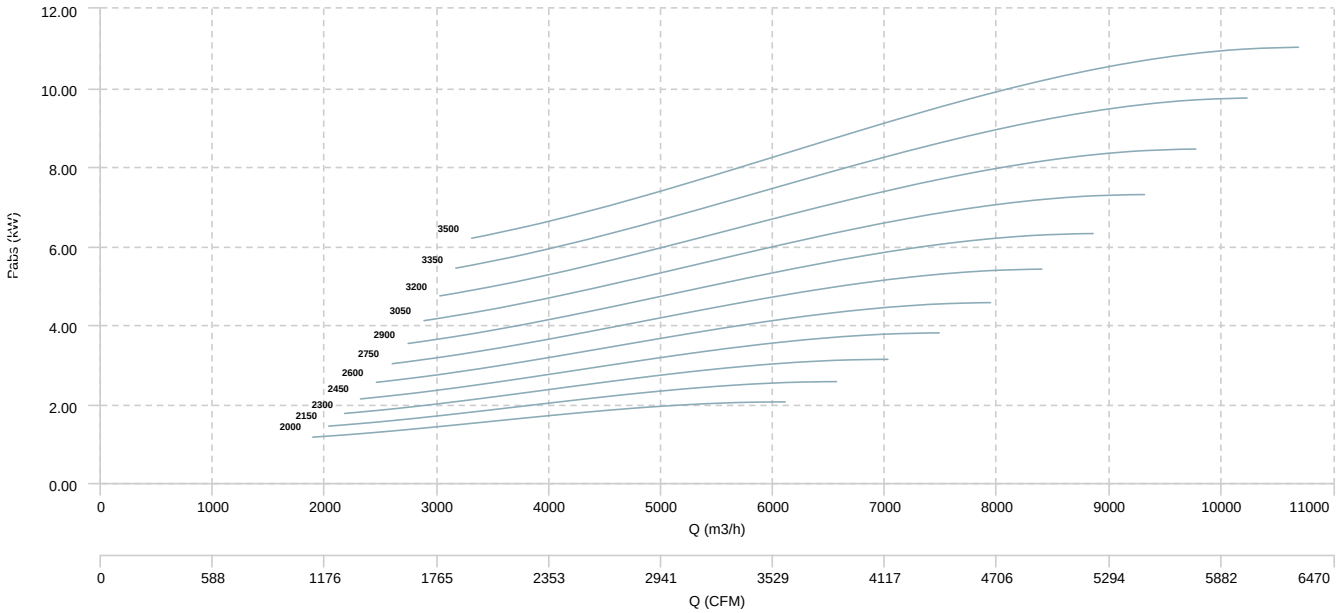


MTRU 450

AIR FLOW - PRESSURE

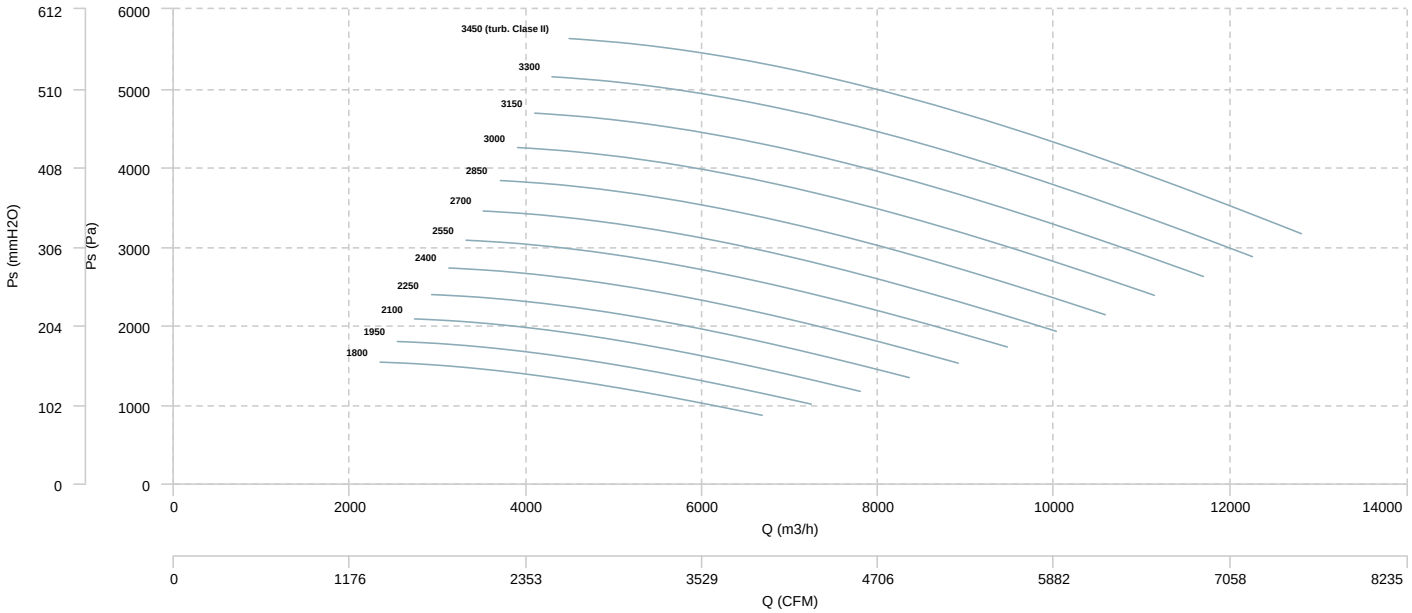


AIR FLOW - MECHANICAL POWER

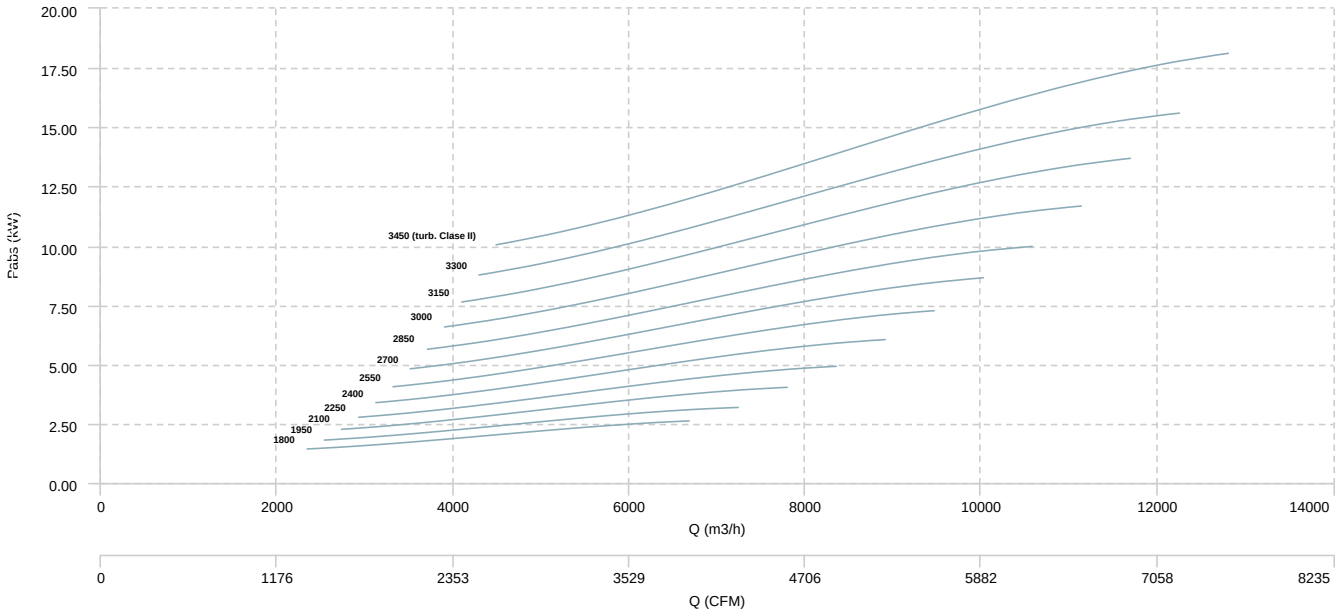


MTRU 500

AIR FLOW - PRESSURE

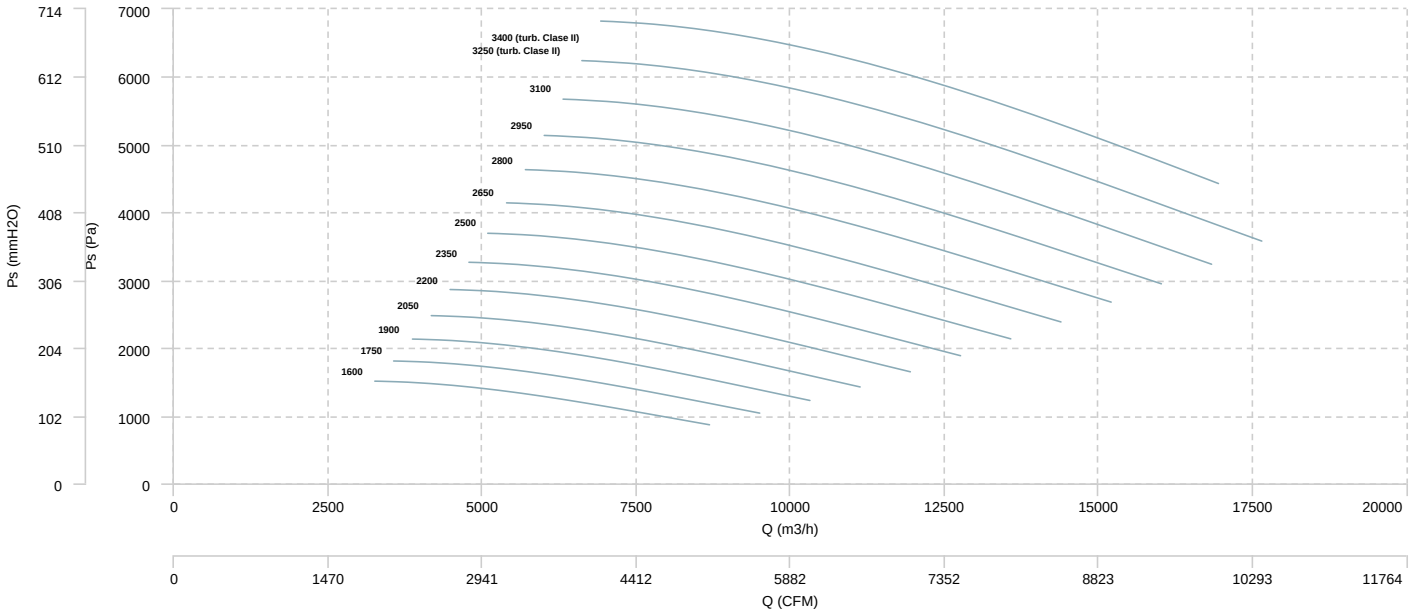


AIR FLOW - MECHANICAL POWER

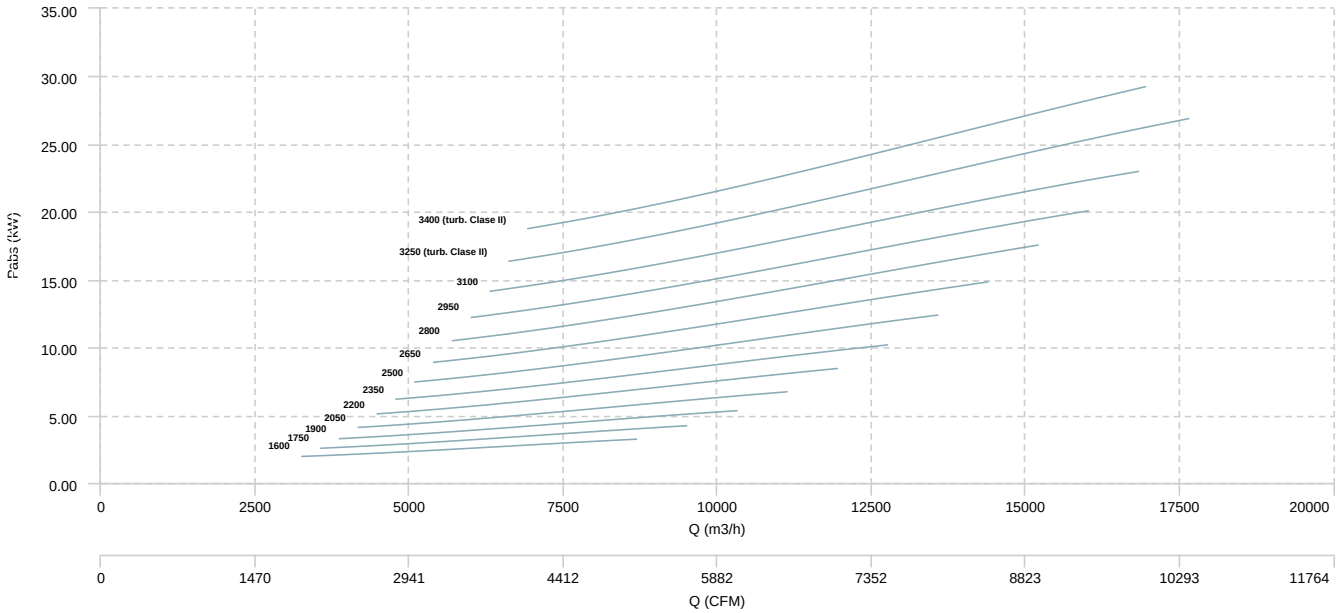


MTRU 560

AIR FLOW - PRESSURE

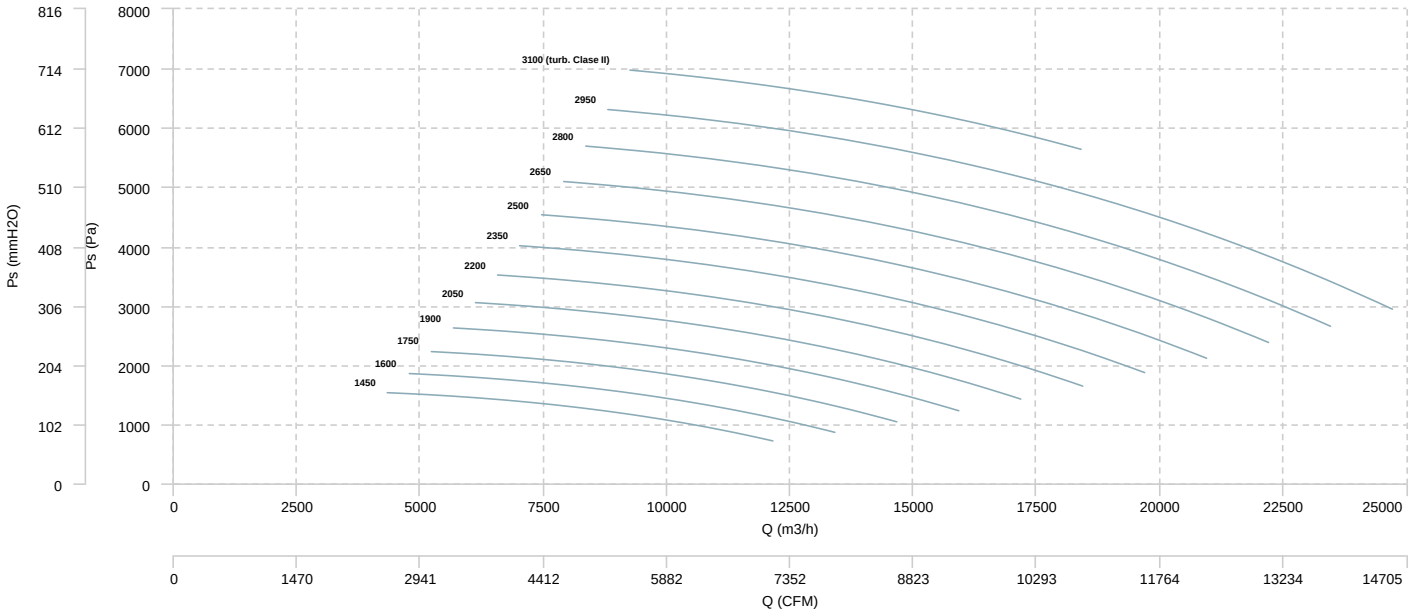


AIR FLOW - MECHANICAL POWER

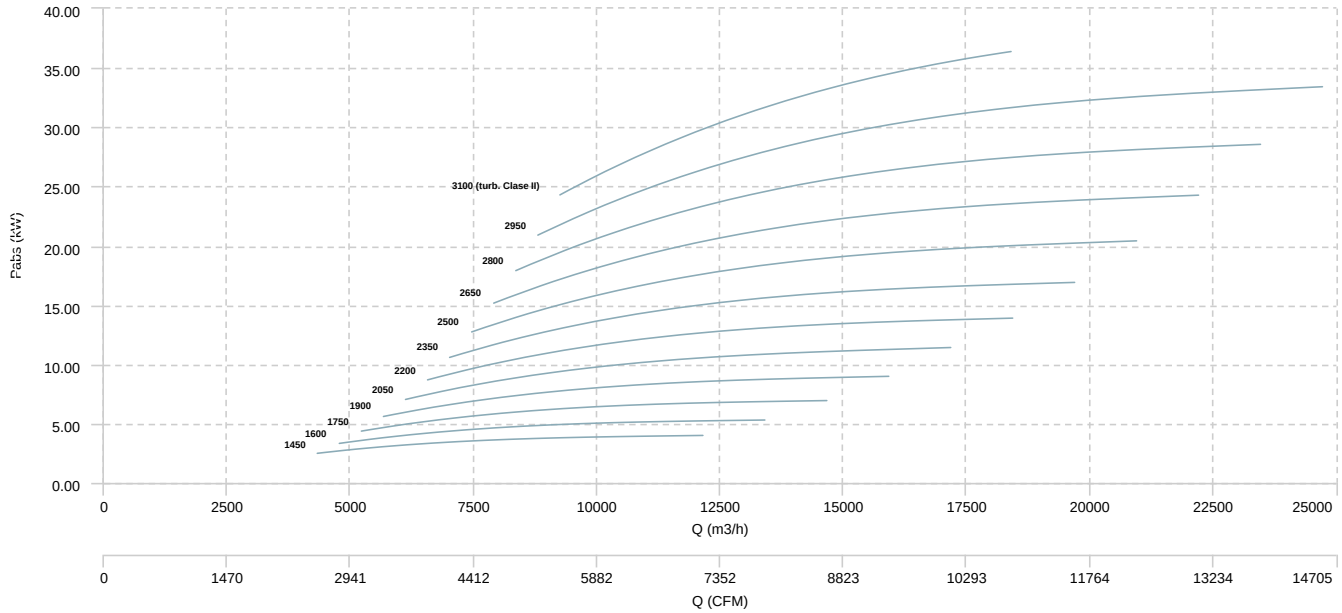


MTRU 630

AIR FLOW - PRESSURE

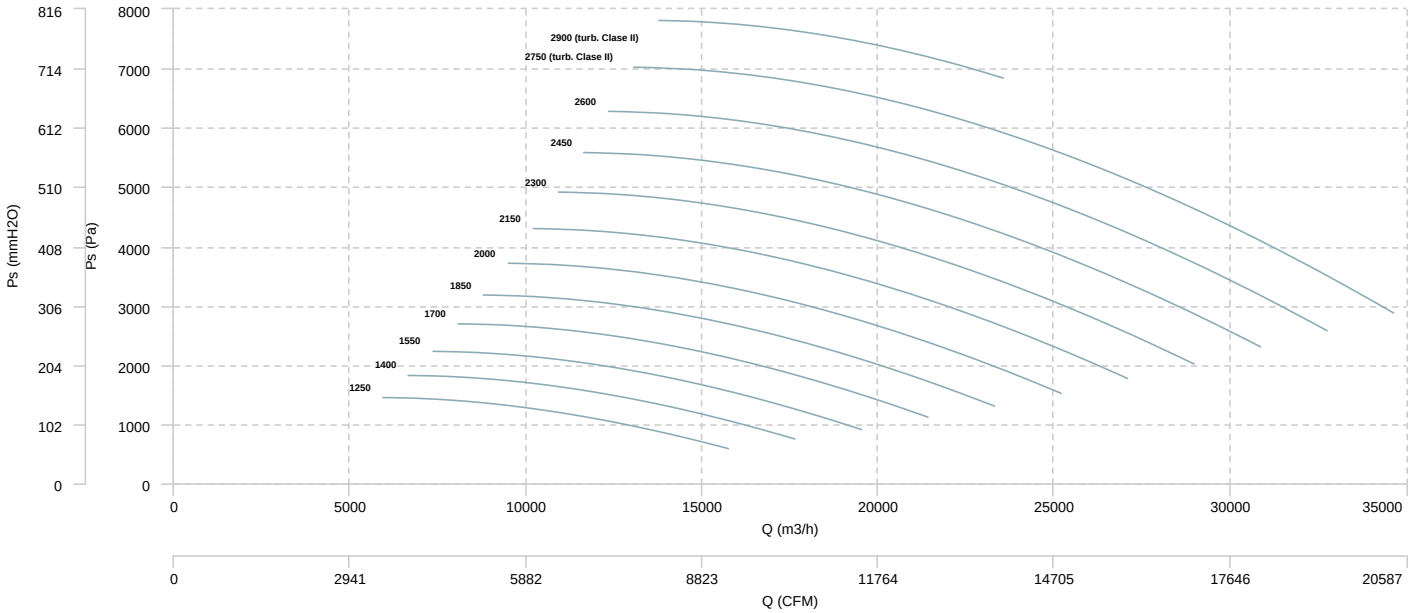


AIR FLOW - MECHANICAL POWER

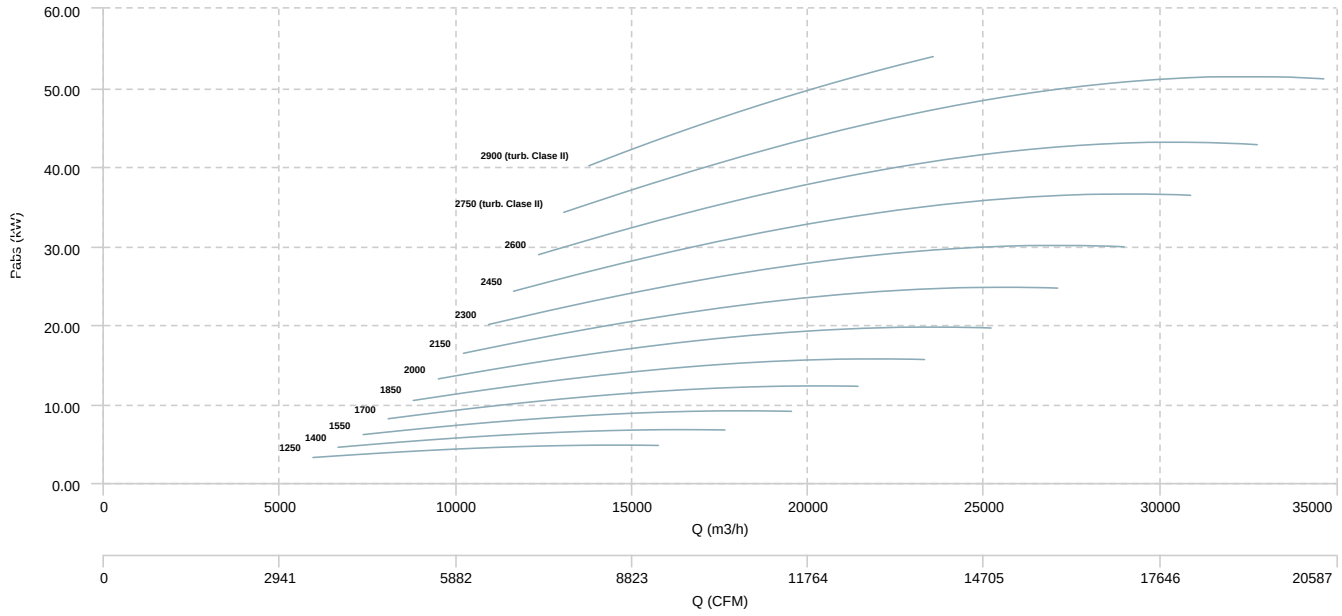


MTRU 710

AIR FLOW - PRESSURE

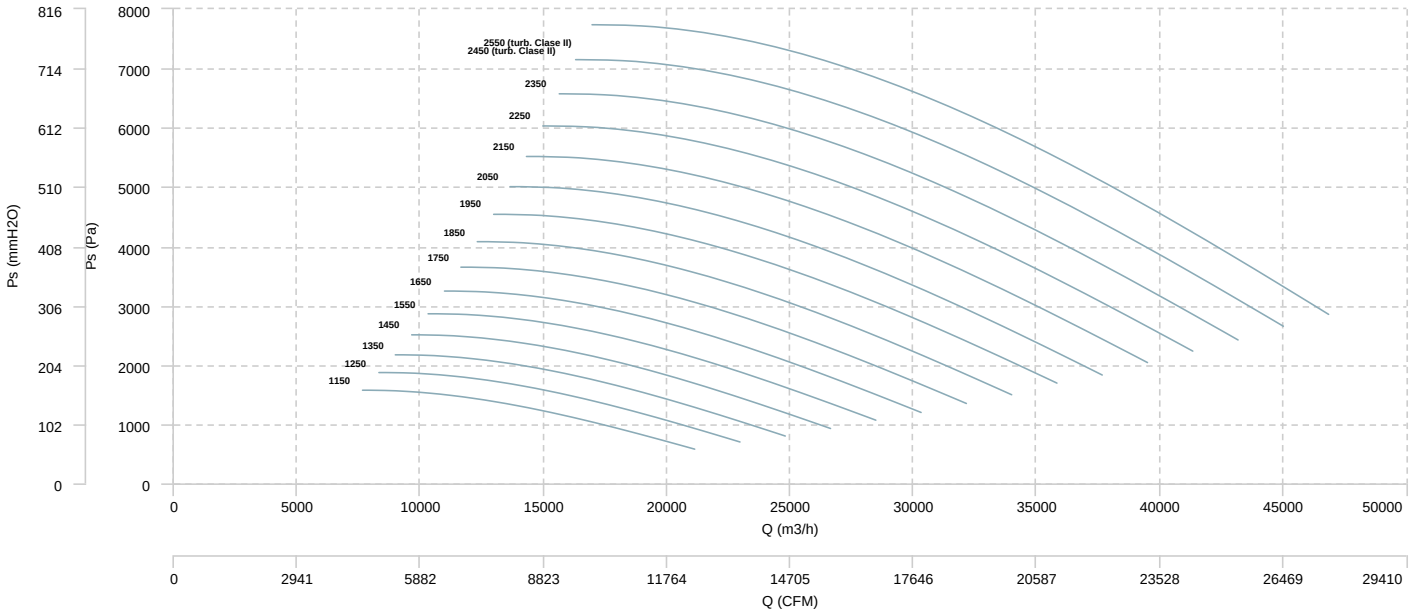


AIR FLOW - MECHANICAL POWER

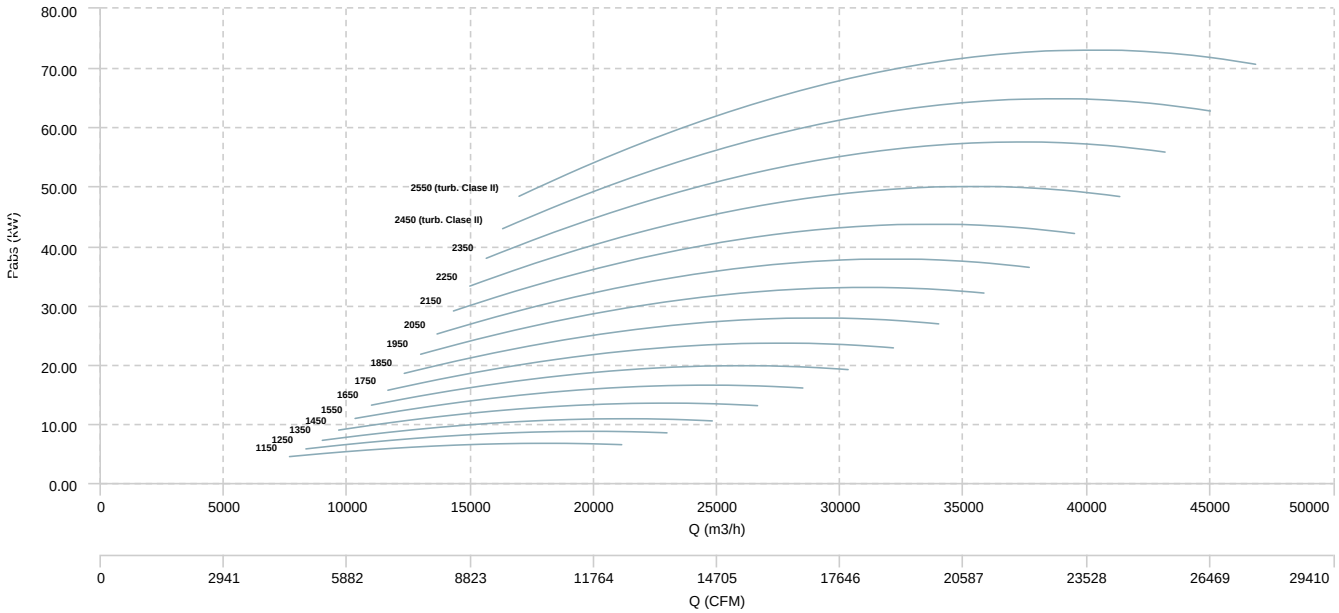


MTRU 800

AIR FLOW - PRESSURE

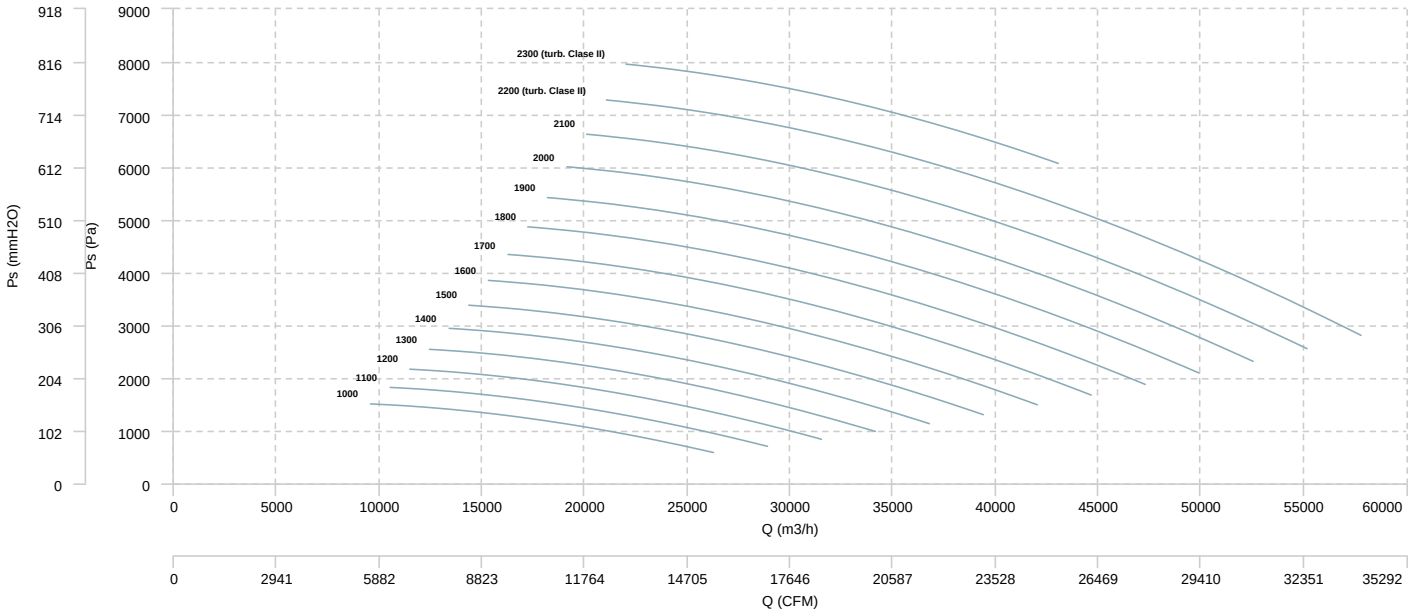


AIR FLOW - MECHANICAL POWER

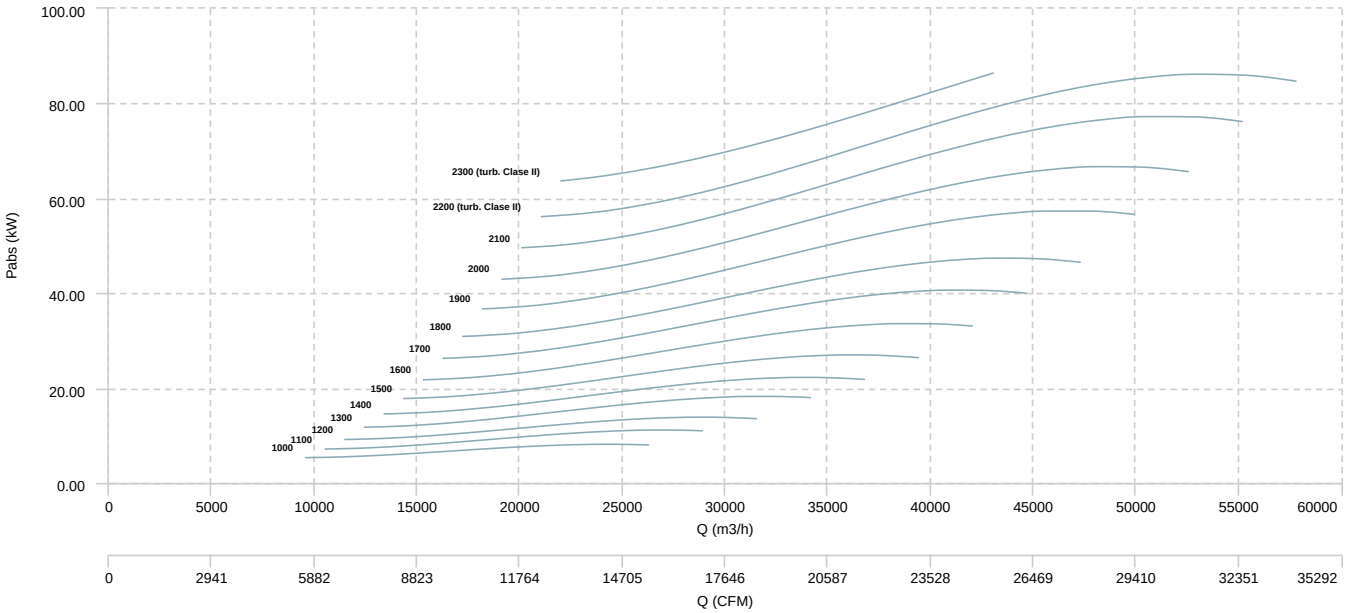


MTRU 900

AIR FLOW - PRESSURE

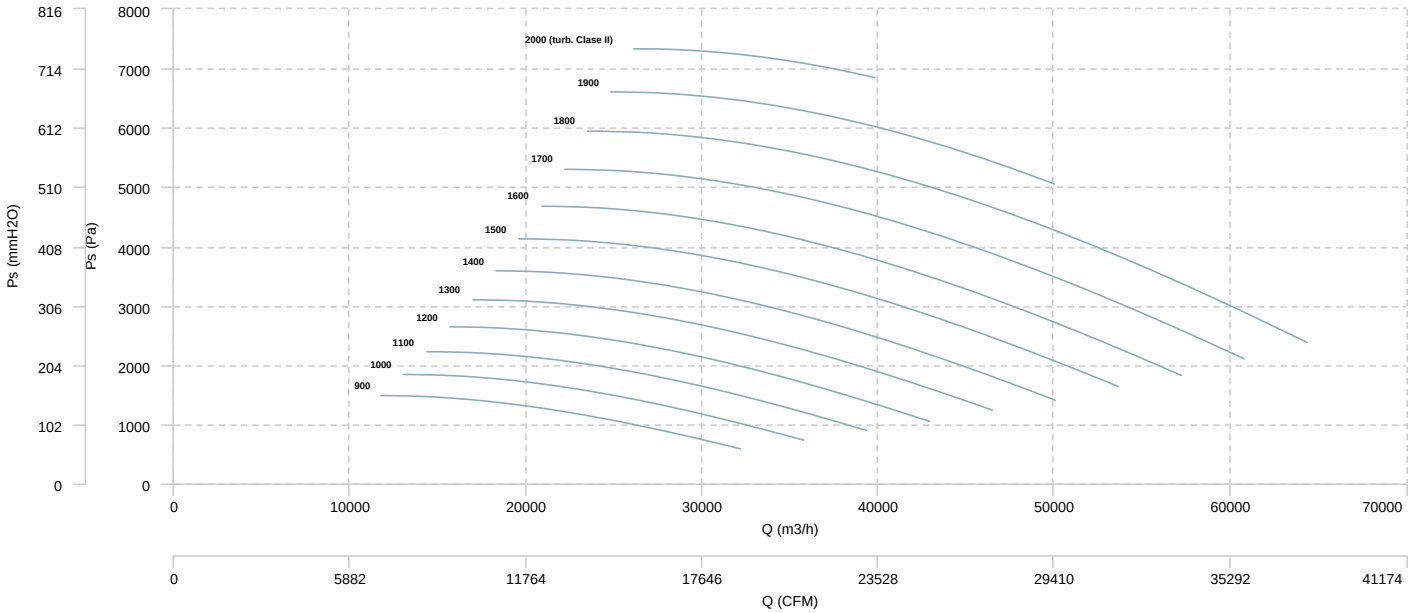


AIR FLOW - MECHANICAL POWER

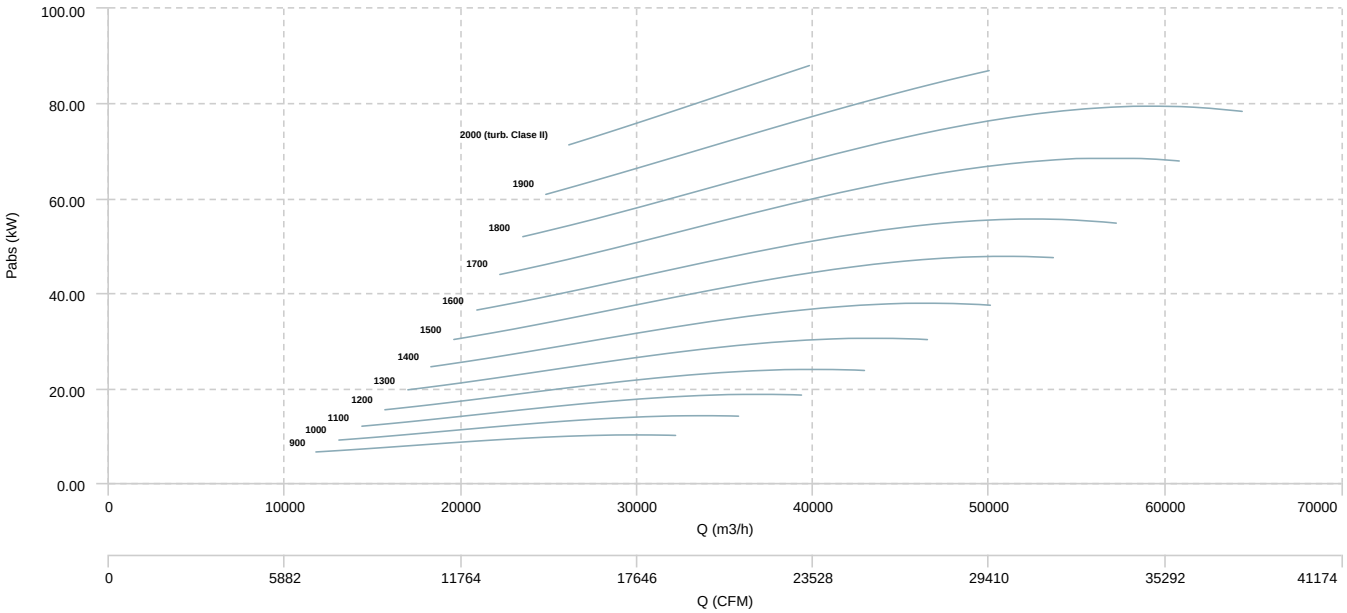


MTRU 1000

AIR FLOW - PRESSURE

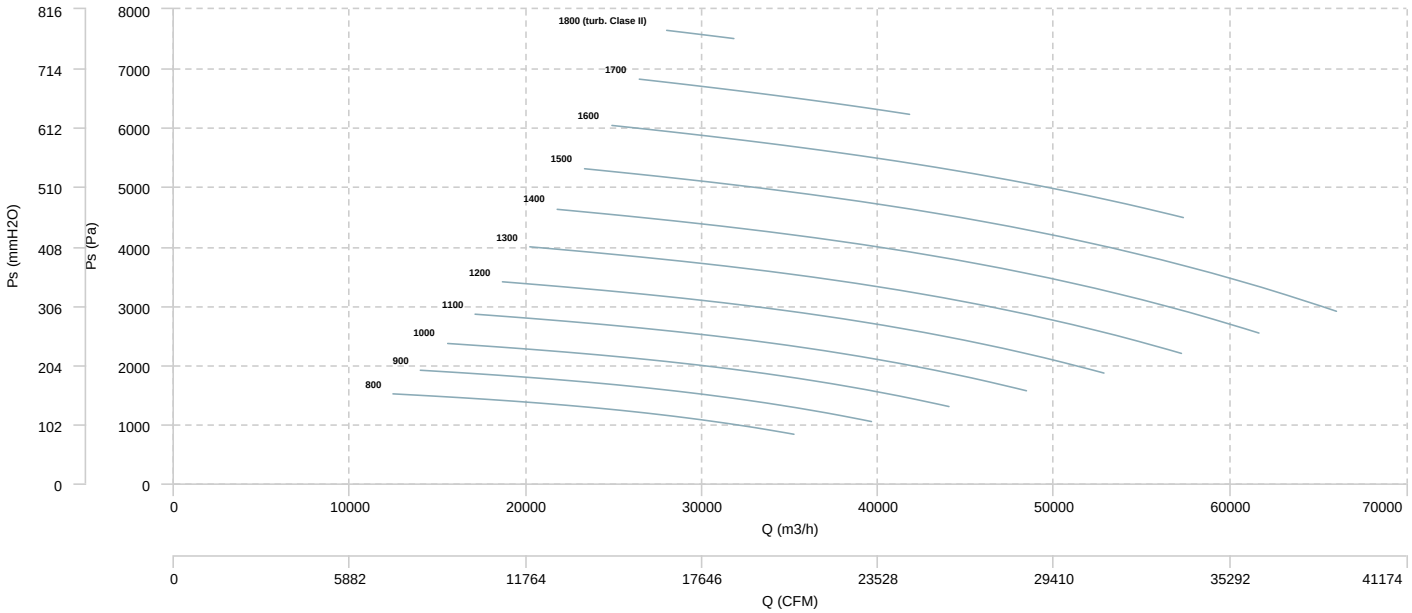


AIR FLOW - MECHANICAL POWER

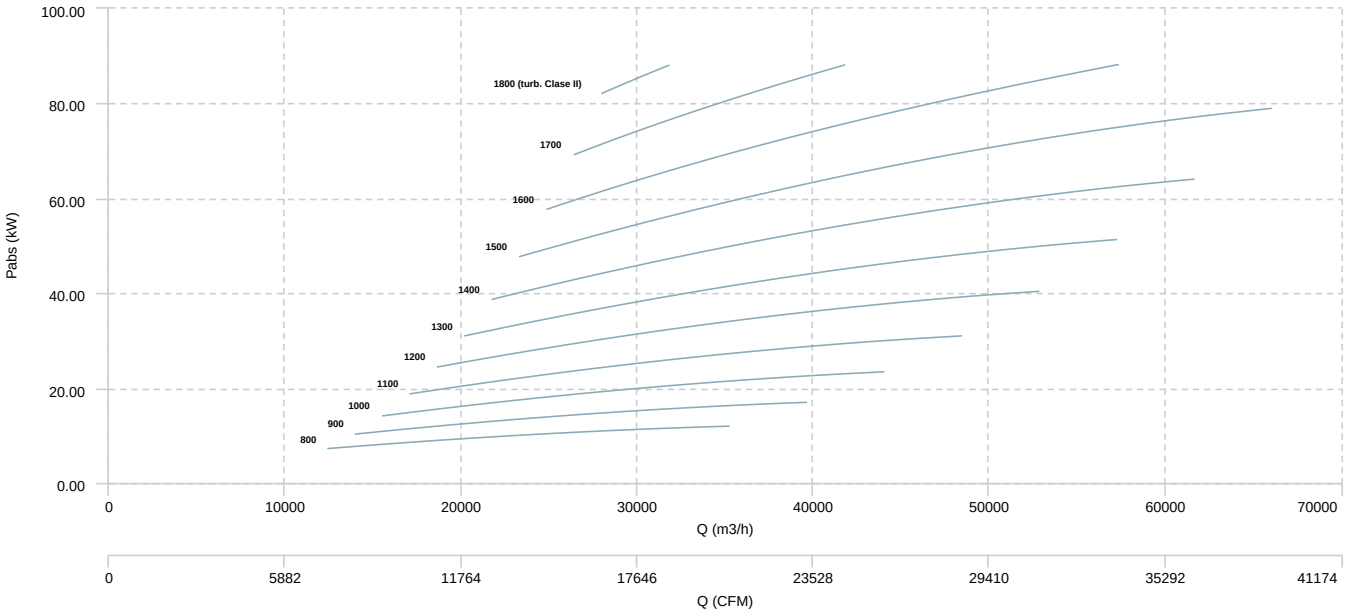


MTRU 1120

AIR FLOW - PRESSURE

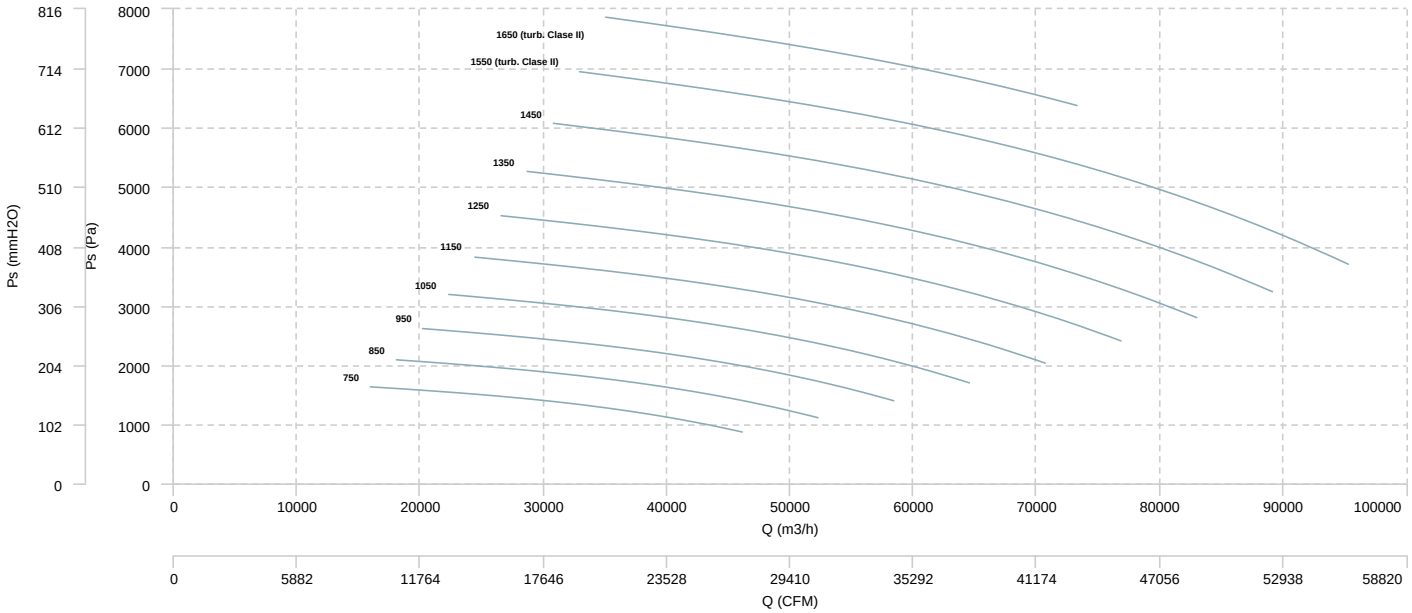


AIR FLOW - MECHANICAL POWER

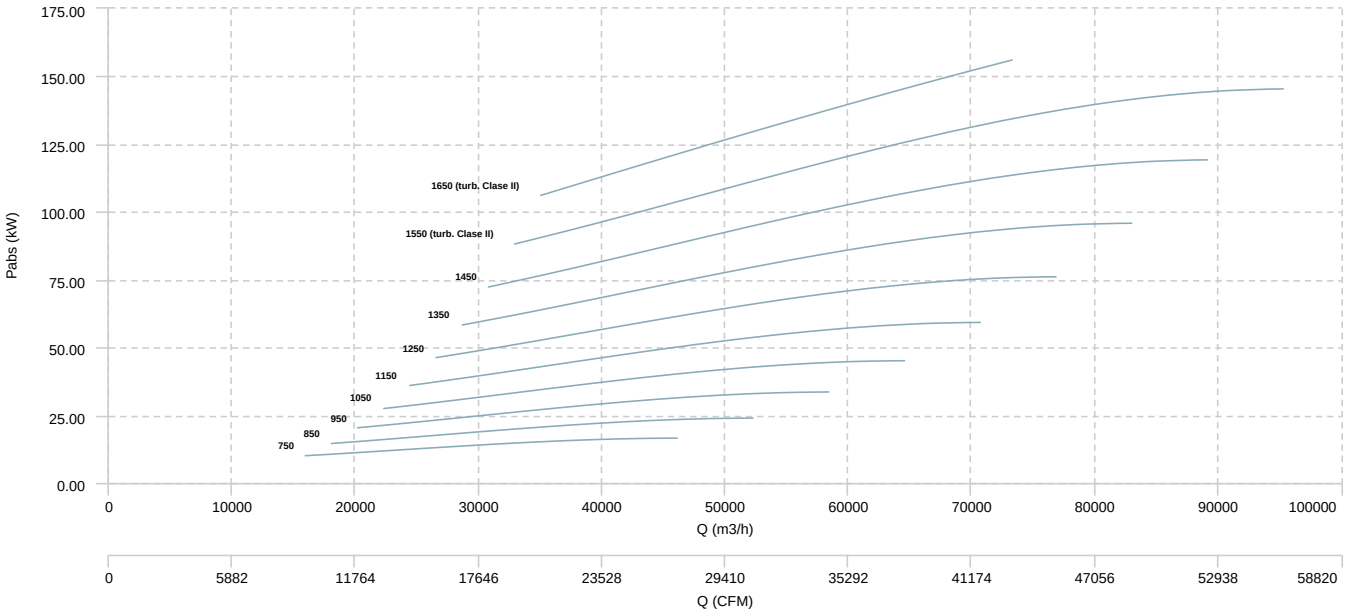


MTRU 1250

AIR FLOW - PRESSURE

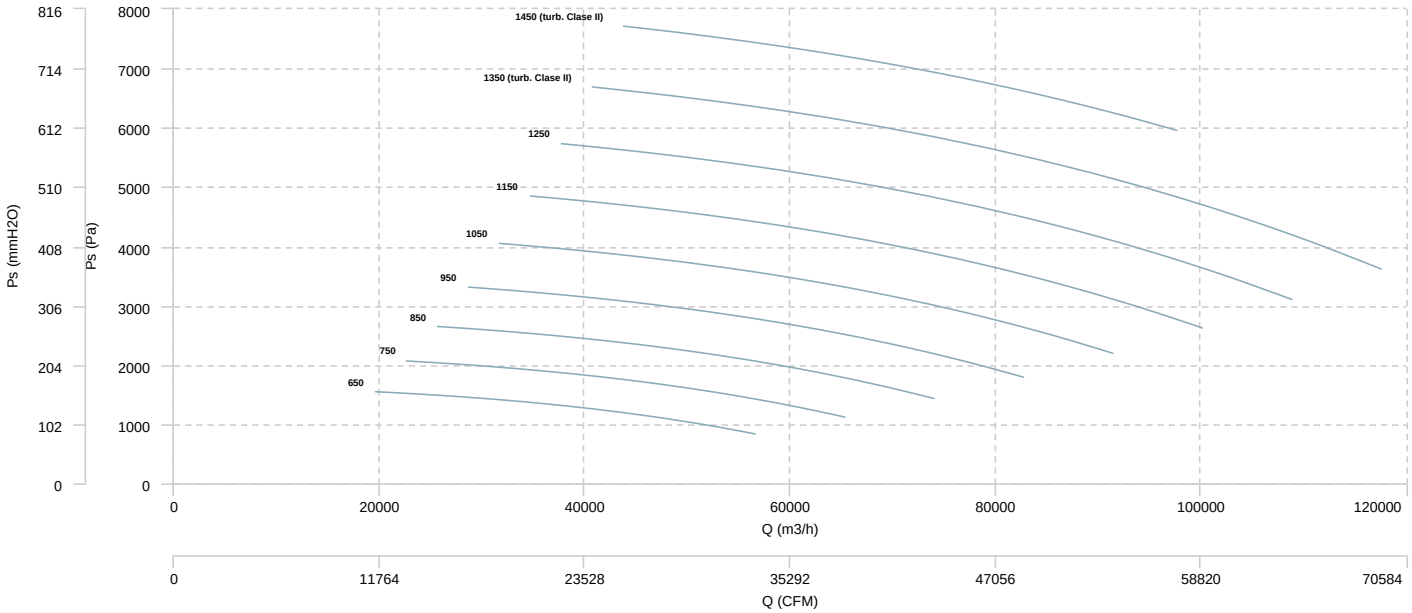


AIR FLOW - MECHANICAL POWER

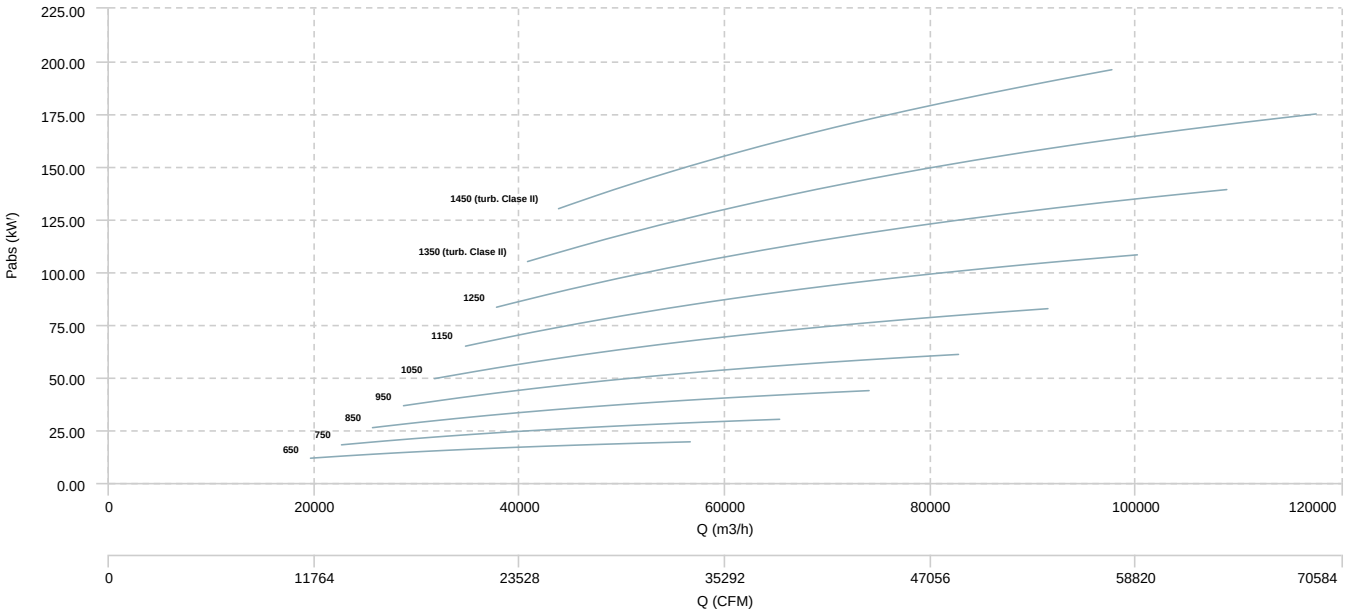


MTRU 1400

AIR FLOW - PRESSURE

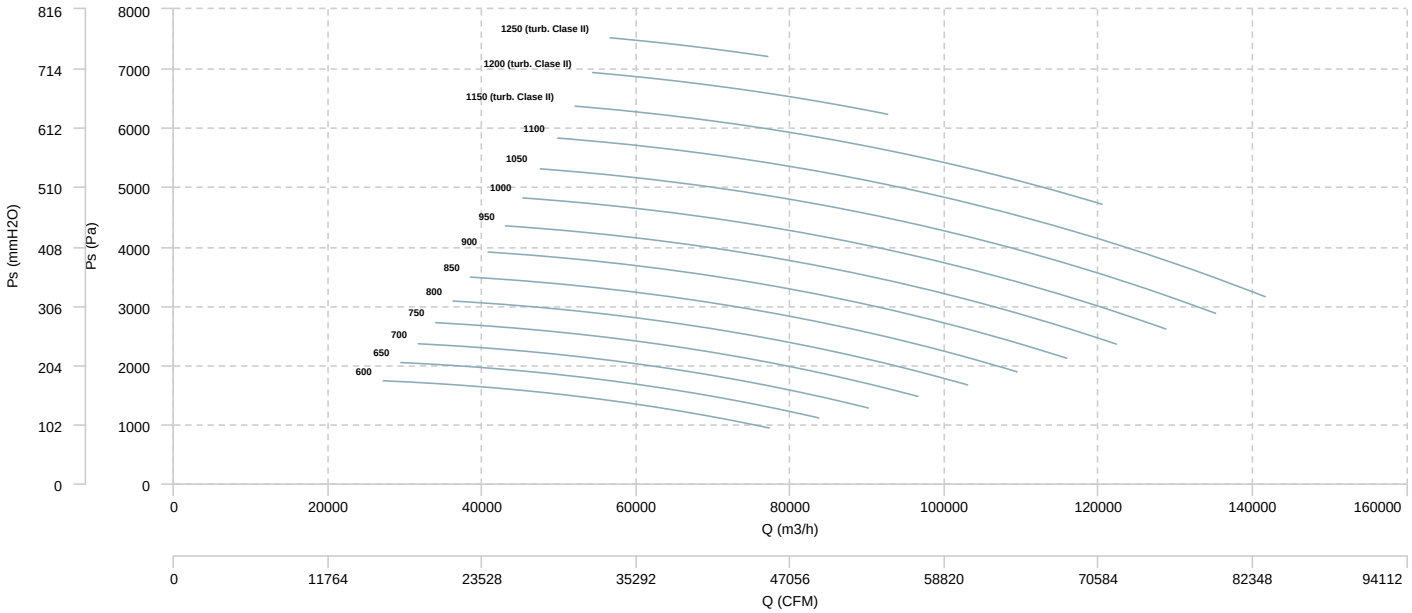


AIR FLOW - MECHANICAL POWER

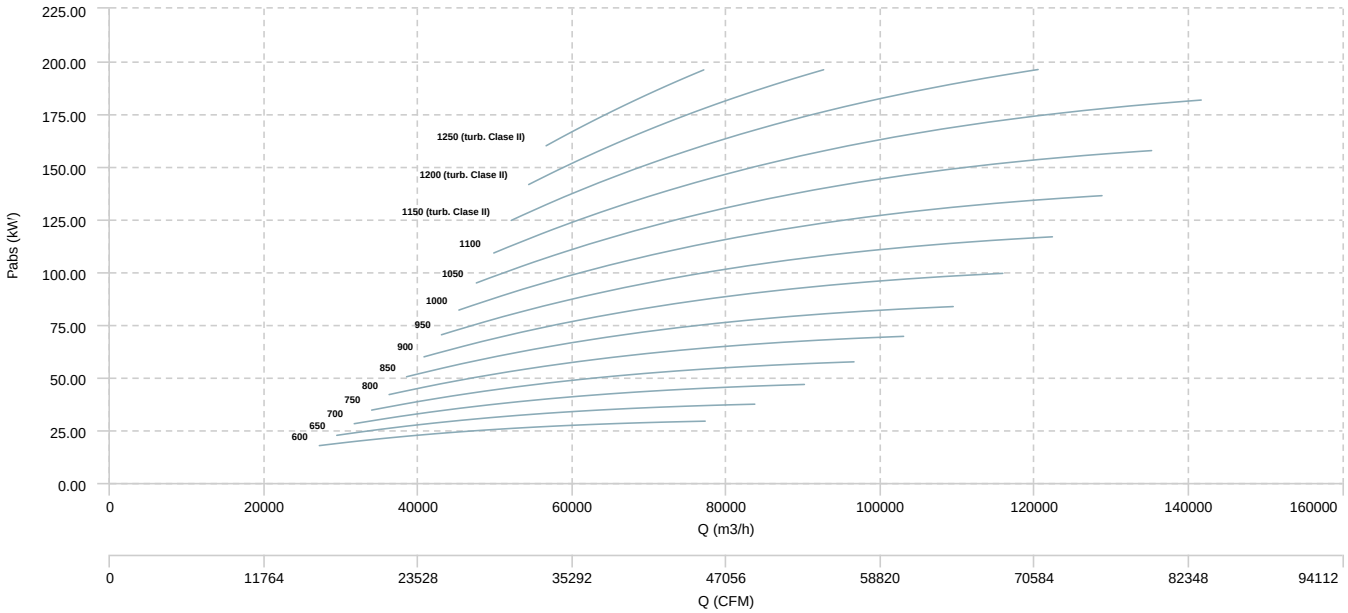


MTRU 1600

AIR FLOW - PRESSURE

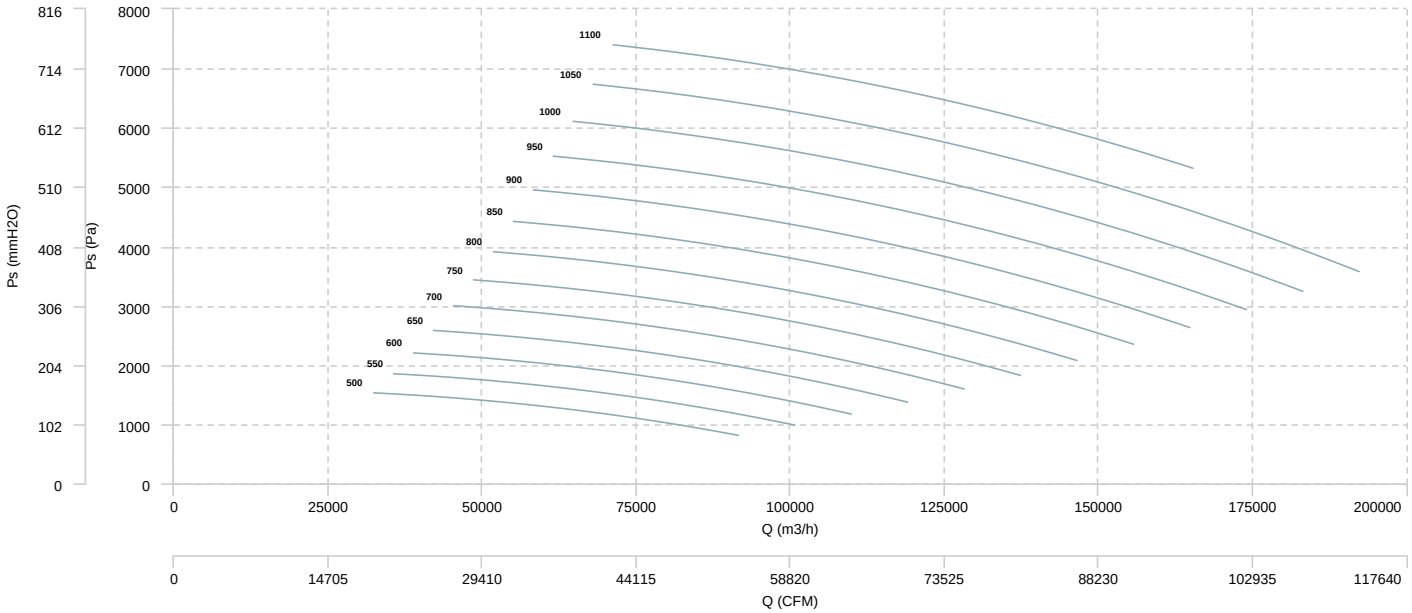


AIR FLOW - MECHANICAL POWER

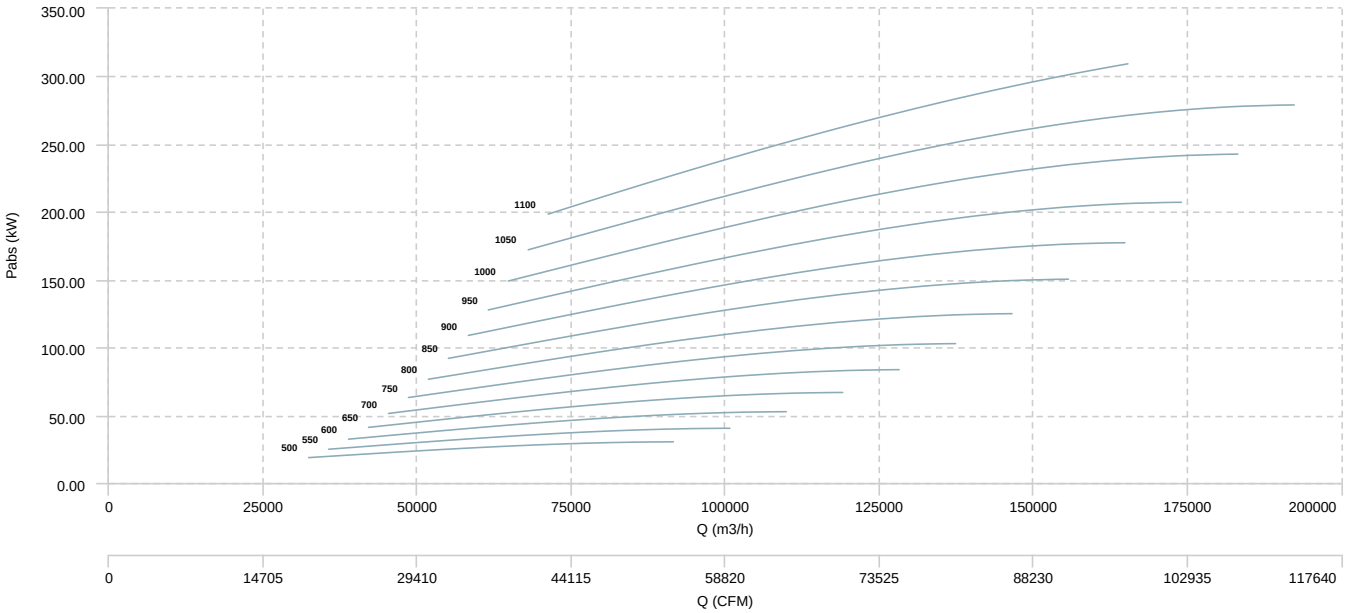


MTRU 1800

AIR FLOW - PRESSURE

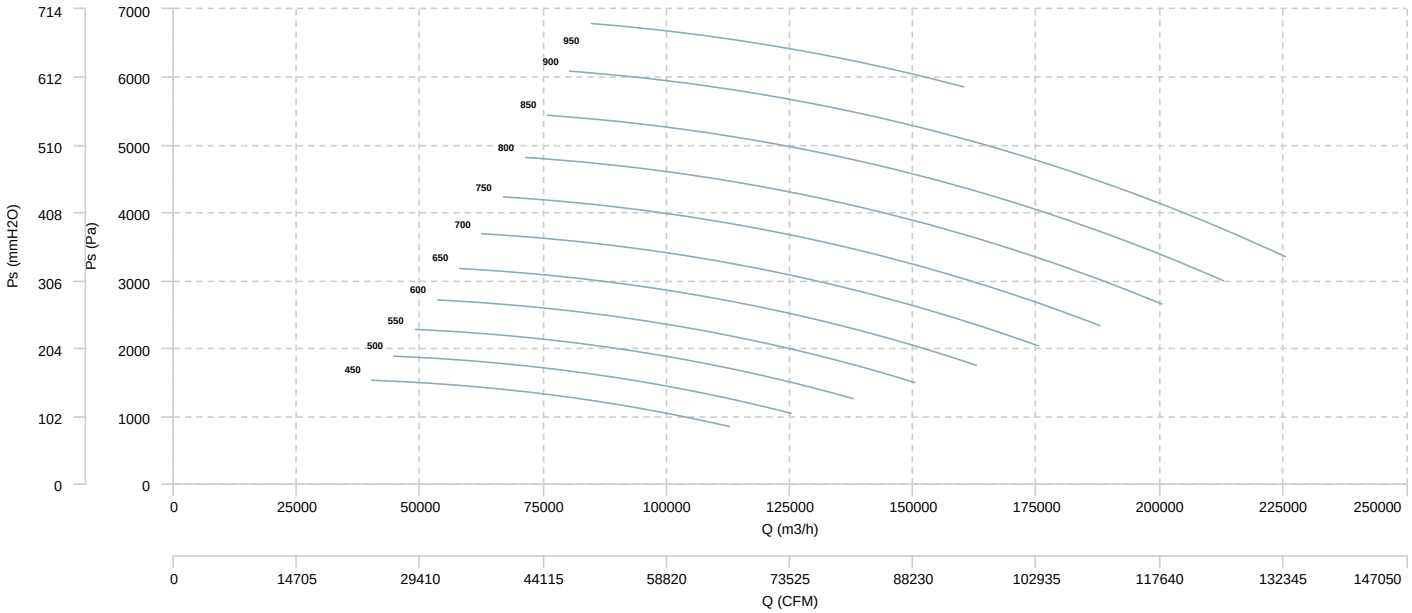


AIR FLOW - MECHANICAL POWER

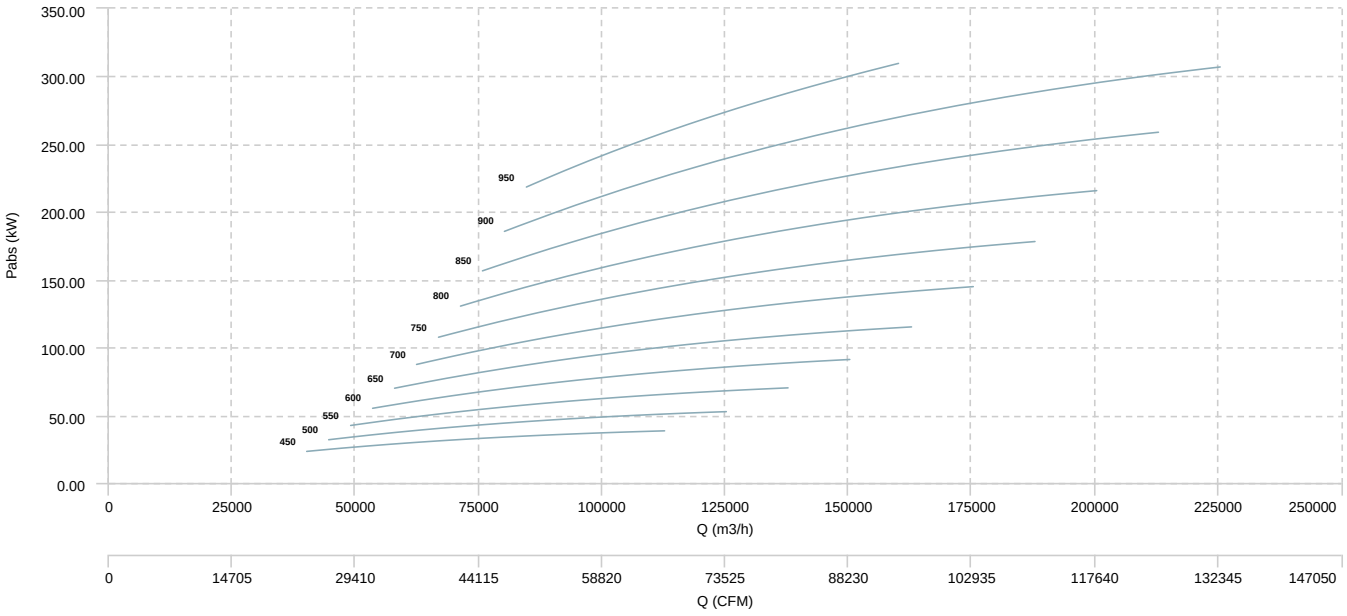


MTRU 2000

AIR FLOW - PRESSURE



AIR FLOW - MECHANICAL POWER



Sound data

Sound power Lw dB (A)										
Model		**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1000 Hz**	**2000 Hz**	**4000 Hz**	**8000 Hz**	**Total**
MTRU 250 (2500 RPM)	Inlet	44	56	62	66	67	63	56	53	72
MTRU 280 (2500 RPM)	Inlet	47	59	65	69	70	66	59	56	74
MTRU 310 (2250 RPM)	Inlet	45	57	64	68	69	64	58	55	73
MTRU 350 (2250 RPM)	Inlet	48	60	66	70	71	67	60	57	75
MTRU 400 (2000 RPM)	Inlet	48	60	66	70	71	67	60	57	75
MTRU 450 (2000 RPM)	Inlet	56	68	74	79	79	75	68	65	84
MTRU 500 (1800 RPM)	Inlet	55	67	73	77	78	74	67	64	82
MTRU 560 (1600 RPM)	Inlet	54	66	72	76	77	72	66	63	81
MTRU 630 (1450 RPM)	Inlet	56	68	75	79	80	75	69	66	84
MTRU 710 (1250 RPM)	Inlet	52	64	70	75	75	71	64	61	80
MTRU 800 (1150 RPM)	Inlet	56	68	74	78	79	75	68	65	83
MTRU 900 (1000 RPM)	Inlet	56	68	75	79	80	75	69	66	84
MTRU 1000 (900 RPM)	Inlet	55	67	74	78	79	74	67	64	83
MTRU 1120 (800 RPM)	Inlet	57	69	76	80	81	76	69	63	85
MTRU 1250 (750 RPM)	Inlet	57	69	75	79	80	75	69	66	84
MTRU 1400 (650 RPM)	Inlet	58	70	77	81	82	77	70	67	86
MTRU 1600 (600 RPM)	Inlet	60	72	79	83	84	79	72	69	88
MTRU 1800 (500 RPM)	Inlet	59	71	78	82	83	78	72	69	87
MTRU 2000 (450 RPM)	Inlet	59	71	78	82	83	78	72	69	87

Notes:

* To calculate the sound power level at different rpm from those indicated above, use the following formula:

$$\text{Lw dB(A)}_{\text{rpmA}} = \text{Lw dB(A)}_{\text{rpmB}} + 52.5 \cdot \log_{10} \frac{\text{rpmA}}{\text{rpmB}}$$