



**TRUNDEAN**  
MACHINERY



Minimal Vibration and Lowest Noise

**Roots Blower**

**ISO 9001**



TRUNDEAN MACHINERY INDUSTRIAL CO., LTD.

# Professional Manufacturer of Roots Blower



TH Type  
Roots Blower



THD Type  
Direct Drive Roots Blower



THV Type  
Roots Vacuum Blower



TV Type  
Vertical Roots Blower



TSW Type  
Submersible Roots Blower



THL Type  
Two Section Roots Blower



THVE Type (European Style)  
Roots Vacuum Blower



TS Type  
Ring Blower



THW Type  
Water-Cooled Roots Blower



THS Type  
Partial Water-Cooled Roots Blower



TMD Type  
Magnetic Drive Pump



Diffusers  
Tubes

# Trundean Overview

## Introduction / Operating Principles

Trundean Machinery Industrial Co., Ltd. was founded in 1982. We insist on seeking high-quality talented acquisition of overseas new concepts, to set up a business reputation of excellence and perfection. Trundean Machinery Industrial Co., Ltd. has intensified our spirit and attitude in our quest for perpetual betterment, to seek sustained research and improvement, to persist in aggressively adhering to the policy of "customer first, quality first, service first" to ensure customers with quality after-sale services.

In the past years, with the upgrading of domestic industrial standards, and in view of the imperativeness to enhance market competitiveness, we have passed ISO 9001 in 2002, and passed CE certification in 2005. In this competitive market, we have been seeking product stability, standardized production processes, and continued to renew installation of production equipment and inspection equipment, so that our products are not inferior to those in advanced countries. And we have actively invested in research and development and made improvement on all our products, including Roots Blower, Vertical Blower, Submersible Blower, and Magnetic Drive Pump.

Besides developing the Taiwanese market, Trundean Machinery Industrial Co., Ltd. has actively developed overseas markets, and produced the "TRUNDEAN" brand for sales in overseas markets. Export markets have been extended to more than 60 countries, and our products have been highly recommended by local users. Based on firm and stable quality, Trundean Machinery Industrial Co., Ltd. enthusiastically develops new products and provides sincere and prompt service, providing better service to our customers and establishing excellent cornerstones for our sustainable business operation.

## Patent is to approve our R & D achievement and the glory of leading the industry.



Patent for Roots Blower Series



Patent for THW Type



Patent for TV Type



Patent for TMD Type



Patent for Roots Blower Series



Patent for THW Type



Patent for TV Type



Patent for TMD Type

## Certification is to decide our position in the market and the bridge to the world.



ISO 9001:2000



ISO 9001:2000



CE for Roots Blower Series



CE for TMD Series



ISO 14001:2004

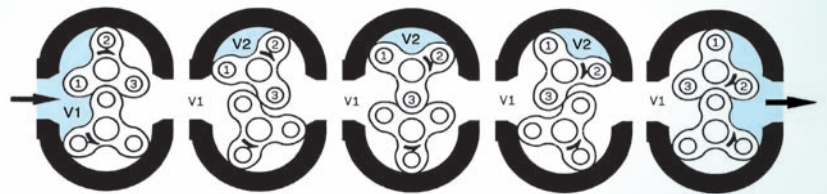


ISO 9001:2008

## Features of TRUNDEAN Roots Blower :

1. The air compartment and the side cover of our blower has a flange and groove rim, which can not only strengthen the blower's operational functions but also prevent eccentric phenomenal resulting from the fastening of the stud, which may shorten the life of the blower.
2. To reduce man-made errors, enhance the precision of the leave wheel, and to higher the blower efficiency, our rotor uses the most advanced one time work process Four-Shaft method.
3. Appropriate clearance between the rotors and the rotors with the casing ensure no direct operational contact, hence no lubrication is necessary. The synchronous gear drive system and the shaft bearings are the only parts which require lubrication. Separate lateral chambers are designed to house these moving parts with proper seals to prevent oil leakage to the main chamber.
4. Computerized CNC machines are used to produce components and parts of high quality and precision also saves the user both time and labor during maintenance and replacement.
5. Low Noise & Minimal Vibration: Noise and vibration reduction are the main emphasis in developing the new series of roots blower. The TRUNDEAN Blower rotor concept was adopted based on its flow characteristics which are very stable and even compared to the 2 lobes type, also coupled with the fact that it shows a considerable reduction of both noise and vibration. The ext ent of reduction can even allow the smaller unit to operate without the need of a silencer.

## Principle of Blower Operation :



There are two rotors in the compartment of the blower body, when the rotors operate in opposite direction, they suck air in to balance the pressure created due to the volume V1 change on the inlet side. And the air of the volume V2 will be sent out thru the discharge side and the high pressure will be created thru the discharge.

There is no need to supply any lubrication between two rotors because of the existing clearance between them which gives no worry about the possibility of friction. The blower runs well at high speed and produces clean air, it is also applied to vacuum purpose.

## Usage of Performance Table :

The performance table shows relationships among blower type, bore, rpm., discharge pressure, theoretical air capacity and shaft power.

1. The air volume shown in the performance table represents a suction volume under standard suction condition (temp. 20 °C, absolute pressure 1.0332 kg/cm<sup>2</sup>, relative humidity 65%).
2. In case an air flow under the normal condition (0 °C 1.0332 1.0332 kg/cm<sup>2</sup> ABS) is equivalent to a suction pressure, it can be converted to an air flow under the standard condition by means of following formula:

$$Q_s = Q_n \times \frac{\gamma_n}{\gamma_s} \quad \gamma = 0.465 \frac{P - 0.378 \phi \times P_s}{273 + t} \quad \phi : \text{Humidity}(\%) \quad P : \text{Pressure}(\text{mmHg})$$

$Q_n$  : Air flow under normal condition Nm<sup>3</sup>/min       $Q_s$  : Air flow under standard condition (indicated in the performance table, m<sup>3</sup>/min)

$\gamma$  : Air ratio weight(kg/m<sup>3</sup>)       $P_s$  : Water vapor saturation pressure of the temperature(mmHg)       $T$  : Absolute Temperature(273+t)°C

3. An air flow under discharge condition can be converted to an air flow under standard condition :

$$Q_s = Q_d \times \frac{1.0332 + P_d}{1.0332} \times \frac{273 + T_s}{273 + T_d} \quad Q_d : \text{Air flow under discharge condition, m}^3/\text{min} \quad T_s : \text{Suction temperature}$$

$$P_d : \text{Discharge pressure, kgf/m}^2 \quad T_d : \text{Discharge temperature}$$

4. Seek blower type, bore, rpm., and shaft power of the performance table based on the air flow and required discharge pressure obtained as a result of the aforementioned results.
5. The selective range is duplicated depending on blower types. However, as a selective criterion, choose blowers of the smaller type from a economical viewpoint and those of the larger type from a viewpoint of noise level.

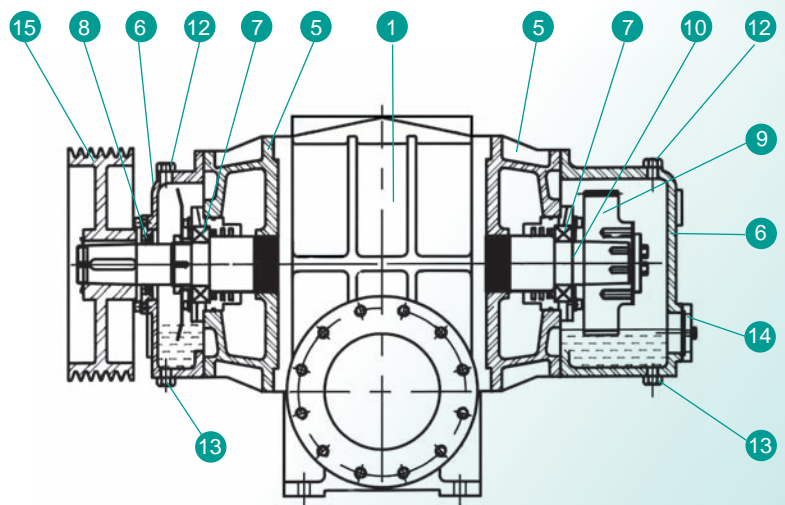
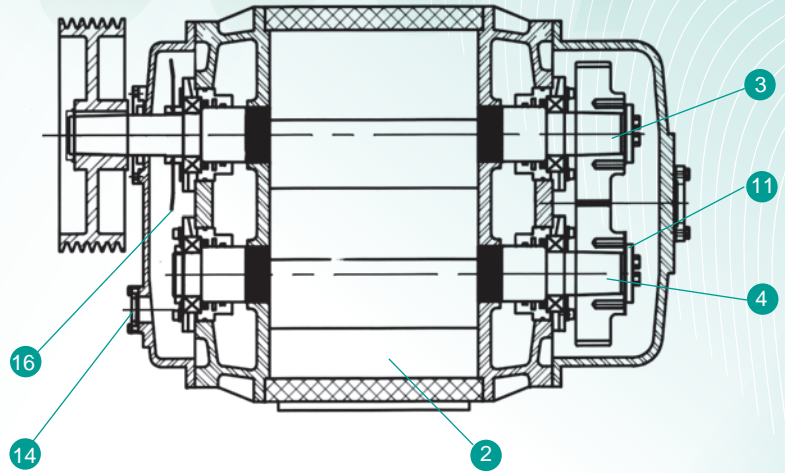
# TH Type Structural Drawing



## TH Type (Pressure Conveyance)

Pressure: 0~6000 mmAq

Power: 1~300 HP



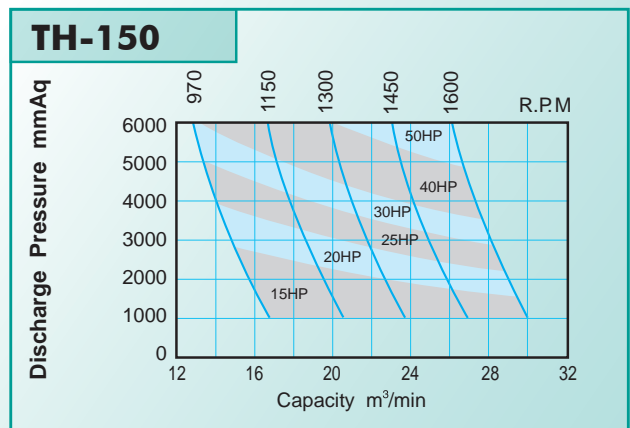
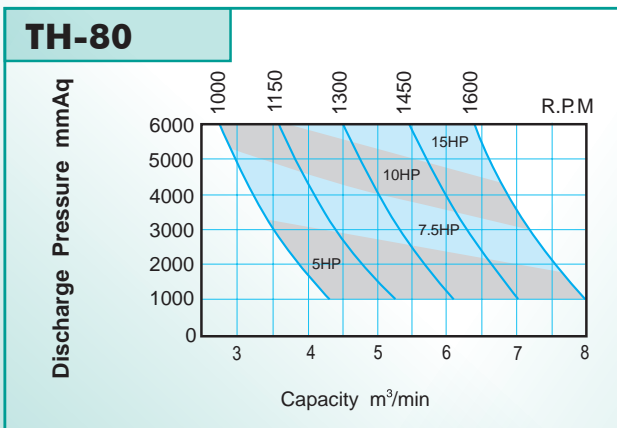
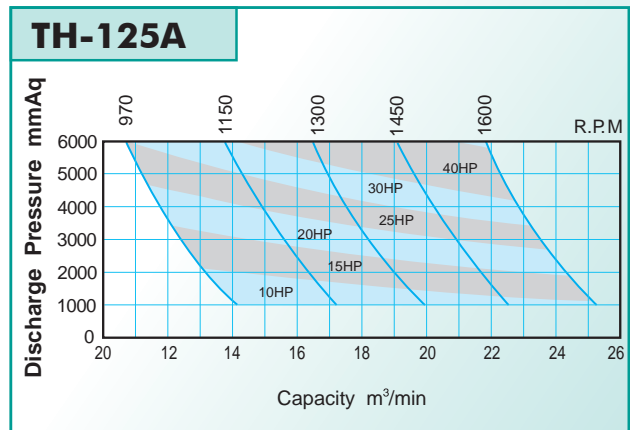
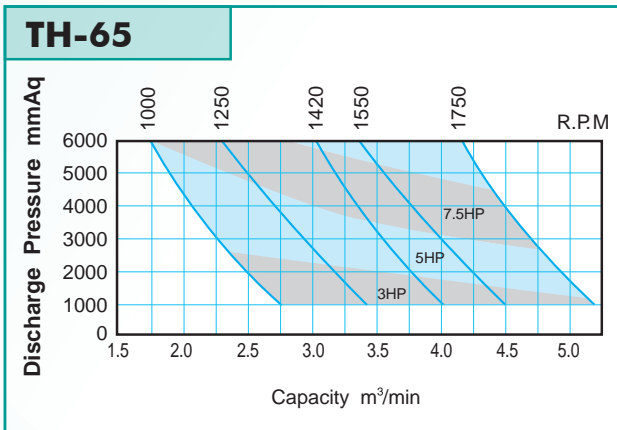
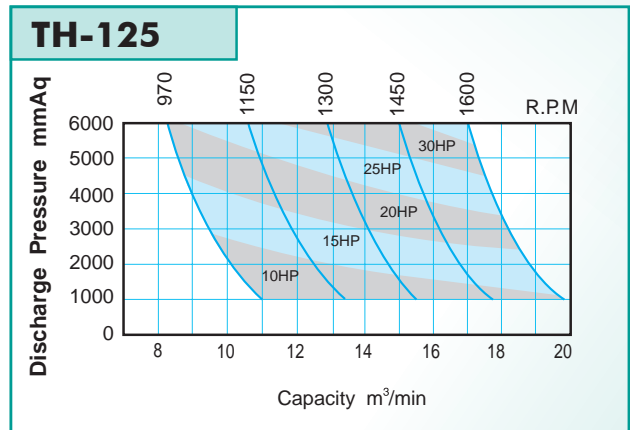
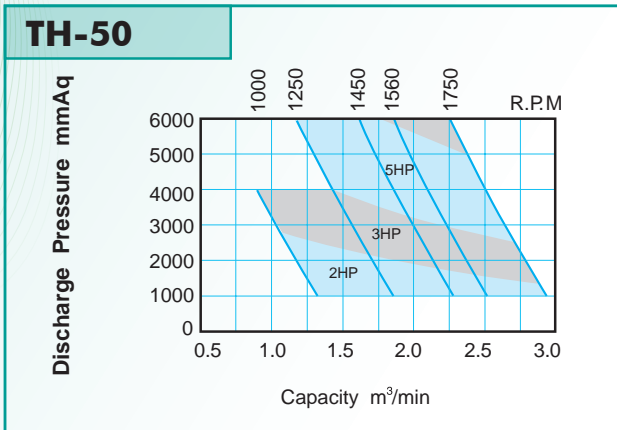
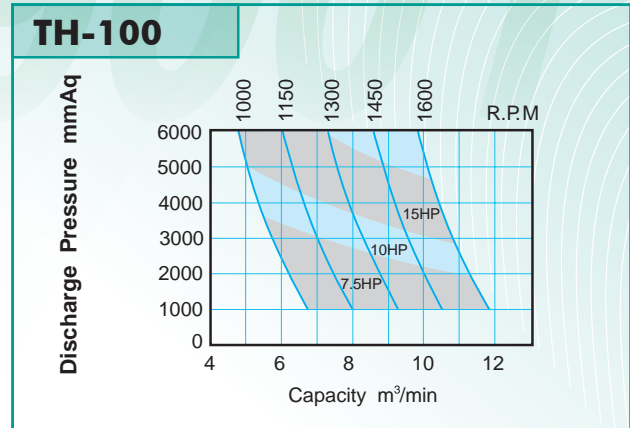
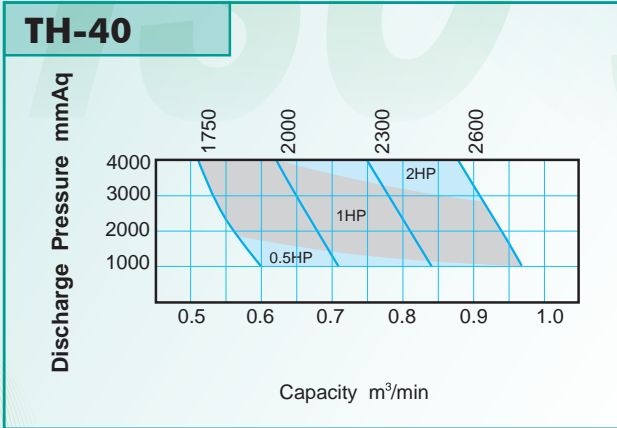
NO.	Name	Material	Q'ty	NO.	Name	Material	NO.
1	Main body	FC25	1	9	Gear	SNM220	2
2	Rotor	FC25	2	10	"S"Ring	SK7	2
3	Drive Shaft	S45C	1	11	Washer	S45C	2
4	Driven Shaft	S45C	1	12	Lubrication Plug	PP	2
5	Bearing Base	FC25	2	13	Drain Plug	FCMB28	2
6	Oil Box	FC25	2	14	Oil Gauge	BRASS	2
7	Bearing	SUJ2	4	15	Pulley	FC20	1
8	Oil Seal	NBR	1	16	Oil Splasher	SS41	1

※ Could be manufactured by special material

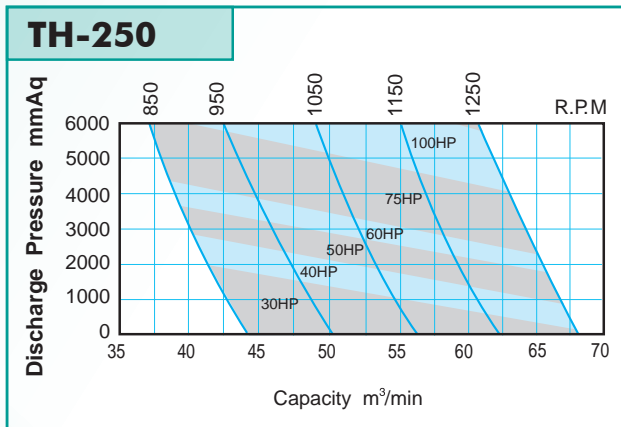
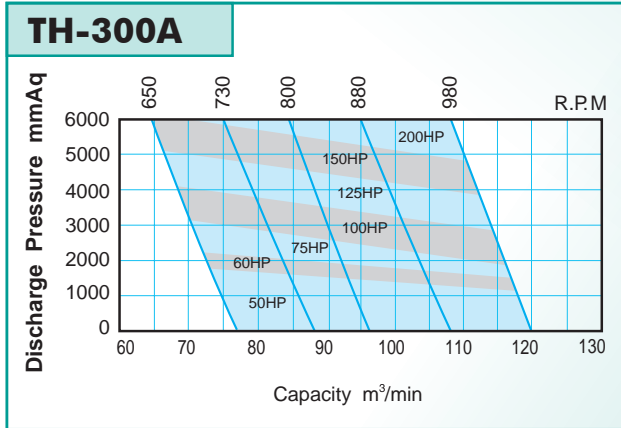
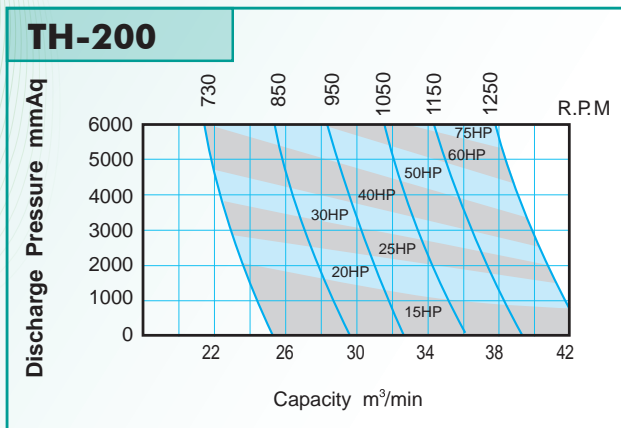
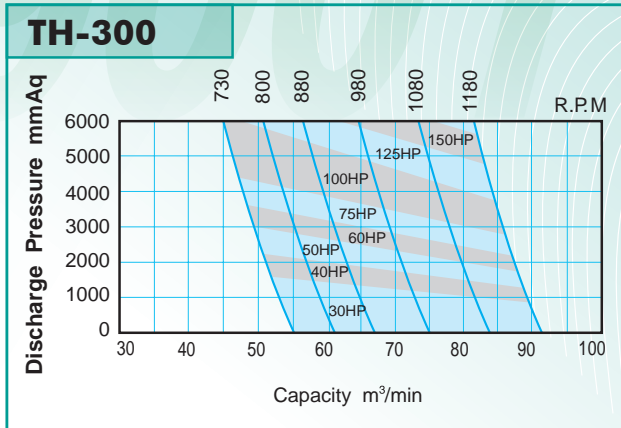
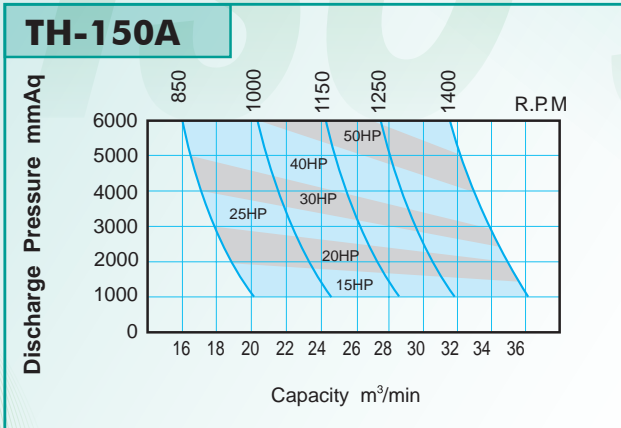
# TH Type Performance Table (Pressure Conveyance)

Models	Speed R.P.M	1000 mmAq		2000 mmAq		3000 mmAq		4000 mmAq		5000 mmAq		6000 mmAq	
		m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw
TH-40	1750	0.60	0.26	0.56	0.39	0.54	0.53	0.51	0.66				
	2000	0.71	0.30	0.68	0.45	0.65	0.60	0.62	0.75				
	2300	0.84	0.34	0.81	0.51	0.78	0.69	0.75	0.86				
	2600	0.97	0.38	0.84	0.57	0.91	0.78	0.88	0.97				
TH-50	1000	1.33	0.72	1.18	1.07	1.04	1.45	0.90	1.81	0.77	2.15	0.64	2.44
	1250	1.86	0.91	1.71	1.35	1.57	1.82	1.43	2.27	1.31	2.69	1.18	3.06
	1450	2.29	1.05	2.14	1.56	2.00	2.10	1.86	2.62	1.74	3.11	1.61	3.53
	1560	2.53	1.13	2.38	1.68	2.24	2.26	2.10	2.82	1.97	3.35	1.84	3.80
	1750	2.94	1.27	2.78	1.88	2.65	2.54	2.51	3.17	2.38	3.75	2.25	4.27
TH-65	1000	2.76	1.2	2.48	1.9	2.27	2.5	2.06	3.1	1.85	3.7	1.75	4.3
	1250	3.41	1.5	3.14	2.2	2.93	2.9	2.72	3.6	2.51	4.3	2.31	5.0
	1420	4.03	1.7	3.76	2.5	3.55	3.3	3.34	4.2	3.23	5.0	3.03	5.8
	1550	4.48	1.8	4.23	2.7	4.00	3.6	3.79	4.5	3.58	5.4	3.37	6.3
	1750	5.17	2.1	4.89	3.1	4.68	4.1	4.47	5.1	4.26	6.1	4.16	7.1
TH-80	1000	4.38	1.5	3.94	2.4	3.57	2.8	3.25	4.3	2.97	5.2	2.72	6.1
	1150	5.27	1.8	4.85	2.9	4.48	3.9	4.16	5.0	3.87	6.0	3.61	7.1
	1300	6.17	2.0	5.74	3.2	5.37	4.4	5.05	5.6	4.76	6.8	4.51	8.0
	1450	7.07	2.2	6.65	3.6	6.28	5.0	5.96	6.3	5.66	7.6	5.41	9.0
	1600	7.96	2.5	7.54	4.0	7.17	5.5	6.85	6.9	6.55	8.4	6.30	9.9
TH-100	1000	6.72	2.3	6.22	3.5	5.72	4.8	5.38	6.1	5.04	7.4	4.80	8.7
	1150	8.00	2.8	7.42	4.2	7.02	5.5	6.58	7.2	6.34	8.5	6.14	10.0
	1300	9.26	3.0	8.71	4.6	8.26	6.3	7.89	8.0	7.57	9.7	7.31	11.4
	1450	10.50	3.4	9.96	5.2	9.51	7.0	9.14	9.0	8.82	10.8	8.57	12.7
	1600	11.8	3.7	11.2	5.7	10.8	7.8	10.4	9.9	10.1	12.0	9.82	14.1
TH-125	970	11.0	3.4	10.2	5.7	9.5	7.9	8.9	10.2	8.5	12.5	8.0	14.8
	1150	13.5	4.0	12.7	6.7	12.1	9.4	11.5	12.1	11.0	14.8	10.6	17.5
	1300	15.6	4.5	14.8	7.6	14.2	10.6	13.6	13.6	13.1	16.7	12.7	19.8
	1450	17.7	5.0	16.9	8.5	16.2	11.8	15.6	15.2	15.2	18.7	14.7	22.1
	1600	19.8	5.5	19.0	9.3	18.3	13.0	17.7	16.8	17.3	20.6	16.8	24.4
TH-125A	970	14.1	4.2	13.1	7.1	12.4	9.9	11.7	13.0	11.2	15.7	10.7	18.5
	1150	17.2	5.0	16.3	8.4	15.6	11.8	14.8	15.4	14.4	18.6	13.8	22.0
	1300	19.9	5.7	18.9	9.5	18.2	13.3	17.5	17.4	17.0	21.0	16.5	24.8
	1450	22.5	6.3	21.6	10.6	20.9	14.8	20.2	19.4	19.6	23.4	19.1	27.7
	1600	25.2	7.0	24.2	11.7	23.5	16.4	22.8	21.4	22.3	25.9	21.8	30.6
TH-150	970	16.8	4.9	15.7	8.4	14.9	11.8	14.2	15.2	13.5	18.6	12.9	22.0
	1150	20.6	5.8	19.5	9.9	18.6	14.0	17.9	18.0	17.3	22.1	16.7	26.1
	1300	23.7	6.6	22.6	11.2	21.8	15.8	21.1	20.4	20.4	25.0	19.9	29.5
	1450	26.9	7.4	25.8	12.5	24.9	17.6	24.2	22.7	23.6	27.9	23.0	33.0
	1600	30.0	8.1	28.9	13.8	28.1	19.4	27.4	25.1	26.7	30.7	26.1	36.4
TH-150A	850	20.7	6.1	19.5	10.2	18.3	14.3	17.5	18.4	16.7	22.6	16.1	26.7
	1000	25.0	7.1	23.7	12.0	22.6	16.9	21.7	21.7	20.9	26.6	20.3	31.4
	1150	29.3	8.2	27.9	13.8	26.9	17.7	25.9	22.8	25.2	30.6	24.5	36.1
	1250	32.2	8.9	30.8	15.0	29.7	21.1	28.8	27.2	28.0	33.3	27.3	39.3
	1400	36.4	10.0	35.0	16.9	34.0	23.6	33.0	30.4	32.3	37.3	31.6	44.0
TH-200	730	24.6	6.7	23.8	11.2	23.2	15.9	22.7	20.5	22.1	25.1	21.7	29.7
	850	28.6	7.8	27.7	13.1	27.0	18.5	26.4	24.0	25.6	29.2	25.3	34.6
	950	32.0	8.7	31.0	14.6	30.2	20.7	29.5	26.7	28.8	32.6	28.3	38.7
	1050	35.3	9.6	34.3	16.2	33.3	22.8	32.6	29.5	31.8	36.1	31.3	42.7
	1150	38.7	10.5	37.5	17.7	36.5	25.0	35.7	32.3	34.9	39.5	34.2	46.8
	1250	42.1	11.4	40.8	19.3	44.7	27.2	38.8	35.1	38.0	43.0	37.2	50.9
TH-250	730	38.6	9.7	37.5	16.6	36.6	23.7	35.9	30.8	35.2	37.9	34.5	44.8
	850	44.9	11.2	43.7	19.4	42.6	27.6	41.8	35.8	40.9	44.1	40.2	52.2
	950	50.1	12.6	48.8	21.6	47.7	30.8	46.7	40.1	45.8	49.3	44.9	58.3
	1050	55.4	13.9	54.0	23.9	52.7	34.1	51.6	44.3	50.6	54.5	49.7	64.5
	1150	60.7	15.2	59.1	26.2	57.7	37.3	56.5	48.5	55.4	59.7	54.4	70.6
	1250	65.9	16.6	64.3	28.5	62.8	40.6	61.4	52.8	60.3	64.9	59.2	76.8
TH-300	730	52.8	15.7	50.8	27.4	49.2	39.1	47.8	50.8	46.5	62.5	45.4	74.8
	800	58.4	17.1	56.4	29.9	54.8	42.6	53.4	55.4	52.0	68.1	50.9	81.6
	880	64.8	18.8	62.8	32.8	61.1	46.7	59.7	60.7	58.3	74.6	57.2	89.4
	980	72.9	20.7	70.9	36.2	69.2	51.4	67.8	66.9	66.4	82.3	65.2	98.6
	1080	81.1	22.9	79.1	39.9	77.4	56.7	76.0	73.8	74.6	90.8	73.4	108.7
	1180	89.3	25.0	87.3	43.6	85.6	62.0	84.1	80.6	82.7	99.2	81.6	118.7
TH-300A	650	74.8	21.9	72.2	39.1	69.9	55.2	68.1	72.5	66.3	89.7	64.8	97.8
	730	85.2	24.2	82.6	43.7	80.4	62.1	78.6	80.5	76.9	100.0	75.3	118.5
	800	94.4	26.5	91.8	47.2	89.7	67.9	87.8	88.6	86.1	109.3	84.5	130.0
	880	105.3	29.9	102.6	51.8	100.3	74.8	98.4	97.8	96.6	120.8	95.1	143.8
	980	117.8	33.4	115.5	58.7	113.4	82.8	109.6	109.3	108.9	134.6	108.1	159.9

# TH Type Performance Curve (Pressure Conveyance)

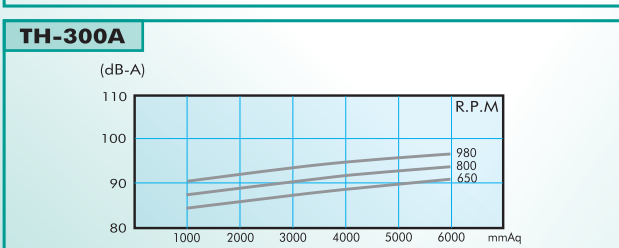
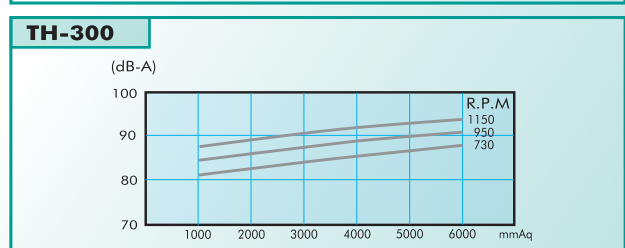
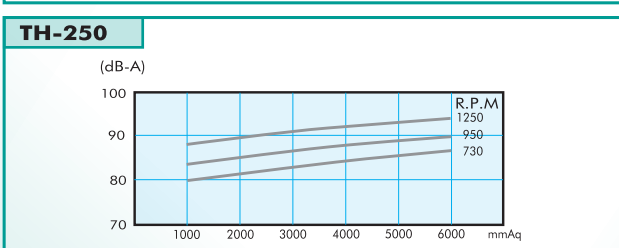
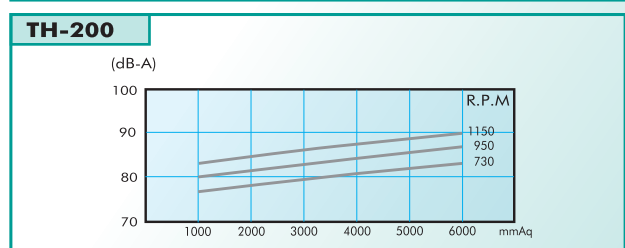
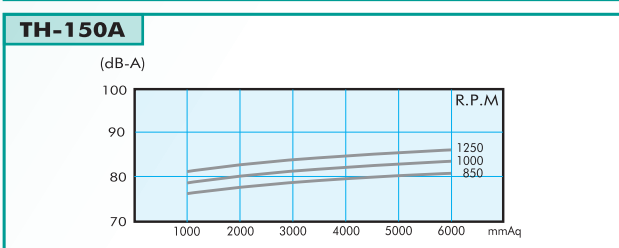
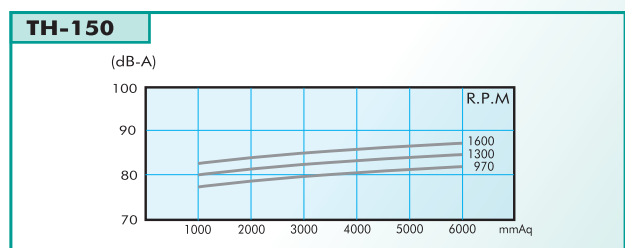
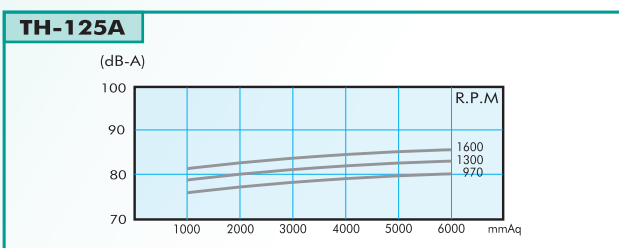
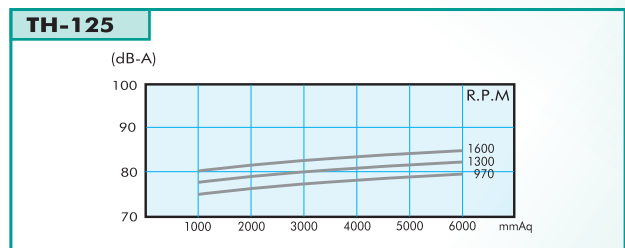
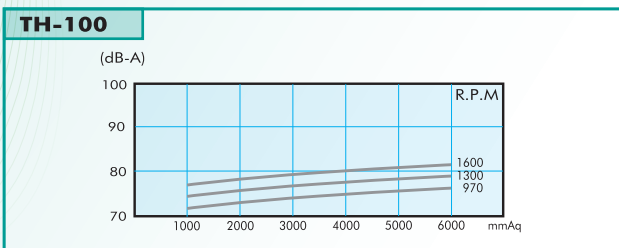
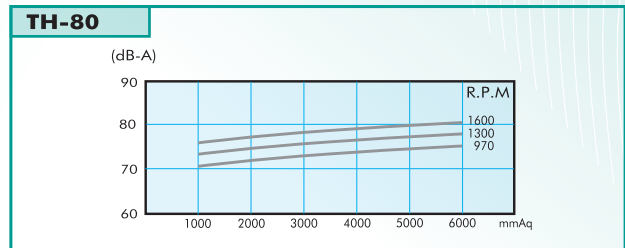
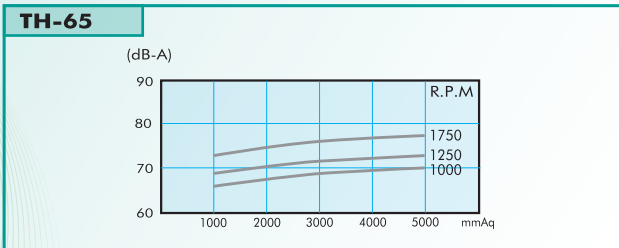
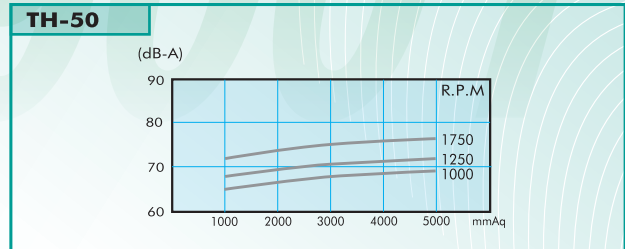
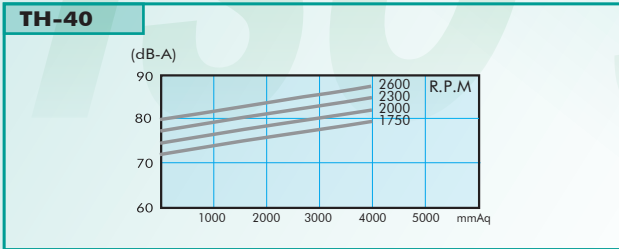


# TH Type Performance Curve (Pressure Conveyance)





# TH Type Noise Level Curve



- Noise Level measured at a distance of 1 meter for the blower fitted with a standard silencer.
- Noise level may be different according to the extent pipe length and environmental conditions.

All of TRUNDEAN's products have been improved which reduce more noise level.

# THV Type Performance Table (Vacuum)

THV Type Performance Table

Models	Speed R.P.M	-1000 mmAq		-2000 mmAq		-3000 mmAq		-3500 mmAq		-4000 mmAq		-4500 mmAq	
		m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw
THV-50	1000	1.22	0.72	1.07	1.07	0.93	1.45	0.86	1.61	0.79	1.78	0.73	1.95
	1250	1.76	0.91	1.61	1.35	1.47	1.82	1.40	2.02	1.33	2.22	1.26	2.44
	1450	2.19	1.05	2.04	1.56	1.90	2.10	1.83	2.34	1.76	2.58	1.69	2.83
	1560	2.42	1.13	2.27	1.68	2.13	2.26	2.06	2.52	1.99	2.77	1.93	3.04
	1750	2.83	1.27	2.68	1.88	2.54	2.54	2.47	2.83	2.40	3.11	2.34	3.41
THV-65	1000	2.58	1.24	2.31	1.90	2.10	2.50	2.00	2.77	1.89	3.10	1.81	3.37
	1250	3.23	1.50	2.97	2.20	2.76	2.90	2.65	3.27	2.55	3.63	2.47	3.98
	1420	3.85	1.70	3.59	2.50	3.38	3.31	3.27	3.75	3.17	3.75	3.09	4.55
	1550	4.30	1.80	4.03	2.70	3.82	3.61	3.72	4.09	3.61	4.20	3.53	4.97
	1750	4.99	2.10	4.72	3.10	4.51	4.10	4.40	4.62	4.30	4.54	4.22	5.61
THV-80	1150	5.11	1.8	4.55	2.9	4.03	3.9	3.83	4.5	3.61	5.0	3.42	5.5
	1300	6.12	2.0	5.51	3.2	4.98	4.4	4.71	5.0	4.43	5.6	4.19	6.2
	1450	7.09	2.2	6.43	3.6	5.81	5.0	5.51	5.6	5.12	6.3	4.99	6.9
	1600	7.98	2.5	7.31	4.0	6.64	5.5	6.37	6.2	6.04	6.9	5.78	7.7
	1750	8.85	2.7	8.23	4.4	7.54	6.0	7.24	6.8	6.92	7.6	6.61	8.4
THV-100	1150	8.54	2.7	8.08	4.1	7.62	5.6	7.42	6.3	7.23	7.1	6.9	7.9
	1300	9.65	3.0	9.14	4.6	8.62	6.3	8.39	7.1	8.17	8.1	7.8	8.9
	1450	10.80	3.4	10.20	5.2	9.61	7.1	9.36	7.9	9.11	9.0	8.7	9.9
	1600	11.9	3.7	11.2	5.7	10.6	7.8	10.3	8.7	10.1	9.9	9.6	11.0
	1750	13.0	4.1	12.3	6.2	11.6	8.5	11.3	9.6	11.0	10.8	10.5	12.0
THV-125	970	11.0	3.4	9.8	5.6	8.7	7.9	8.2	9.0	7.8	10.1	7.3	11.3
	1150	13.5	4.0	12.4	6.7	11.3	9.3	10.8	10.7	10.4	12.0	9.8	13.4
	1300	15.6	4.5	14.5	7.5	13.4	10.5	12.9	12.1	12.5	13.6	12.0	15.1
	1450	17.7	5.0	16.6	8.4	15.5	11.7	14.9	13.5	14.5	15.2	14.1	16.9
	1600	19.8	5.5	18.7	9.3	17.5	13.0	17.0	14.9	16.6	16.7	16.2	18.6
THV-125A	970	14.0	4.3	12.7	7.2	11.5	10.0	11.0	11.5	10.4	12.9	9.7	14.2
	1150	17.2	5.0	15.9	8.5	14.7	11.9	14.2	13.6	13.6	15.3	13.0	16.8
	1300	19.9	5.7	18.5	9.6	17.3	13.4	16.8	15.4	16.2	17.3	15.6	19.0
	1450	22.5	6.4	21.2	10.7	20.0	15.0	19.5	17.1	18.9	19.2	18.3	21.2
	1600	25.2	7.0	23.9	11.8	22.6	16.5	22.1	18.9	21.5	21.2	20.9	23.4
THV-150	970	16.8	4.9	15.3	8.4	13.9	11.8	13.2	13.5	12.6	15.2	11.8	17.0
	1150	20.6	5.8	19.0	9.9	17.6	14.0	17.0	16.0	16.4	18.0	15.6	20.1
	1300	23.7	6.6	22.2	11.2	20.8	15.8	20.1	18.1	19.5	20.4	18.7	22.7
	1450	26.9	7.4	25.3	12.5	23.9	17.6	23.3	20.2	22.7	22.7	21.9	25.3
	1600	30.0	8.1	28.5	13.8	27.1	19.5	26.4	22.3	25.8	25.1	25.0	28.0
THV-150A	850	24.9	7.1	23.1	12.0	21.6	16.9	20.8	19.3	20.0	21.7	19.1	24.1
	1000	29.1	8.2	27.4	13.8	25.9	19.4	25.1	22.2	24.3	25.0	23.3	27.8
	1150	33.4	9.3	31.7	15.6	30.1	21.9	29.3	25.1	28.5	28.3	27.6	31.4
	1250	36.6	10.4	33.9	17.6	31.7	24.8	30.5	28.3	29.4	31.9	28.0	35.4
	1400	41.0	11.6	38.0	19.7	35.5	27.8	34.2	31.7	32.9	35.7	31.4	39.6
THV-200	880	30.1	8.0	29.0	13.4	27.8	19.0	27.3	21.9	26.9	24.7	26.4	27.5
	950	32.5	8.7	31.3	14.6	30.1	20.6	29.5	23.7	29.1	26.7	28.5	29.7
	1050	36.0	9.5	34.6	16.1	33.2	22.8	32.6	26.2	32.1	29.4	31.5	32.8
	1150	39.4	10.5	37.9	17.7	36.4	25.0	35.7	28.7	35.2	32.3	34.5	35.9
	1230	42.1	11.2	40.5	19.0	38.9	26.7	38.2	30.7	37.6	34.5	36.9	38.4
THV-250	880	46.9	11.7	45.3	20.3	43.8	28.9	43.1	33.1	42.4	37.5	41.6	41.8
	950	50.7	12.7	49.0	22.0	47.3	31.2	46.6	35.8	45.8	40.5	45.0	45.2
	1050	56.1	14.0	54.2	24.3	52.3	34.4	51.5	39.6	50.7	44.8	49.7	50.0
	1150	61.4	15.4	59.3	26.6	57.2	37.7	56.4	43.4	55.5	49.0	54.5	54.2
	1230	65.7	16.4	63.5	28.4	61.2	40.3	60.3	46.4	59.4	52.4	58.2	58.5
THV-300	730	52.8	15.7	50.8	27.4	49.2	39.1	48.5	45.0	47.8	50.8	47.2	56.7
	800	58.4	17.1	56.4	29.9	54.8	42.6	54.1	49.0	53.4	55.4	52.7	61.8
	880	64.8	18.8	62.8	32.8	61.1	46.7	60.4	53.7	59.7	60.7	59.0	67.7
	980	72.9	20.7	70.9	36.2	69.2	51.4	68.5	59.2	67.8	66.9	67.1	74.6
	1080	81.1	22.9	79.1	39.9	77.4	56.7	76.7	65.3	76.0	73.8	75.3	82.3
THV-300A	650	74.8	21.9	72.2	39.1	69.9	55.2	69.0	63.9	68.1	72.5	67.2	81.1
	730	85.2	24.2	82.6	43.7	80.4	62.1	79.5	71.3	78.6	80.5	77.8	90.3
	800	94.4	26.5	91.8	47.2	89.7	67.9	88.8	78.3	87.8	88.6	87.0	99.0
	880	105.3	29.9	102.6	51.8	100.3	74.8	99.4	81.7	98.4	97.8	97.5	109.3
	980	117.8	33.4	115.5	58.7	113.4	82.8	111.5	96.1	109.6	109.3	107.7	122.0

# THV Type Performance Curve (Vacuum)

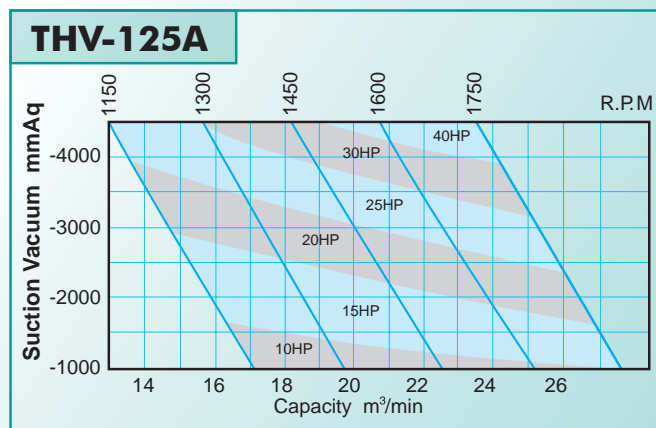
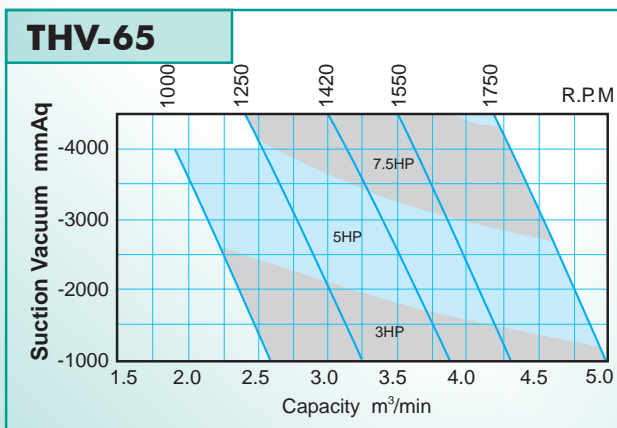
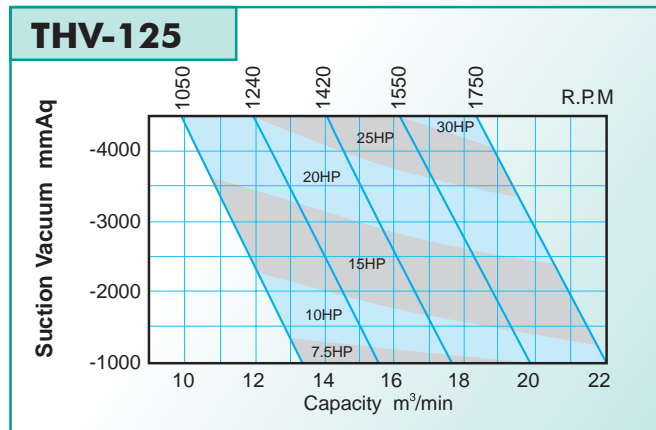
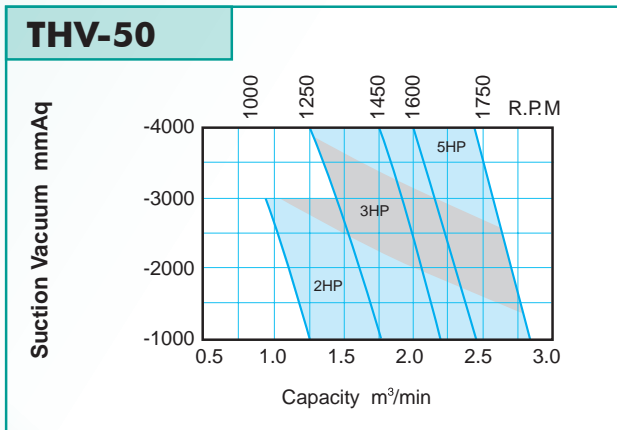
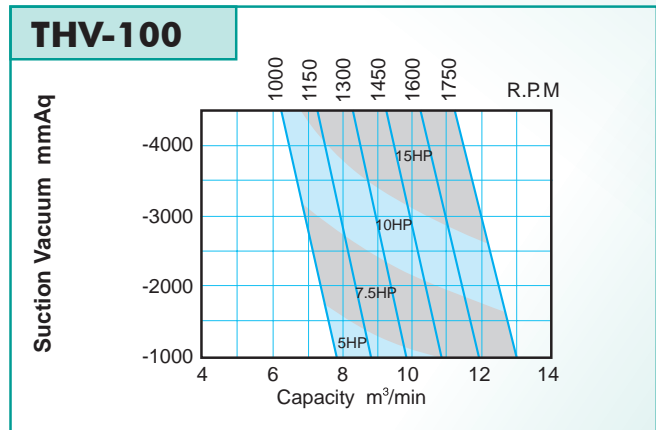
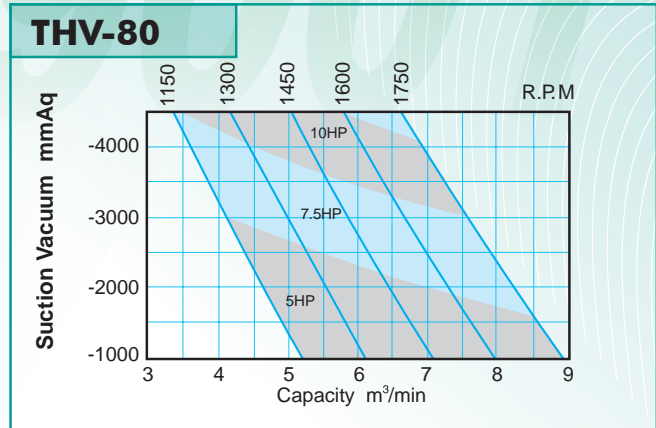


## THV Type (Vacuum)

Vacuum Pressure: 0~-4500 mmAq

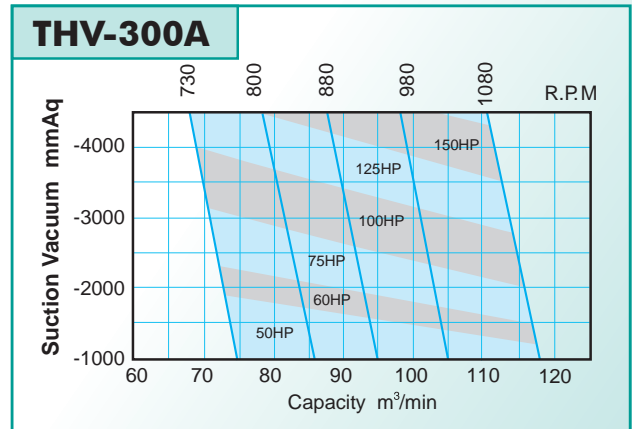
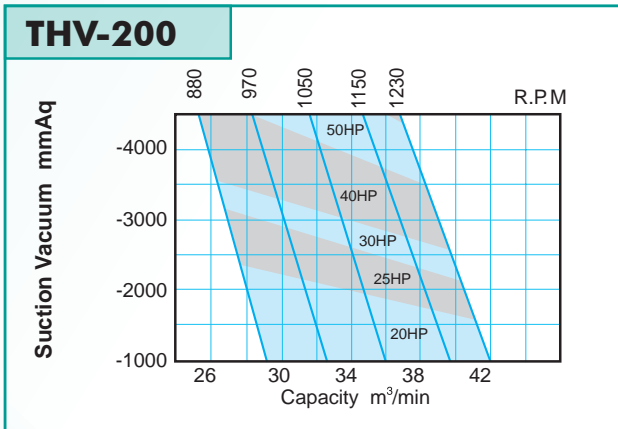
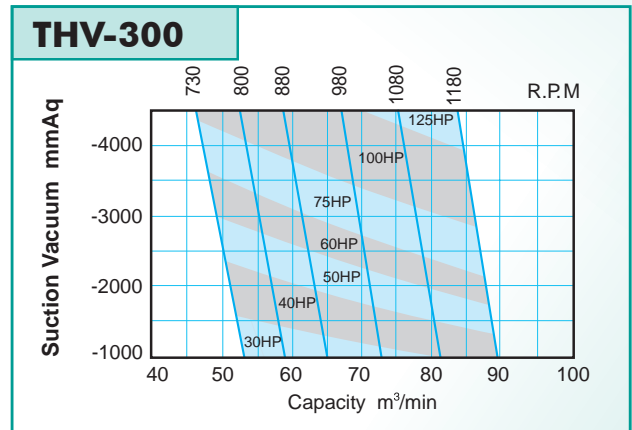
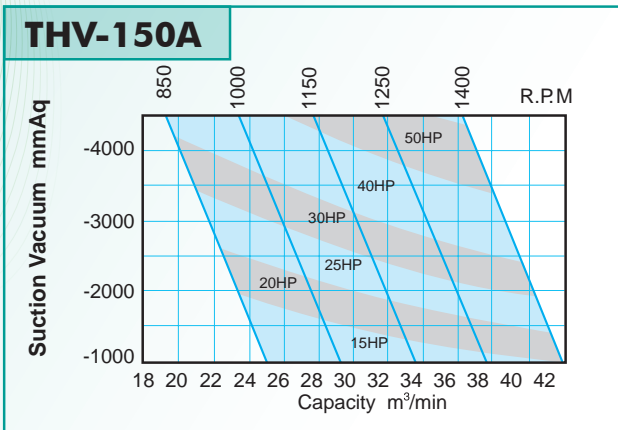
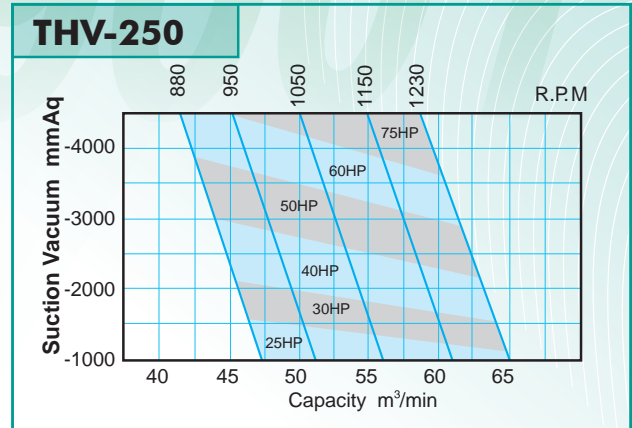
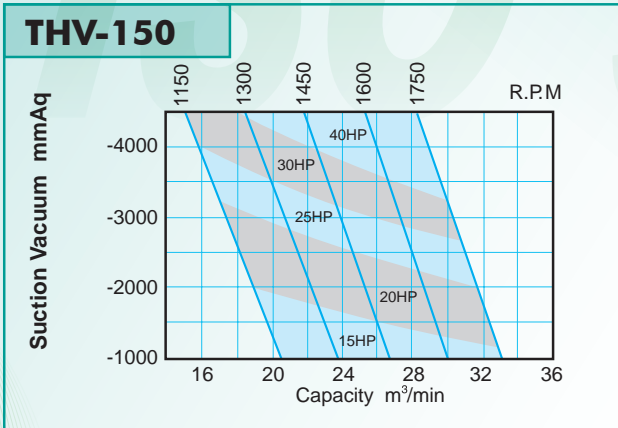
Power: 2~250 HP

THV Type Performance Curve



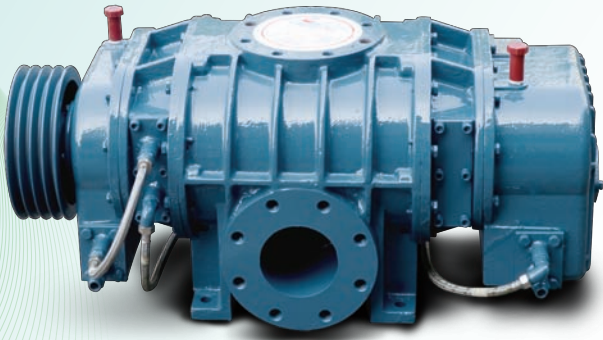
# THV Type Performance Curve (Vacuum)

THV Type Performance Curve



# ISO 9001

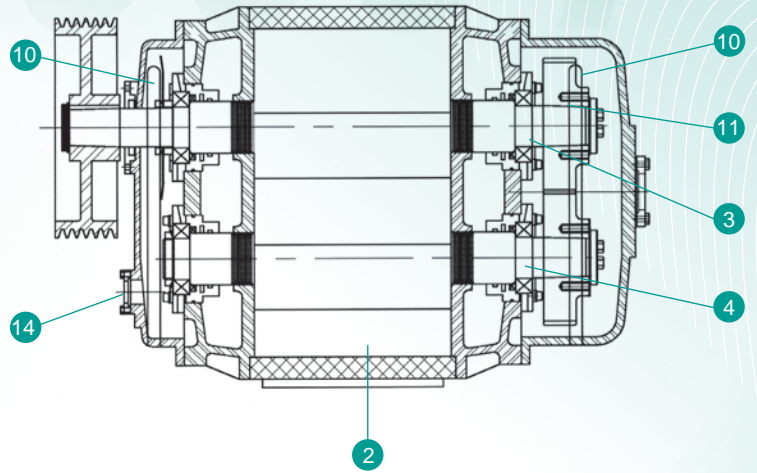
## THS Type Structural Drawing



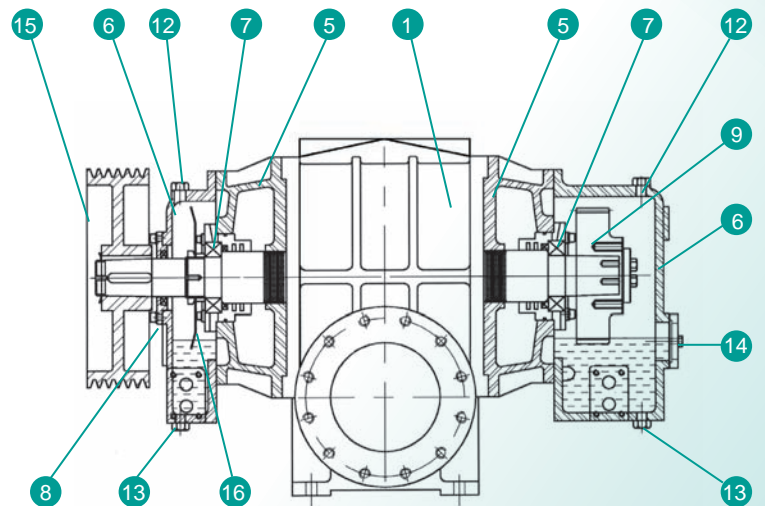
### THS Type (Pressure Conveyance)

Pressure: 0~8000 mmAq

Power: 10~250 HP



THS Type Structural Drawing



NO.	Name	Material	Q'ty	NO.	Name	Material	NO.
1	Main body	FC25	1	9	Gear	SNM220	2
2	Rotor	FC25	2	10	"S"Ring	Brass	2
3	Drive Shaft	S45C	1	11	Washer	S45C	2
4	Driven Shaft	S45C	1	12	Lubrication Plug	PP	2
5	Bearing Base	FC25	2	13	Drain Plug	FCMB28	2
6	Oil Box	FC25	2	14	Oil Gauge	BRASS	2
7	Bearing	SUJ2	4	15	Pulley	FC20	1
8	Oil Seal	NBR	1	16	Oil Splasher	SS41	1

※ Could be manufactured by special material

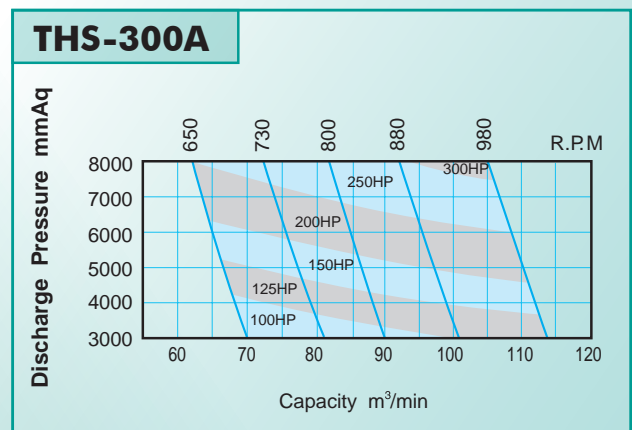
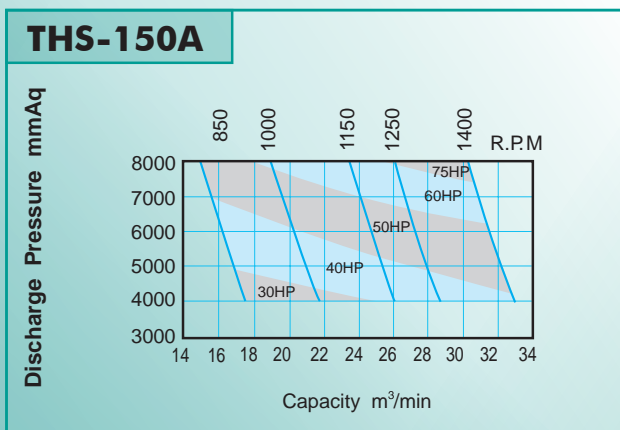
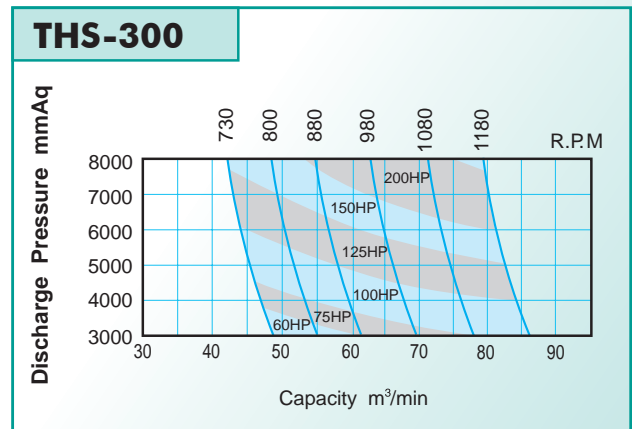
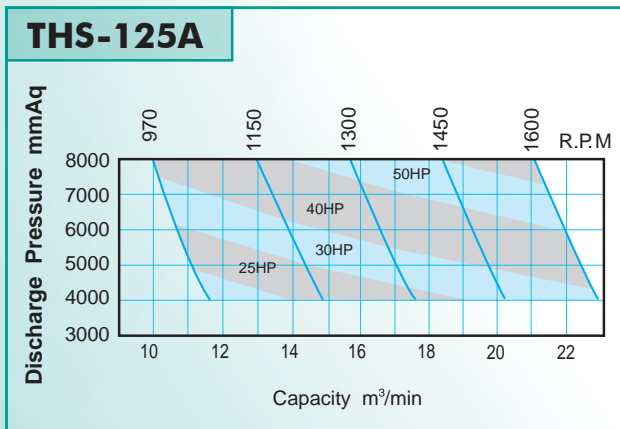
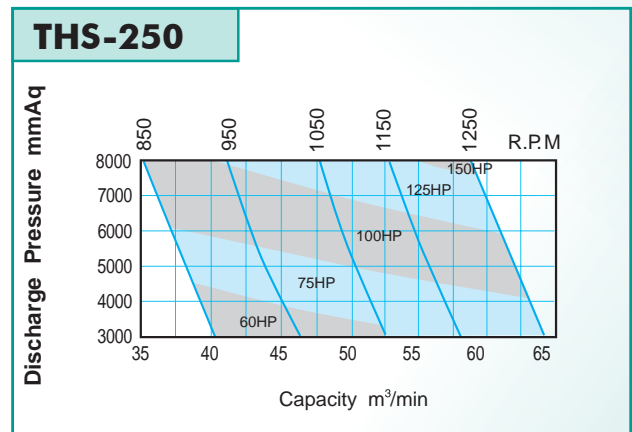
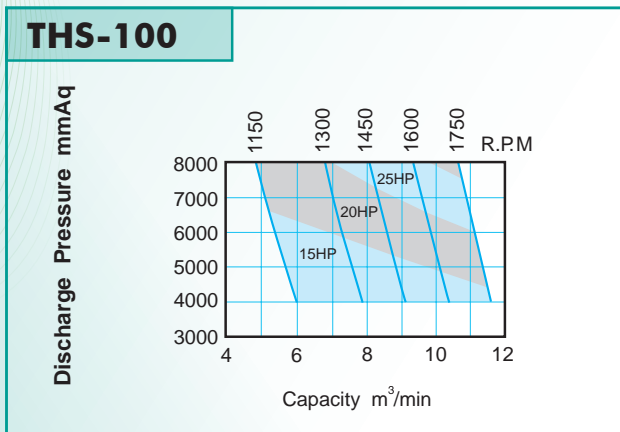
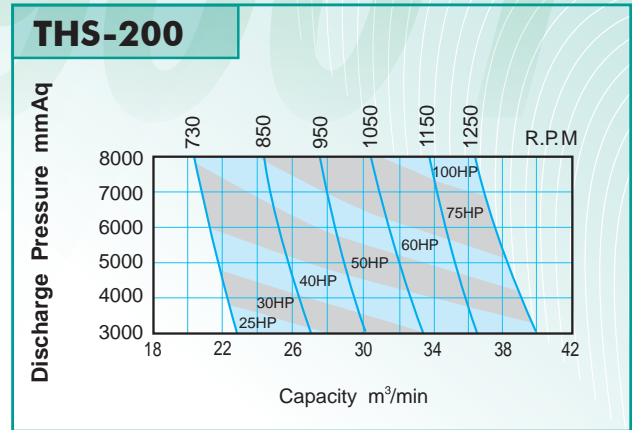
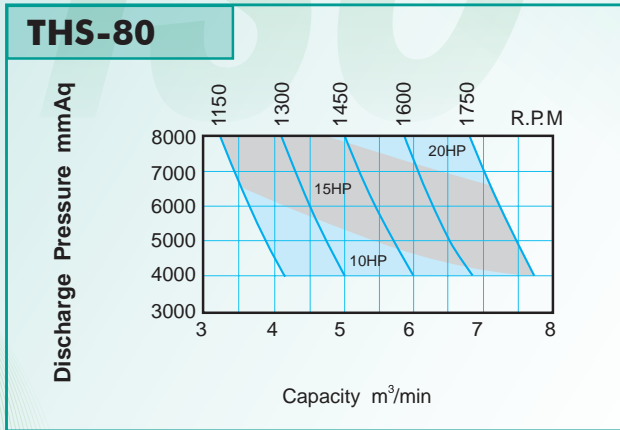
# THS Type Performance Table (Pressure Conveyance)

THS Type Performance Table

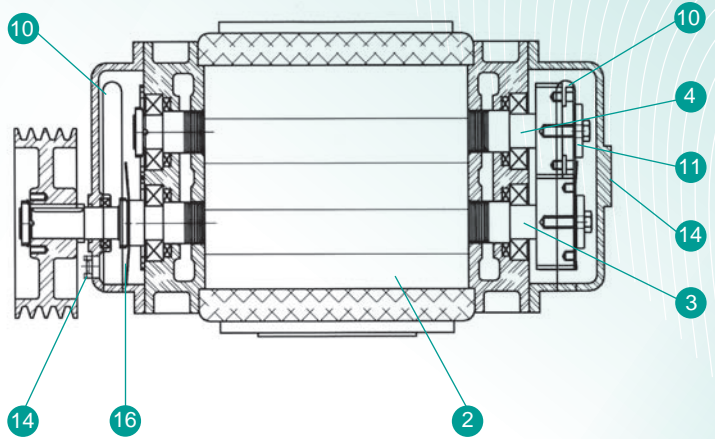
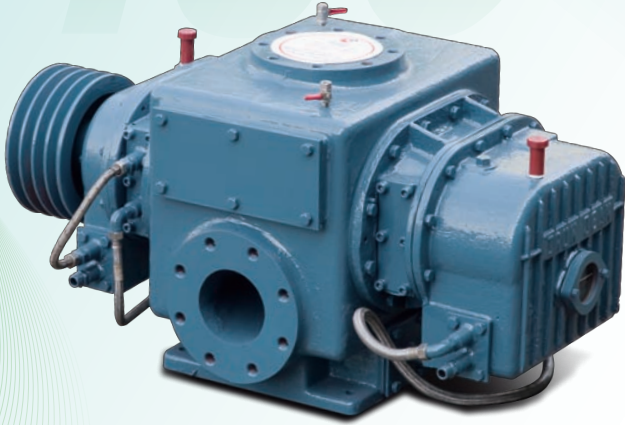
Models	Speed	4000 mmAq		5000 mmAq		6000 mmAq		7000 mmAq		8000 mmAq		Cooling Water
	R.P.M	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	L / min
THS-80	1150	4.16	5.0	3.87	6.0	3.61	7.1	3.41	8.2	3.18	9.2	8
	1300	5.05	5.6	4.76	6.8	4.51	8.0	4.30	9.2	4.08	10.4	
	1450	5.96	6.3	5.66	7.6	5.41	9.0	5.20	10.3	4.98	11.6	
	1600	6.85	6.9	6.55	8.4	6.30	9.9	6.09	11.4	5.87	12.8	
	1750	7.75	7.6	7.45	9.2	7.20	10.8	6.99	12.4	6.77	14.0	
THS-100	1150	6.19	7.1	5.82	8.6	5.56	10.1	5.16	11.6	4.98	13.1	10
	1300	7.89	8.0	7.57	9.7	7.31	11.4	7.00	13.1	6.79	14.8	
	1450	9.14	9.0	8.82	10.8	8.57	12.7	8.25	14.6	8.04	16.5	
	1600	10.40	9.9	10.10	12.0	9.82	14.1	9.51	16.2	9.30	18.2	
	1750	11.60	10.8	11.30	13.1	11.00	15.4	10.70	17.7	10.55	19.9	
THS-125A	970	11.6	13.0	11.1	15.7	10.6	18.5	10.1	21.4	9.8	24.2	15
	1150	14.8	15.4	14.3	18.6	13.8	22.0	13.3	25.4	13.0	28.7	
	1300	17.5	17.4	16.9	21.0	16.5	24.8	16.0	28.7	15.6	32.4	
	1450	20.1	19.4	19.6	23.4	19.1	27.7	18.6	32.0	18.3	36.2	
	1600	22.8	21.4	22.3	25.9	21.8	30.6	21.3	35.3	20.9	39.9	
THS-150A	850	17.5	18.4	16.6	22.6	16.1	26.7	16.0	28.2	15.7	31.8	18
	1000	21.7	21.7	20.9	26.6	20.3	31.4	20.1	33.4	19.8	37.7	
	1150	25.9	22.8	25.2	30.6	24.5	36.1	23.6	37.8	23.2	42.6	
	1250	28.8	27.2	28.0	33.3	27.3	39.3	27.0	42.1	26.7	47.5	
	1400	33.0	30.4	32.3	37.3	31.6	44.0	30.4	46.5	30.1	52.5	
THS-200	850	24.3	23.7	23.5	29.1	22.9	34.6	22.3	39.7	21.7	45.1	20
	950	28.1	26.6	27.3	32.6	26.7	38.7	26.1	44.4	25.5	50.5	
	1050	31.9	29.5	31.1	36.1	30.5	42.8	29.9	49.1	29.3	55.9	
	1150	35.7	32.3	34.8	39.5	34.2	46.8	33.6	53.8	33.1	61.2	
	1250	39.5	35.2	38.6	43.0	38.0	50.9	37.4	58.5	36.9	66.6	
THS-250	850	39.1	35.9	38.1	44.2	37.1	52.3	36.2	60.3	35.3	68.6	25
	950	44.9	40.1	43.9	49.4	42.9	58.4	42.0	67.4	41.1	76.7	
	1050	50.7	44.3	49.7	54.6	48.7	64.5	47.8	74.5	46.9	84.8	
	1150	56.5	48.5	55.4	59.7	54.4	70.6	53.5	81.6	52.6	92.8	
	1250	62.3	52.7	61.2	64.9	60.2	76.7	59.3	88.7	58.4	100.9	
THS-300	730	47.8	50.8	46.5	62.5	45.4	74.8	44.3	85.8	43.5	97.6	30
	800	53.4	55.4	52.0	68.1	50.9	81.6	49.8	93.6	49.0	106.4	
	880	59.7	60.7	58.3	74.6	57.2	89.4	56.1	102.5	55.2	116.5	
	980	67.8	66.9	66.4	82.3	65.2	98.6	64.1	113.1	63.2	128.8	
	1080	76.0	73.8	74.6	90.8	73.4	108.7	72.3	124.9	71.4	141.7	
	1180	84.1	80.6	82.7	99.2	81.6	118.7	80.5	136.6	79.6	154.6	
THS-300A	650	68.1	72.5	66.3	89.7	64.8	97.8	63.2	123.0	61.8	139.2	35
	730	78.6	80.5	76.9	100.0	75.3	118.5	73.7	138.0	72.4	156.4	
	800	87.8	88.6	86.1	109.3	84.5	130.0	82.9	150.7	81.5	171.4	
	880	98.4	97.8	96.6	120.8	95.1	143.8	93.5	165.6	92.1	188.6	
	980	109.6	109.3	108.9	134.6	108.1	159.9	106.6	185.2	105.2	210.5	

# THS Type Performance Curve (Pressure Conveyance)

THS Type Performance Curve



# THW Type Structural Drawing

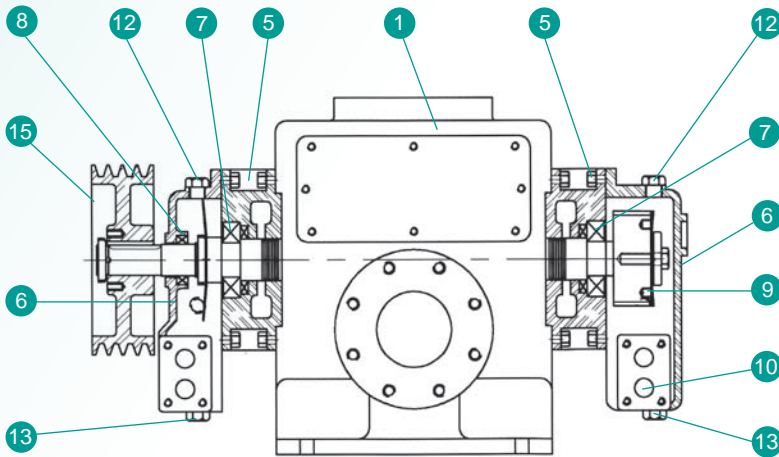


## THW Type (Pressure Conveyance)

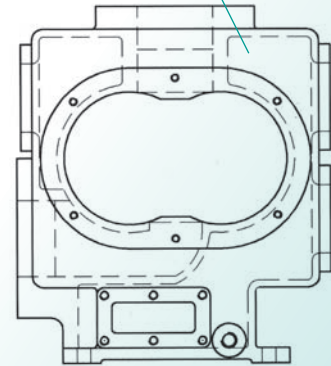
Pressure: 0~10000 mmAq

Power: 15~300 HP

THW Type Structural Drawing



The Case of cooling water



NO.	Name	Material	Q'ty	NO.	Name	Material	NO.
1	Main body	FC25	1	9	Gear	SNM220	2
2	Rotor	FC25	2	10	"S"Ring	Brass	2
3	Drive Shaft	S45C	1	11	Washer	S45C	2
4	Driven Shaft	S45C	1	12	Lubrication Plug	PP	2
5	Bearing Base	FC25	2	13	Drain Plug	FCMB28	2
6	Oil Box	FC25	2	14	Oil Gauge	BRASS	2
7	Bearing	SUJ2	4	15	Pulley	FC20	1
8	Oil Seal	NBR	1	16	Oil Splasher	SS41	1

※ Could be manufactured by special material



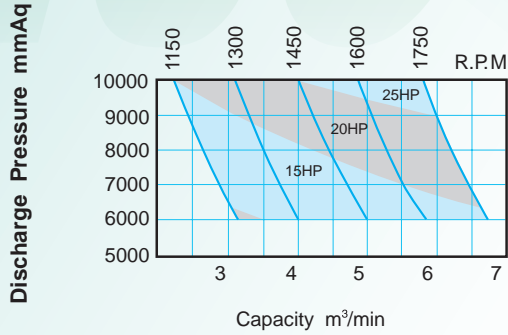
# THW Type Performance Table (Pressure Conveyance)

Models	Speed	6000 mmAq		7000 mmAq		8000 mmAq		9000 mmAq		10000 mmAq		Cooling water
	R.P.M	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	m <sup>3</sup> /min	kw	L / min
THW-80	1150	3.61	7.1	3.41	8.2	3.18	9.2	2.95	10.5	2.75	11.4	8
	1300	4.51	8.0	4.30	9.2	4.08	10.4	3.84	11.6	3.65	12.8	
	1450	5.41	9.0	5.20	10.3	4.98	11.6	4.64	13.0	4.44	14.3	
	1600	6.30	9.9	6.09	11.4	5.87	12.8	5.43	14.3	5.33	15.9	
	1750	7.20	10.8	6.99	12.4	6.77	14.0	6.33	15.6	6.23	17.2	
THW-100	1150	5.52	10.1	5.16	11.6	4.92	13.1	3.92	12.6	3.76	14.1	10
	1300	7.31	11.4	7.00	13.1	6.79	14.8	6.43	16.5	6.27	18.2	
	1450	8.57	12.7	8.25	14.6	8.04	16.5	7.86	18.4	7.51	20.3	
	1600	9.82	14.1	9.51	16.2	9.30	18.2	8.94	20.4	8.78	22.3	
	1750	11.00	15.4	10.70	17.7	10.55	19.9	10.20	22.3	10.10	24.0	
THW-125A	970	10.6	18.5	10.1	21.4	9.8	24.2	9.1	27.1	8.9	29.9	15
	1150	13.8	22.0	13.3	25.4	13.0	28.7	12.3	32.2	12.1	35.4	
	1300	16.5	24.8	16.0	28.7	15.6	32.4	15.0	36.4	14.8	40.0	
	1450	19.1	27.7	18.6	32.0	18.3	36.2	17.6	40.6	16.5	44.7	
	1600	21.8	30.6	21.3	35.3	20.9	39.9	20.3	44.7	20.1	49.2	
THW-150A	850	16.1	26.7	16.0	28.2	15.7	31.8	14.2	43.7	13.6	43.2	18
	1000	20.3	31.4	20.1	33.4	19.8	37.7	18.4	46.0	17.9	50.9	
	1150	24.5	36.1	23.6	37.8	23.2	42.6	22.7	52.9	22.1	58.5	
	1250	27.3	39.3	27.0	42.1	26.7	47.5	25.5	57.5	24.9	63.6	
	1400	31.6	44.0	30.4	46.5	30.1	52.5	29.7	64.4	29.1	71.3	
THW-200	850	22.9	34.6	22.3	39.7	21.7	45.1	21.0	50.2	20.6	55.6	20
	950	26.7	38.7	26.1	44.4	25.5	50.5	24.8	56.2	24.4	62.3	
	1050	30.5	42.8	29.9	49.1	29.3	55.9	28.6	62.2	28.2	69.0	
	1150	34.2	46.8	33.6	53.8	33.1	61.2	32.3	68.1	32.0	75.6	
	1250	38.0	50.9	37.4	58.5	36.9	66.6	36.1	74.1	35.8	82.3	
THW-250	850	37.1	52.3	36.2	60.3	35.3	68.6	34.5	77.0	33.6	85.0	25
	950	42.9	58.4	42.0	67.4	41.1	76.7	40.3	86.0	39.4	95.0	
	1050	48.7	64.5	47.8	74.5	46.9	84.8	46.1	95.0	45.2	105.0	
	1150	54.4	70.6	53.5	81.6	52.6	92.8	51.8	104.0	50.9	115.0	
	1250	60.2	76.7	59.3	88.7	58.4	101.0	57.6	113.0	56.7	125.0	
THW-300A	650	64.8	97.8	63.2	123.0	61.8	139.2	60.4	156.4	59.0	173.6	35
	730	75.3	118.5	73.7	138.0	72.4	156.4	70.9	176.0	69.6	185.2	
	800	84.5	130.0	82.9	150.7	81.5	171.4	80.2	192.1	78.9	212.8	
	880	95.1	143.8	93.5	165.6	92.1	188.6	90.8	211.6	89.5	234.6	
	980	108.1	159.9	106.6	185.2	105.2	210.5	103.9	235.8	102.6	261.1	

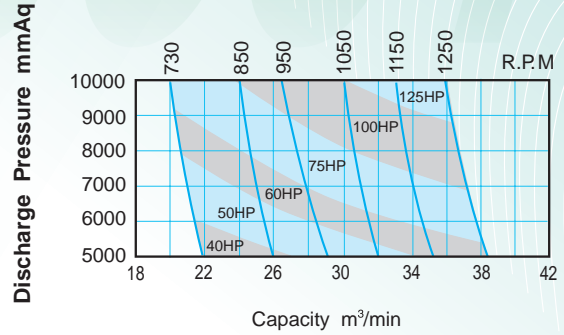
THW Type Performance Table

# THW Type Performance Curve (Pressure Conveyance)

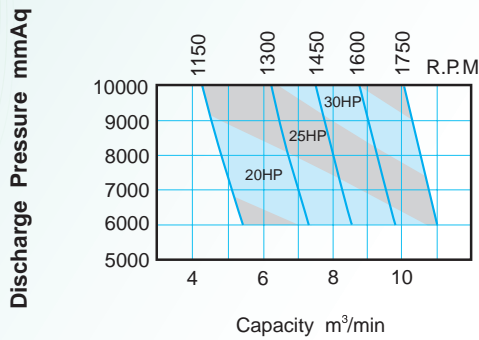
**THW-80**



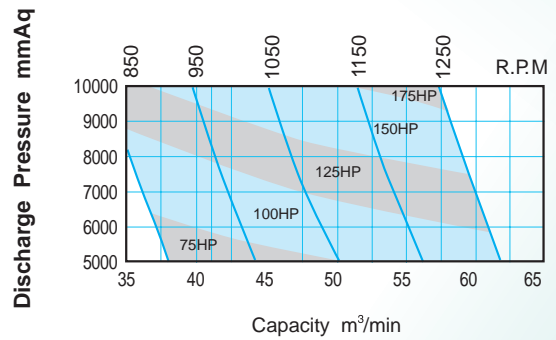
**THW-200**



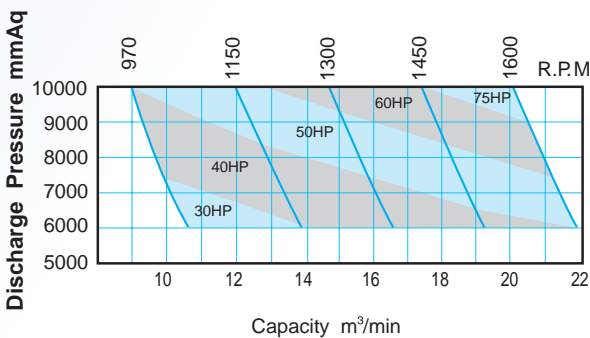
**THW-100**



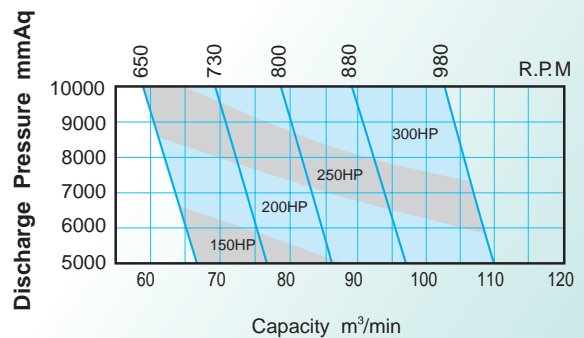
**THW-250**



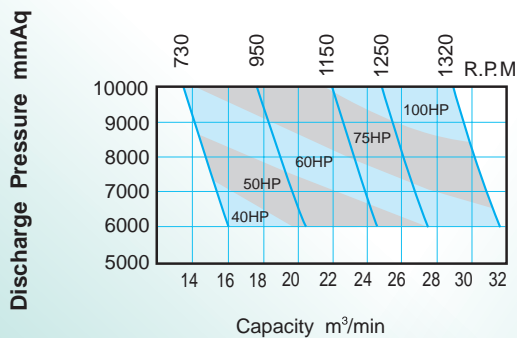
**THW-125A**



**THW-300A**

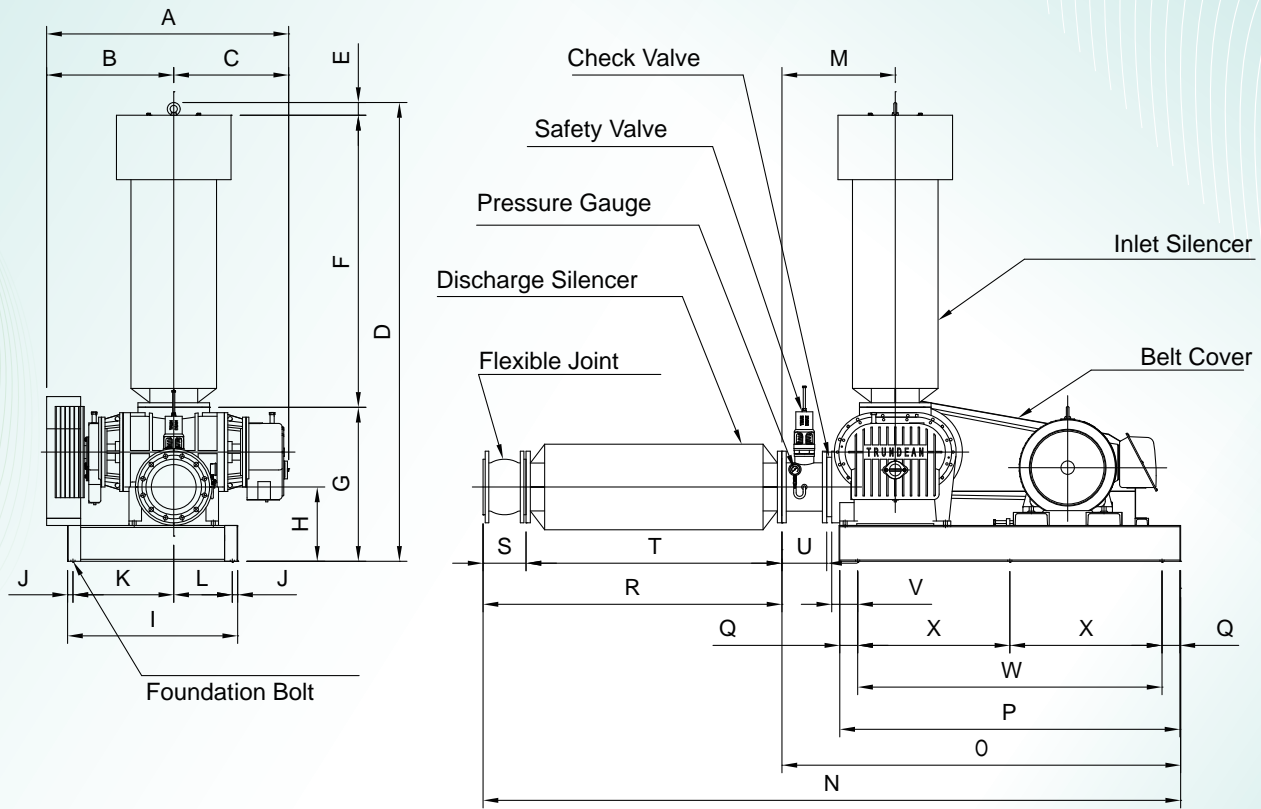


**THW-150A**



THW Type Performance Curve

# TH Type Dimension Drawing



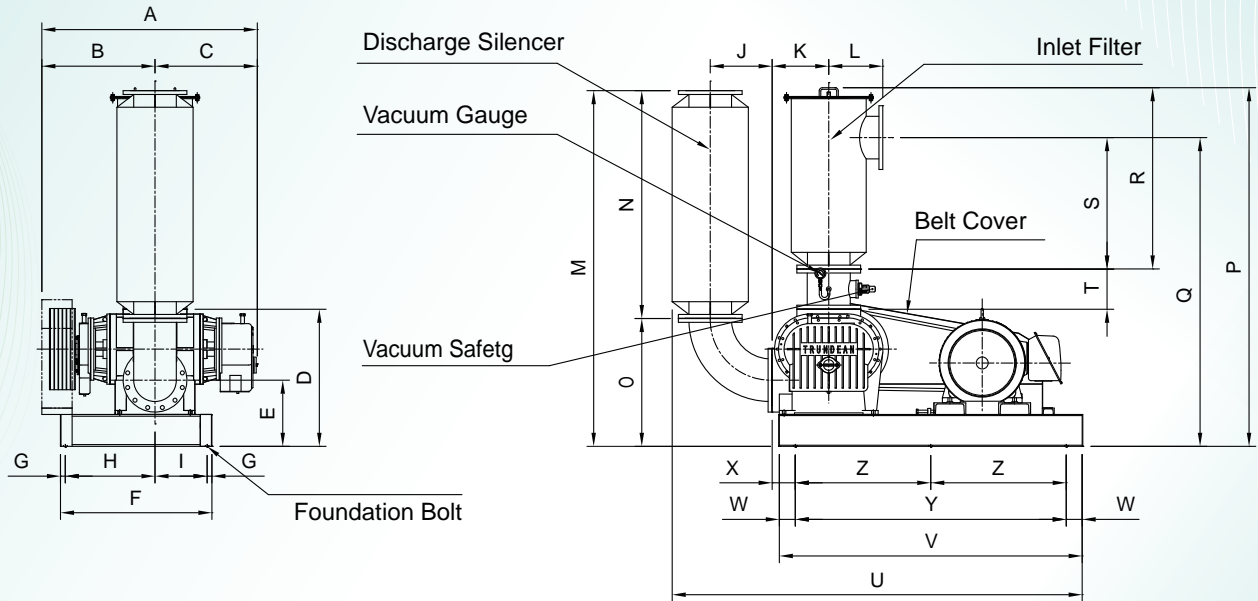
Models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	W1	W2
TH-40	349	195	154	820	51		260	185	330	18	177	117	304	709		500	50			123	86		400		30	61
TH-50	565	303	262	1134	51	741	342	175	470	18	285	149	326	1804	911	700	50	893	105	788	160	81	600		76	137
TH-65	658	346	312	1174	51	781	342	175	470	18	328	106	326	1814	907	700	50	907	115	792	160	81	600		94	169
TH-80	711	390	321	1248	51	782	415	183	470	18	247	187	380	2052	1130	900	100	922	130	792	185	129	700		151	234
TH-100	807	435	372	1318	51	841	462	196	470	18	292	142	380	2062	1130	900	100	932	135	797	185	129	700		168	270
TH-125	813	420	393	2022	60	1492	530	230	600	22	258	298	451	2945	1353	1100	100	1592	170	1422	200	138	900		290	464
TH-125A	893	460	433	2082	60	1492	530	230	600	22	298	258	451	2945	1353	1100	100	1592	170	1422	200	138	900		311	486
TH-150	991	503	488	2097	60	1492	545	245	600	22	340	216	451	2959	1353	1100	100	1606	180	1426	200	138	900		352	539
TH-150A	1066	555	511	2180	60	1492	628	275	600	25	395	155	511	3277	1671	1400	100	1606	180	1426	200	155	1400		580	777
TH-200	1171	624	547	2563	71	1632	860	380	950	30	477	413	583	3808	2177	1900	100	1631	205	1426	200	145		850	812	1226
TH-250	1352	710	642	2563	71	1632	860	415	950	30	563	327	633	3897	2227	1900	100	1670	240	1430	250	145		850	941	1407
TH-300	1531	797	734	2618	71	1632	915	433	950	30	590	300	687	3971	2281	1900	100	1690	260	1430	300	145		850	1026	1593
TH-300A	1402	747	655	2698	71	1632	995	435	1300	30	721	519	782	4279	2589	2200	150	1690	260	1430	300	208	1900		1575	2181

W1 : Weight of main body only. (Kg)

W2 : Weight of main body and all accessories which include Inlet & Discharge Silencer, Base Plate, T-Joint, Safety Valve, Check Valve, Belt Cover and Flexible Joint, doesn't include motor. (Kg)

TH Type Dimension Drawing

# THV Type Dimension Drawing



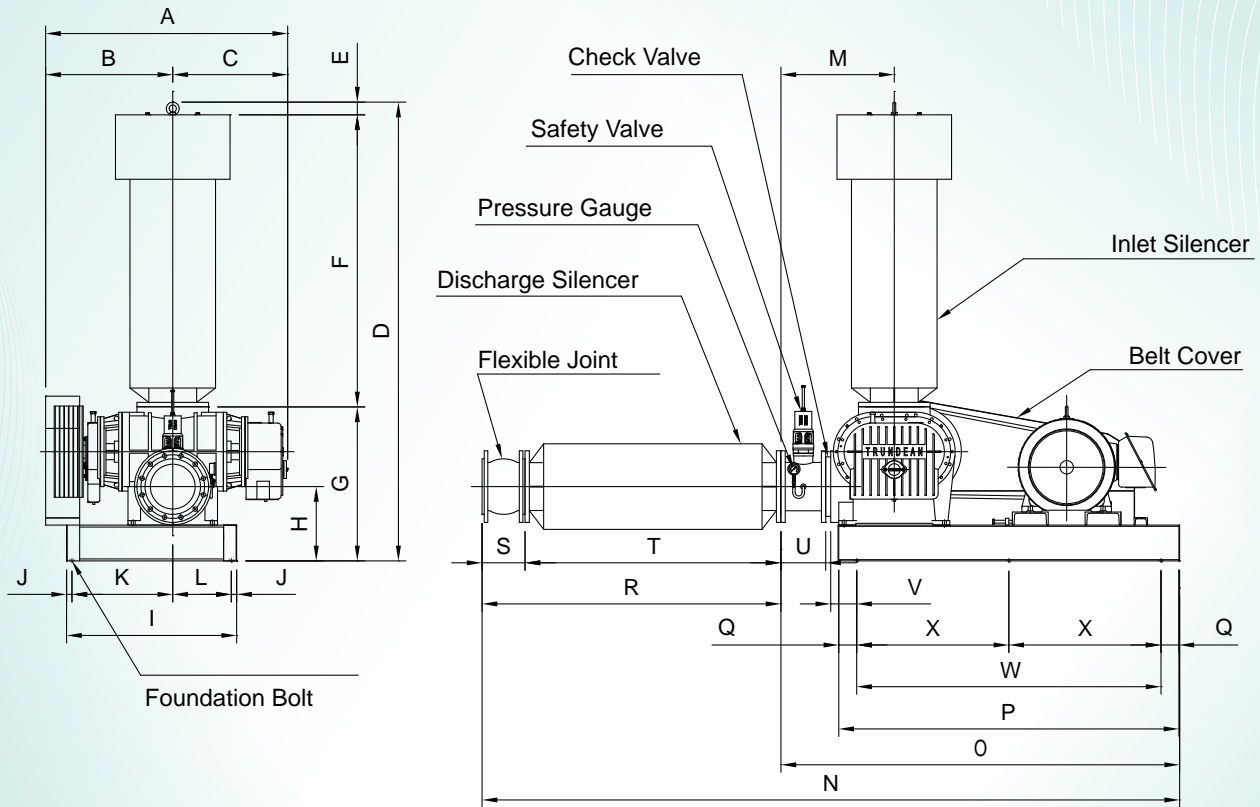
THV Type Dimension Drawing

Models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	W1	W2
THV-50	565	303	262	342	175	470	18	285	149	110	150	221	1073	788	285	1022	843	520	341	160	929	700	50	81	600		76	140
THV-65	658	346	312	342	175	470	18	328	106	120	150	223	1086	791	295	1125	934	623	432	160	963	700	50	81	600		94	169
THV-80	711	390	321	415	183	470	18	247	187	125	179	223	1100	792	308	1323	1102	721	500	187	1166	900	100	129	700		151	234
THV-100	807	435	372	426	196	470	18	292	142	162	179	243	1153	797	356	1335	1114	772	501	187	1229	900	100	129	700		168	270
THV-125	813	420	393	530	230	600	22	258	298	212	235	285	1862	1422	440	1546	1293	814	561	202	1514	1100	100	138	900		290	459
THV-125A	893	460	433	530	230	600	22	298	258	212	235	285	1862	1422	440	1546	1293	814	561	202	1514	1100	100	138	900		311	480
THV-150	991	503	488	545	245	600	22	340	216	252	235	285	1921	1425	496	1563	1310	816	563	202	1554	1100	100	138	900		352	530
THV-150A	1066	555	511	628	275	600	25	395	155	252	295	285	1951	1425	526	1646	1393	817	564	201	1872	1400	100	155	1200		580	769
THV-200	1171	624	547	860	380	950	30	477	413	312	355	337	2116	1425	691	1908	1655	846	593	202	2500	1900	100	145		850	812	1193
THV-250	1352	710	642	860	415	950	30	563	327	388	355	339	2231	1429	802	2250	1937	1138	825	252	2577	1900	100	145		850	941	1369
THV-300	1531	797	734	915	432	950	30	590	300	465	355	339	2325	1429	896	2355	2042	1138	825	302	2728	1900	100	145		850	1026	1536
THV-300A	1402	747	655	995	435	1300	30	721	519	465	450	339	2328	1430	898	2435	2122	1138	825	302	3040	2200	150	208	1900		1575	2125

W1 : Weight of main body only. (Kg)

W2 : Weight of main body and all accessories which include Inlet Filter, Bast Plate T-Joint, Vacuum Safety Valve Discharge Silencer, Belt Cover, 90° Joint, doesn't include motor. (Kg)

# THS Type Dimension Drawing



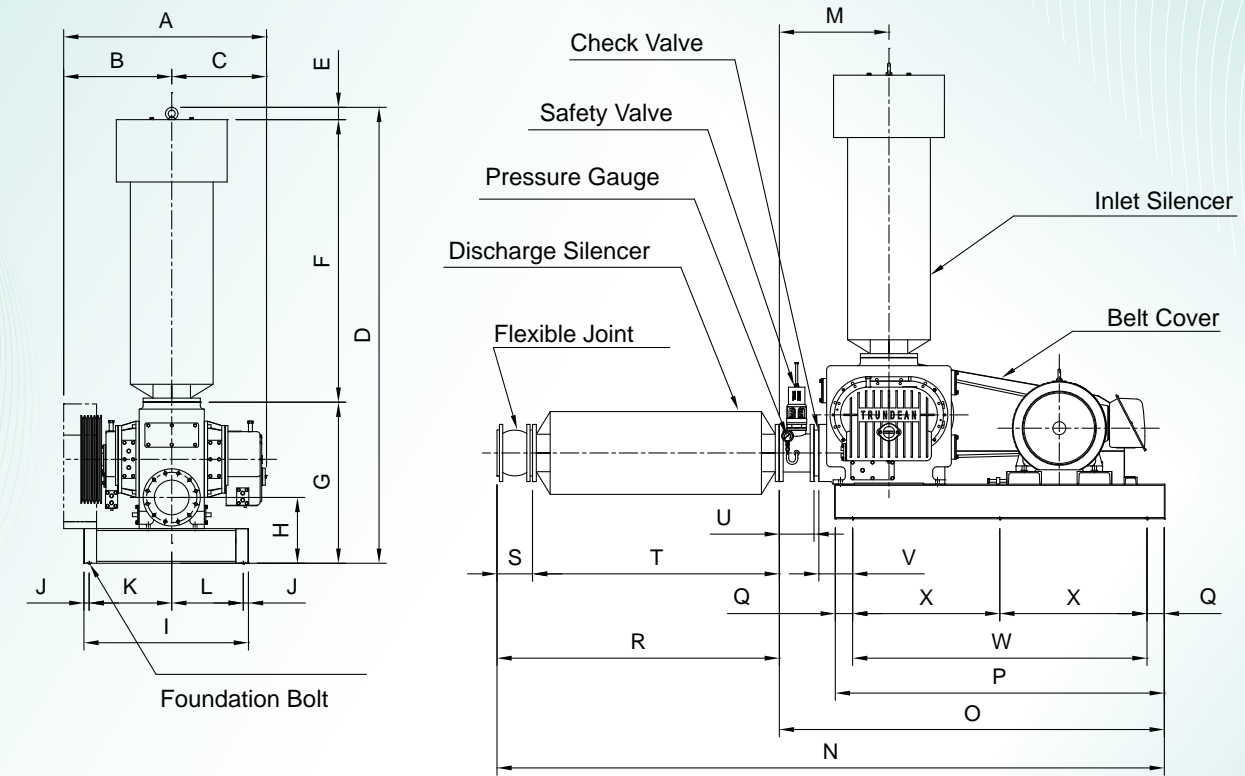
Models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	W1	W2
THS-80	711	390	322	1248	51	782	415	183	470	18	247	187	380	2052	1130	900	100	923	130	793	185	129	700		170	253
THS-100	807	435	372	1318	51	841	426	196	470	18	292	142	380	2062	1130	900	100	932	135	797	185	129	700		185	287
THS-125	514	420	394	2082	60	1492	530	230	600	22	258	298	451	2946	1354	1100	100	1592	170	1422	200	138	900		345	519
THS-125A	938	478	460	2082	60	1492	530	230	600	22	298	258	451	2946	1354	1100	100	1592	170	1422	200	138	900		388	563
THS-150A	1066	555	511	2180	60	1492	628	275	600	25	395	155	511	3277	1671	1400	100	1606	181	1426	200	155	1200		625	822
THS-200	1174	624	550	2563	71	1632	860	380	950	30	477	413	583	3804	2173	1900	100	1631	205	1426	200	145		850	810	1224
THS-250	1355	710	645	2563	71	1632	860	415	950	30	563	327	633	3893	2223	1900	100	1670	240	1430	250	145		850	970	1436
THS-300	1531	797	734	2618	71	1632	915	433	950	30	590	300	687	3971	2281	1900	100	1690	260	1430	300	145		850	1120	1687
THS-300A	1404	747	657	2698	71	1632	995	435	1300	30	721	519	782	4280	2590	2200	150	1690	260	1430	300	208	1900		1575	2182

W1 : Weight of main body only. (Kg)

W2 : Weight of main body and all accessories which include Inlet & Discharge Silencer, Base Plate, T-Joint, Safety Valve, Check Valve, Belt Cover and Flexible Joint, doesn't include motor. (Kg)

THS Type Dimension Drawing

# THW Type Dimension Drawing



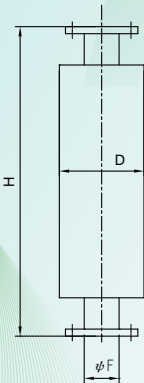
THW Type Dimension Drawing

Models	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	W1	W2
THW-80	705	390	315	1383	51	782	550	245	470	18	247	187	411	2083	1161	900	100	923	130	793	185	160	700		237	320
THW-100	799	435	365	1442	51	841	550	245	470	18	292	142	411	2165	1161	900	100	933	135	797	185	160	700		254	356
THW-125A	963	480	483	2182	60	1492	630	275	600	22	288	268	496	3096	1399	1100	100	1592	170	1422	200	183	900	850	498	673
THW-150A	1066	555	511	2282	60	1492	730	310	600	25	395	155	556	3396	1716	1400	100	1606	180	1426	200	200	1200		717	914
THW-200	1171	624	547	2633	71	1632	930	380	950	30	477	413	633	3854	2223	1900	100	1631	205	1426	200	195			896	1310
THW-250	1352	710	642	2633	71	1632	930	430	950	30	563	327	683	3943	2273	1900	100	1670	240	1430	250	195		850	1217	1683

W1 : Weight of main body only. (Kg)

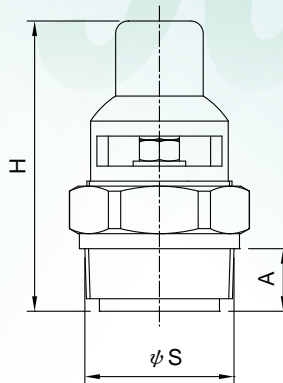
W2 : Weight of main body and all accessories which include Inlet & Discharge Silencer, Base Plate, T-Joint, Safety Valve, Check Valve, Belt Cover and Flexible Joint, doesn't include motor. (Kg)

# Accessories Dimension



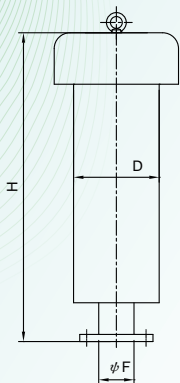
### Discharge Silencer

Type	H	D	$\psi F$	Wt.(kg)
DS-40	527	114	40	8
DS-50	787	168	50	13
DS-65	791	216	65	19
DS-80	791	216	80	20
DS-100	796	268	100	27
DS-125	1420	321	125	55
DS-150	1424	321	150	52
DS-200	1424	478	200	78
DS-250	1428	478	250	100
DS-300	1428	628	300	130



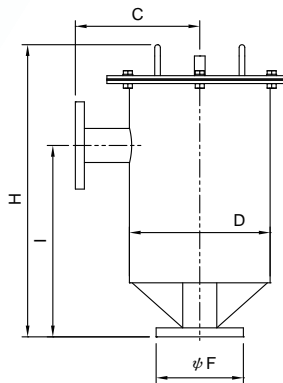
### Vacuum Safety Valve

Type	H	$\psi S$	A	Wt.(kg)
VB-50	116	PT 2"	25	1



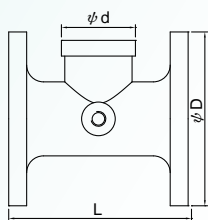
### Inlet Silencer

Type	H	D	$\psi F$	Wt.(kg)
SS-40	525	114	40	3
SS-50	740	168	50	14
SS-65	780	216	65	18
SS-80	780	216	80	19
SS-100	840	268	100	24
SS-125	1490	321	125	46
SS-150	1490	321	150	49
SS-200	1630	478	200	99
SS-250	1630	478	250	105
SS-300	1630	628	300	143



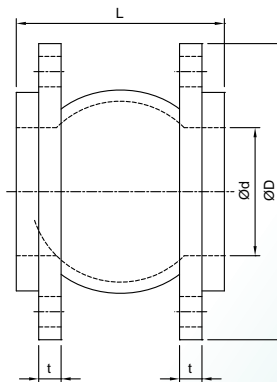
### Vacuum Inlet Filter

Type	C	D	$\psi F$	H	I	Wt.(kg)
SR-50	221	250	155	519	340	16
SR-65	223	250	175	621	430	20
SR-80	223	250	185	721	500	22
SR-100	243	290	210	721	500	25
SR-125	285	370	250	813	560	42
SR-150	287	370	280	815	562	45
SR-200	337	470	330	845	592	73
SR-250	339	470	400	1137	824	73
SR-300	339	470	445	1137	824	102



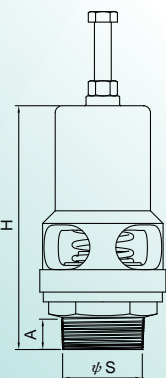
### T-Joint

Type	L	$\psi d$	$\psi D$	Wt.(kg)
SP-40	85	0.5"	90	1
SP-50	160	1.5"	155	5
SP-65	160	1.5"	175	7
SP-80	185	2"	185	8
SP-100	185	2"	210	8
SP-125	200	2"	250	12
SP-150	200	3"	280	17
SP-200	200	3"	330	22
SP-250	250	3"	400	37
SP-300	300	3"	445	



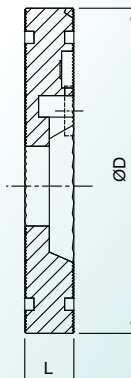
### Flexible Joint

Type	L	$\psi d$	$\psi D$	t	Wt.(kg)
FJ-50	105	50	155	13	3
FJ-65	115	65	175	14	5
FJ-80	130	80	185	14	5
FJ-100	135	100	210	14	6
FJ-125	170	125	250	17	8
FJ-150	180	150	280	18	10
FJ-200	205	200	330	19	15
FJ-250	240	250	400	20	19
FJ-300	260	300	445	24	26



### Safety Valve

Type	H	$\psi S$	A	適用機型	Wt.(kg)
SV-12	95	PT 0.5"	17	TH-40	0.5
SV-38	132	PT 1.5"	26	TH-50,65	1
SV-50	180	PT 2"	28	TH-80,100,125	3
SV-80	260	PT 3"	36	TH-150,200,250,300	7



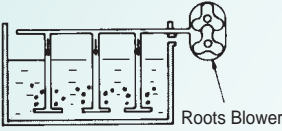
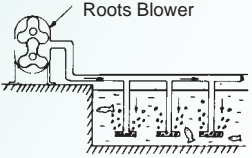
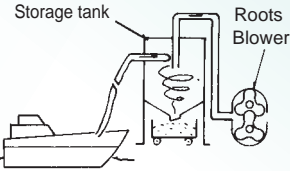
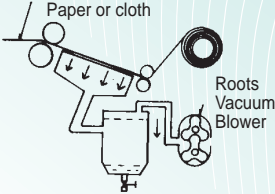
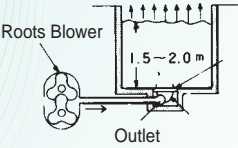
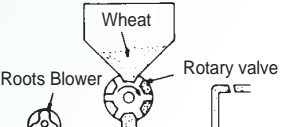
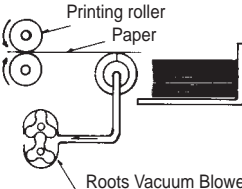
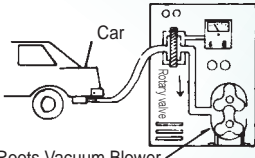
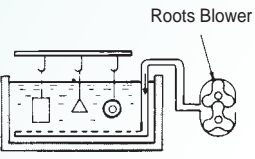
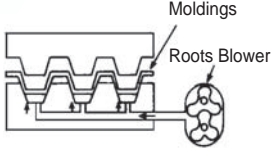
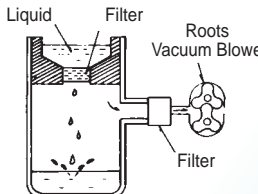
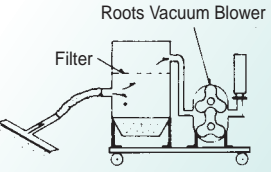
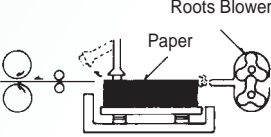
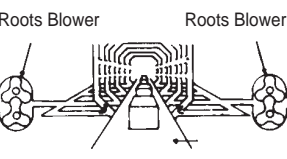
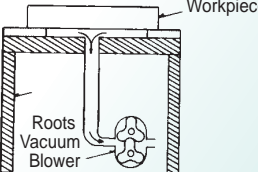
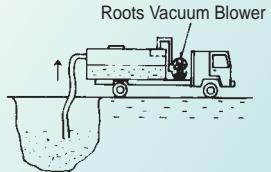
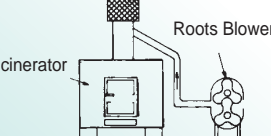
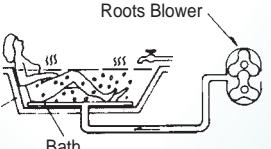
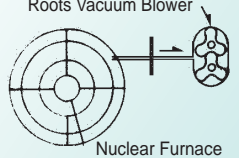
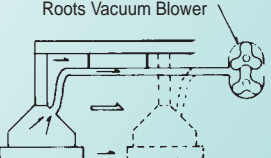
### Check Valve

Type	$\psi D$	L	Wt.(kg)
DS-40	65	88	1
DS-50	106	16	1
DS-65	125	16	2
DS-80	133	16	2
DS-100	158	16	2
DS-125	189	16	3
DS-150	218	19	4
DS-200	265	28	8
DS-250	332	28	13
DS-300	375	32	21

# Application

## Pressure Conveyance

## Vacuum

<p><b>Waste Water Treatment</b></p>  <p>The blower is for aeration and stir purpose in the waste water treatment plant.</p>	<p><b>Oxygen Supply for Farming Ponds</b></p>  <p>The blower is for underwater enzyme supply in comparatively shallow ponds.</p>	<p><b>Conveyance of Particles</b></p>  <p>The vacuum blower is applied to convey soybean, rice and wheat.</p>	<p><b>Dehydration</b></p>  <p>The vacuum blower is applied to paper and fiber industry.</p>
<p><b>Barnyard Manure, Composted Manure Fertilizing</b></p>  <p>The blower promotes the fermentation of domestic animal's excreta, etc..</p>	<p><b>Conveyance of Grain</b></p>  <p>The blower is for pneumatic transport of wheat or other grain separated by a rotary valve.</p>	<p><b>Paper-Feeding for Printer</b></p>  <p>Keeps paper on the deceleration roller.</p>	<p><b>Smog Testing</b></p>  <p>The blower is applied to inspect exhaust gas from car.</p>
<p><b>Electroplating Tank</b></p>  <p>The blower supply air to tank to stir the liquid for high-quality electroplating.</p>	<p><b>Molding Press</b></p>  <p>The blower helps take out the pressed products.</p>	<p><b>Filter</b></p>  <p>A strong vacuum shortens time of the liquid passing the filter.</p>	<p><b>Vacuum Cleaner</b></p>  <p>The vacuum blower is applied to dust collector for general industry.</p>
<p><b>Paper-Feeding for Printer</b></p>  <p>The blower helps printer to separate, align and feed papers.</p>	<p><b>Drying the Conveying-Belts</b></p>  <p>The blower is applied to dry the conveying-belts.</p>	<p><b>Reprocess Goods Absorption-Maintenance</b></p>  <p>Fix non-magnetic material on the worktable by vacuum.</p>	<p><b>Vacuum Mud-Sucking Truck</b></p>  <p>The vacuum blower is applied to clean colloidal sludge.</p>
<p><b>Incinerator</b></p>  <p>The blower enhances the combustion efficiency and promotes the exhaust gas removal.</p>	<p><b>Therapeutic Bath Tub</b></p>  <p>The blower is widely applied to health bath aeration in hospital and hotel.</p>	<p><b>Nuclear Factory</b></p>  <p>The vacuum blower is applied to collect the radiation from nuclear furnace.</p>	<p><b>Absorption Transporter</b></p>  <p>The vacuum blower is applied to transport heavy material such as iron plate and breakable glass.</p>



# Units Conversion Table

## Pressure

	mbar	Pa	atm	lbf/in <sup>2</sup>	kgf/cm <sup>2</sup>	in Hg	mmAq
1 mbar	1	10 <sup>2</sup>	9.869X10 <sup>-4</sup>	1.45X10 <sup>-2</sup>	1.02X10 <sup>-3</sup>	2.953X10 <sup>-2</sup>	10.197
1 Pa	0.01	1	9.87X10 <sup>-6</sup>	1.45X10 <sup>-4</sup>	1.02X10 <sup>-5</sup>	2.953X10 <sup>-4</sup>	0.102
1 atm	1.013X10 <sup>3</sup>	1.013X10 <sup>5</sup>	1	14.7	1.033	29.92	1.033X10 <sup>4</sup>
1 lbf/in <sup>2</sup>	68.95	68.95X10 <sup>2</sup>	6.805X10 <sup>-2</sup>	1	7.03X10 <sup>-2</sup>	2.036	7.03X10 <sup>2</sup>
1 kgf/cm <sup>2</sup>	9.807X10 <sup>2</sup>	9.807X10 <sup>4</sup>	0.968	14.223	1	28.96	10 <sup>4</sup>
1 in Hg	33.86	33.86X10 <sup>2</sup>	3.342X10 <sup>-2</sup>	0.491	3.45X10 <sup>-2</sup>	1	3.45X10 <sup>2</sup>
1 mmAq	9.806X10 <sup>-2</sup>	9.806	9.678X10 <sup>-5</sup>	1.42X10 <sup>-3</sup>	10 <sup>-4</sup>	2.896X10 <sup>-3</sup>	1

### Common formulas for pressure conversion

1Pa=0.102mmAq  
1psi=703mmAq

1mbar=10.197mmAq  
1Torr=133.3Pa

1mmHg=13.6mmAq  
1Torr=1.333mbar

## Capacity

	m <sup>3</sup> /min(cmm)	m <sup>3</sup> /hr(cmh)	ℓ/min(c ℓm)	ft <sup>3</sup> /min(cfm)
1m <sup>3</sup> /min	1	60	1000	35.31
1m <sup>3</sup> /hr	0.017	1	16.67	0.589
1ℓ /min	0.001	0.06	1	0.035
1ft <sup>3</sup> /min	0.028	1.699	28.32	1

## Power

	kg-m/sec	KW	HP	PS
1 kg-m/sec <sup>2</sup>	1	0.001	0.0013	0.0013
1 KW	1000	1	1.341	1.360
1 HP	745.699	0.746	1	1.014
1 PS	735.498	0.736	0.986	1

## Usage Instruction for Roots Blower :

### ● Before starting the blower, check the following to make sure they are all normal.

#### 1、Distribution Pipes

- ◆ Make sure insides of the pips are clean and all connecting part are tightly secured.
- ◆ Make sure all valves are opened to avoid the pressure going up.

#### 2、Power Supply

- ◆ Motor wiring, voltage, frequency, etc. must be normal.

#### 3、Direction of Rotation

- ◆ Please follow the instruction on the safety cover. If rotation reversed, modified the motor wiring.

#### 4、Safety Valve

- ◆ Adjust the safety valve to 1.5~2.5 times than operation pressure.

#### 5、Lubricating oil

- ◆ Make sure that oil level stays at middle of oil gauge. Change the oil three months a time.
- ◆ Before turn blower on, check if it runs smoothly by hand.

### ● The Initial Noise

Because of viscosity of oil, there would be some noise when blower runs at very beginning. It would be normal approx. 10~20 minutes later

### ● Attention

Please pay attention to the sounds, pressure, current and temperature, etc. when the blower is running. If there is any abnormal circumstance, turn off the blower immediately and find the cause out.

Sincere Enthusiasm Professional Innovative



Taoyuan Head Office, Taiwan



Office Lobby



CNC Machine Area



Testing Area for MD Pump



Container Port



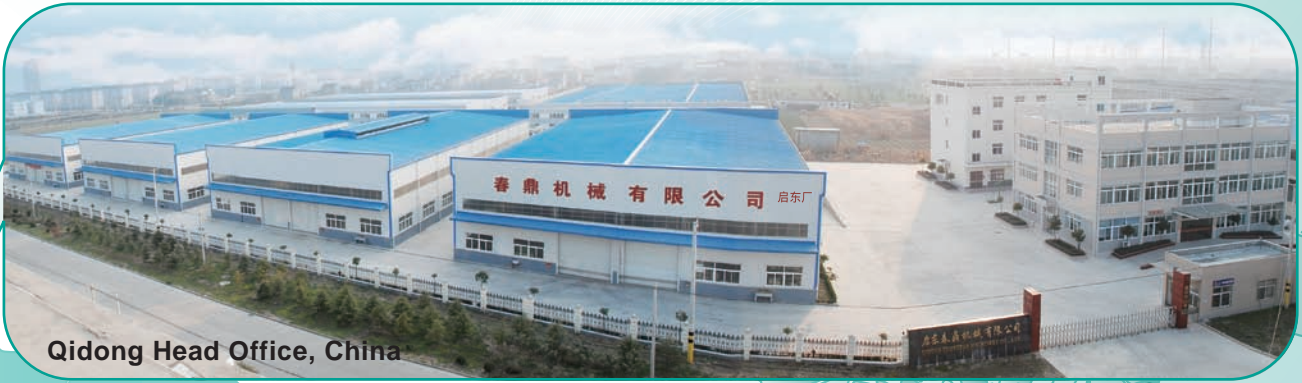
Testing area for Roots Blower



Finished Product Storage Area



Tainan Branch, Taiwan



Qidong Head Office, China



Office Lobby



Dormitory for Trundeans' Staff



Qidong Head Office



Product Storage Area

## Advantages Products Aspect:

- TH Series: The compartment and the side cover of TRUNDEAN Roots Blower has a flange and groove rim, which can not only strengthen the blower's operational functions but also prevent eccentric phenomenon resulting from the fastening of the stud, which may shorten the life of blower.
- TV Series: The Vertical Roots Blower uses direct-drive, reducing wear and tear on the belt, reducing the amount of maintenance needed, and reducing the risk of oil leaks.
- TSW Series: Because it is submersible under water, there wouldn't be much noise when the blower is running.
- TMD Series: Magnetic Drive Pump materials comprise mainly GFR-PP and PVDF. Therefore, almost all chemical solutions can be safely transmitted. Abandoning the traditional design of shaft seal, the no shaft seal pump can be completely sealed, so there is no risk of damage to the pump which may result in leaks.

## Service Aspect:

- Technical Consultancy Service: To enable customers to accurately choose from product specifications, Trundeans Machinery Industrial Co., Ltd. provides technical consultancy service to solve customers' technical problems when choosing products, thereby effectively reducing customers' business costs.
- Innovation R&D Service: R&D is the motivation for Trundeans Machinery Industrial Co., Ltd. on our way to carry forward the past and forging ahead to future prosperity, to seek sustained improvement and perfection. Our well trained production groups can at all times meet the customer requirements for any specifications, so that customers can rest assured.
- Quality Delivery Service: In addition to smooth operation under perfect ISO 9001 system, and complete test and inspection assurance, product delivery is also our acknowledgement and responsibility, so that our service personnel can support every customer at any time and location.
- After-sales Maintenance Service: To ensure maneuverability and stability for customers in the use of products, we shall provide the most efficient and highest quality services. As well as providing customers with a one-year warranty, we guarantee the supply and replacement of parts for future maintenance.



Bangkok Branch,  
Thailand



**TRUNDEAN**  
MACHINERY

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Agency