PROCUREMENT SERVICES

CITY OF SURREY, SURREY CITY HALL
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Tel: 604-590-7274
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ADDENDUM No. 2

REQUEST FOR QUOTATION No.:	**1220-040-2024-089**
TITLE:	**Guildford Aquatic Centre Gas Stripper Installation**
ADDENDUM ISSUE DATE:	**December 3, 2024**
REVISED DATE:	**PREFER TO RECEIVE SUBMISSION ON OR BEFORE DECEMBER 11th, 2024.**

INFORMATION FOR CONTRACTORS

Contractors are advised that Addendum No. 2 to 1220-040-2024-089 is hereby issued by the City. This addendum shall form part of the contract documents and is to be read, interpreted and coordinated with all other parts. The following information is provided to answer questions raised by Contractors for the above-named project, to the extent referenced and shall become a part thereof. No consideration will be allowed for extras due to the Contractors or any sub-contractor not being familiar with this addendum. This Addendum No. 2 contains eighteen (18) pages.

REVISED DATE:

Delete Section 3 in its entirety and substitute with Section 3 below:

"3. DATE

The City would prefer to receive Applications on or before December 11, 2024 (the "**Date**").**"**

CLARIFICATIONS:

1. Refer to the attachment Drawings - Mechanical - Guildford Aquatic Centre Gas Stripper Installation and revise the following notes:

1. REFERENCED DRAWING M103 – MECHANICAL SPECIFICATIONS

DIVISION 25 INTEGRATED AUTOMATION

Delete Section 1.2 in its entirety and substitute with Section 1.2 below:

1.2 Related Requirements
This section of the Specification forms part of the Contract Documents and is to be read, interpreted and coordinated with all other parts.

Delete Section 1.6 in its entirety and substitute with Section 1.6 below:

1.6 Design Requirements
Design and provide conduit and wiring where required linking the new equipment to the existing BMS system. Provide new points on the BMS for the New gas stripper pumps integration and Alarm out. Quantity and points contents as reviewed by the Consultant prior to installation. New EF-101-24 can be connected to existing Trichloramine Exhaust fan status to BMS.

Retain the services of a qualified electrician to provide power and data cabling to the BMS control panel. Power wiring and conduit as well as data cabling and conduit shall comply with the electrical code and coordinated on-site with existing services.

Delete Section 2.1 in its entirety and substitute with Section 2.1 below:

2.1 Control Components
Provide control integration from the Each of the Gas stripper pumps to the existing Pool Flow meters (FM-1) on the main pool water supply line that it is serving. typ. for each pool. Verify operation and calibrate as required to turn off the pumps under no flow conditions.

Any new control devices required for new equipment to be compatible with existing BMS.

Delete Section 3.1 in its entirety and substitute with Section 3.1 below:

3.1 Sequence of Operation
1. When the 50m Pool flow meter detects flow (FM-1) , and are proven on, energize PP-101-24.
2. When the 50m Pool flow meter (FM-1) detects No flow, de-energize PP-101-24.
3. When the Leisure Pool flow meter (FM-1) detects flow, and is proven on, energize PP-201-24.
4. When the Leisure Pool flow meter (FM-1) detects No flow, de-energize PP-201-24.
5. When the Hot pool Pool flow meter (FM-1) detects flow, and are proven on, energize PP-301-24.
6. When the Hot Pool flow meter (FM-1) detects No flow, de-energize PP-301-24
7. If EF-101-24, PP-101-24, PP-201-24 or PP-301-24 fail to activate, provide an alarm at the BMS Panel.

QUESTIONS AND ANSWERS:

Q1. Will there be any after-hour shutdowns needed?

A1. No, the building is occupied and available to contractor from 6:00am – 9:00pm, Monday to Friday. Weekend access can be discussed.

Q2. Do the pumps need to be on housekeeping pads?

A2. Yes, please pour 4” concrete pad or raise the pumps off the ground 4” by other means approved by the City.

Q3. Could you confirm that surge tank penetrations, electrical conduit installations, and breaker setups for the gas strippers that have been completed?

A3. **The City has completed all the penetrations to the surge tanks with valves and caps. The City has run PVC conduit for electrical to the leisure pool and hot tub gas stripper points (not main pool). The City will install properly rated breakers for all three gas strippers.**

Q4. The City has done some electrical work, can you please confirm what scope is still required with drawing.

A4. **Below is the electrical scope left to be accomplished; no drawing will be supplied:**

Main Pool:

- **Supply and install PVC conduit and cable from existing panel for the main pool gas stripper and the City supplied breaker to pull box at location of pump and VFD.**
- **Supply and install tech cable from pull box to pump/VFD and terminate.**

Leisure and Hot Tub:

- **Supply and install tech cable from City supplied and previously run pull boxes complete with cable to location of pump/VFD and terminate. Breaker supplied and installed by the City.**

Trichloramine Fan:

- **Remove existing cabling from existing trichloramine fan and terminate into new City supplied trichloramine fan.**

BMS:

- **As stated by AME in addendum and Specification.**

Q5. Is City providing the Gas Stripper equipment?

A5. **Yes. The City has already purchased the equipment.**

Q6. Is the mechanical contractor responsible for commissioning and start-up of customer supplied equipment and VFDs or is that included in the equipment price from the wholesaler?

A6. **Mechanical Contractor to be responsible for commissioning and start up.**

Q7. Are there shop drawings for the equipment purchased by the City?

A7. **Refer to ATTACHMENT NO. 1 – Guilford Gas Stripper Retro-fit Shop Drawings for specification.**

All Addenda will become part of the Contract Documents.

- END OF ADDENDUM –

#108-2411 Dollarton HWY,
North Vancouver, BC V7H 0A3
PHONE: 1-800-663-5905
FAX: 604-980-0196
Cell: 604-916-3316
E-MAIL: jack@comm-aquatic.com

DB PERKS & ASSOCIATES LTD.

31 July, 2024
City Of Surrey.
Attn: Kevin Littlejohn

Guilford Gas stripper Retro-Fit - Equipment Supply:

SUBMISSION 1

- PUMPS: PP 101-24, PP 201-24 & PP 301-24
- EXHAUST FAN - EF-001-24
- THM Stripper - GS-101-24, 201-24 & 301-24

JACK HENRY
DB PERKS & ASSOC.
Cell: 604-916-3316
Direct: 604-973-0845

HAYWARD®

TriStar® VS 900

»»» Variable-Speed Pump

PP101, 201 & 301

ADVANCED ENERGY EFFICIENCY.

Intuitive control pad can be rotated in four directions on the pump or removed and wall mounted

Upgraded dual-voltage motor drive maintains optimal operating efficiency

No-rib strainer basket with see-through cover ensures easy debris removal

Advanced hydraulic design provides ample power to replace most high-performance pumps up to 1.5 full-rate or 2.0 max-rate HP

INDUSTRY-LEADING ENERGY EFFICIENCY

TriStar VS 900 is the most energy-efficient residential pool pump on the market, according to EPA ENERGY STAR® third-party testing data.

DESIGNED FOR DURABILITY

A chemical-resistant Viton® seal and a 3-year warranty mean TriStar VS 900 will provide years of powerful performance.

UPGRADE AND SAVE

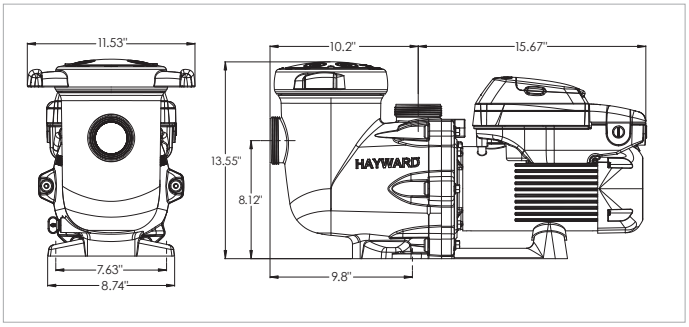
TriStar VS 900 is right-sized to be installed in any application and easy to integrate with any automation system.

SAVE UP TO **90%** ON ENERGY COSTS*

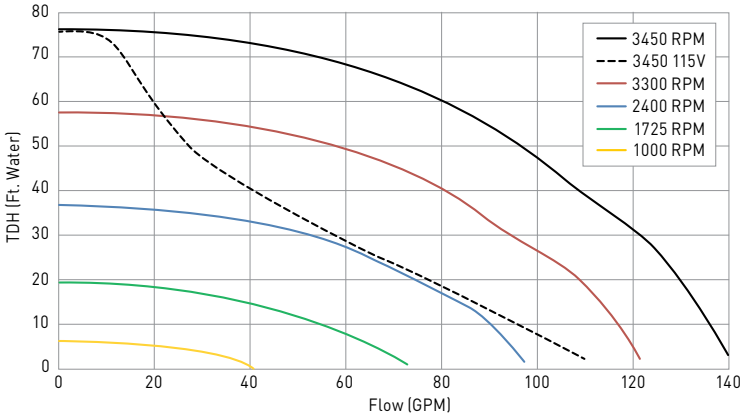
SPECIFICATIONS

MODEL NUMBER	STAND ALONE	RELAY CONTROL	HAYWARD AUTOMATION	TOTAL HP	VOLTS	UNION CONNECTIONS	WARRANTY
SP32900VSP	•	•	•	1.85	230/115V	2″ x 2.5″	3 years

TRISTAR VS 900 DIMENSIONS (INCHES)



TRISTAR VS 900 PERFORMANCE COMPARISON



TriStar VS 900 pumps are listed by: NSF c UL us

* Compared to single-speed pumps.

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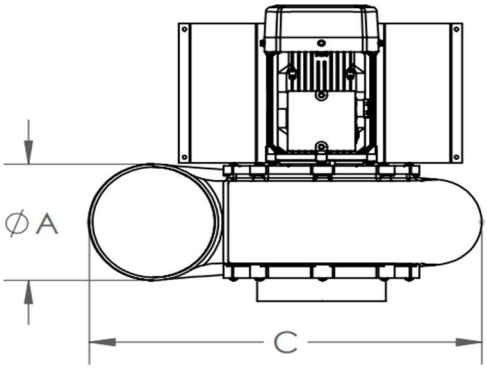

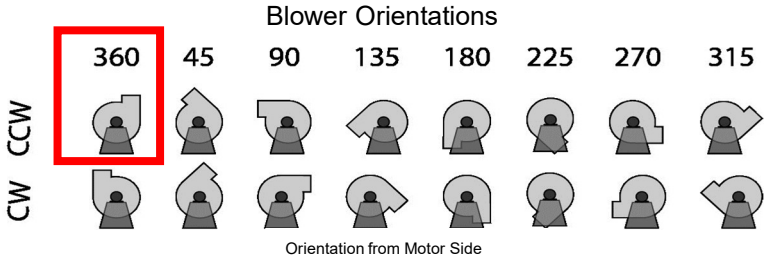

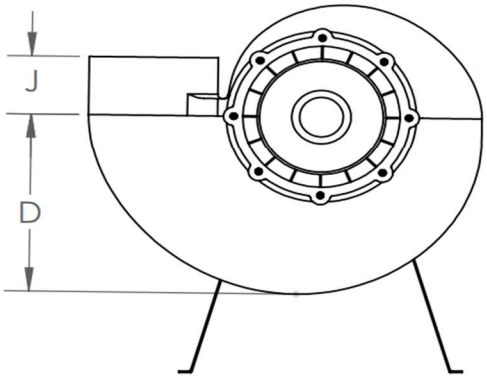

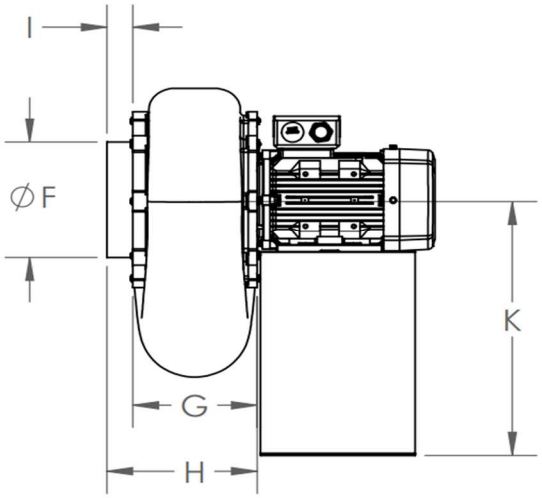

Blower shown with Optional Motor Support Stand

	Mechanical Data							
	ØA (OD)	**C**	**D**	**ØF (OD)**	**G**	**H**	**I**	**J**
in	6.29	20.08	9.43	6.29	6.52	7.74	1.22	3.93
mm	160	511	240	160	166	197	31	100

	Motor Height (K)		
	0.25 Hp	**0.33 Hp**	**~~1 Hp~~ | 1.5 Hp**
in	12.19	12.54	14.94
mm	310	319	380

Project Name	GUILDFORD AQUATIC CENTRE - GAS STRIPPER RETROFIT
Date	
Engineer/Sales Rep	
Client	
Contractor	

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PLASTEC 20

Model Numbers

GUILDFORD AQUATIC CENTRE - GAS STRIPPER RETROFIT

Model Number	Max. Flow (cfm)	Min. Flow (cfm)	Max. Static (in. Wg)	Min. Static (in. Wg)	Phase	Power (hp)	RPM	Voltage (V)	FLA	Weight (lb)
P20SS6P025	610	30	0.63	0.15	Single Phase	0.25	1120	115/208-230	4.16/2.26-2.08	23.3
P20SS2P100	765	30	5.8	0.15	Single Phase	1	3390	115/208-230	9.28/5.02-4.64	25.3
P20SS2P150	1200	30	5.8	0.15	Single Phase	1.5	3435	115/208-230	12.50/7.24-6.24	30.8
P20SS4P033	910	30	1.44	0.15	Single Phase	0.33	1720	115/208-230	3.49/1.88-1.74	19.4
P20ST6P025	610	30	0.63	0.15	Three Phase	0.25	1120	208-230/460	1.33-1.25/0.62	18.9
P20ST2P150	1200	30	5.8	0.15	Three Phase	1.5	3510	208-230/460	4.14-4.10/2.05	29.9
P20ST2P100	765	30	5.8	0.15	Three Phase	1	3480	208-230/460	3.05-3.06/1.53	26.2
P20ST4P033	910	30	1.44	0.15	Three Phase	0.33	1715	208-230/460	1.43-1.39/0.70	17.8
P20CT2P150	1200	30	5.8	0.15	Three Phase	1.5	3510	575	1.64	29.9
P20CT4P033	910	30	1.44	0.15	Three Phase	0.33	1700	575	0.53	17.8

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PLASTEC Ventilation Inc.
2012 58th Avenue Circle East
Bradenton, FL 34203 ■ USA
plastecventilation.com

GUILDFORD AQUATIC CENTRE - GAS STRIPPER RETROFIT

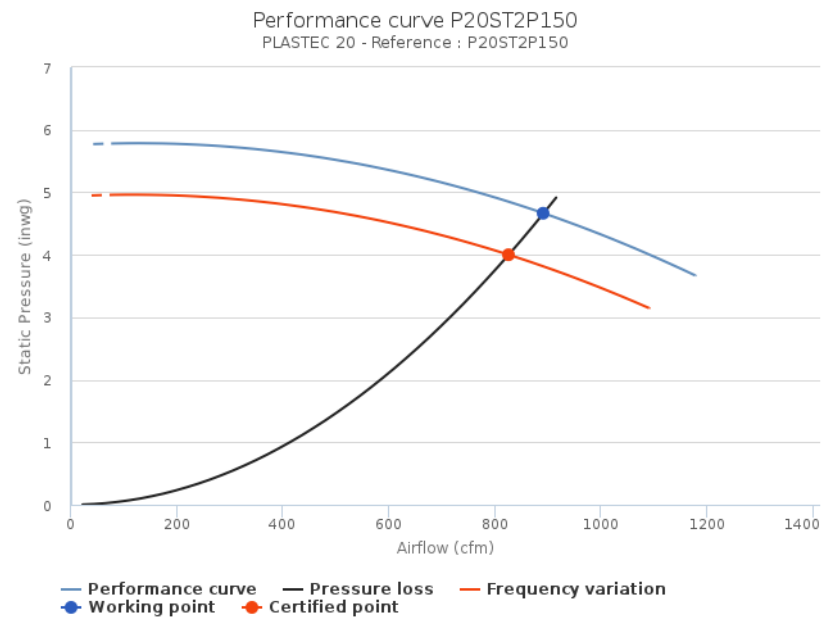
PLASTEC 20 - Reference : P20ST2P150

Certified point	
Airflow (cfm)	825
Static Pressure (inwg)	4
With frequency variation	Yes
Air Temperature (°F)	59
Altitude (ft)	0

Parameters	
Motor power	1.47 hp
Version	Standard
Motor phase	Three Phase
Motor Frequency	60 Hz
Voltage	208 - 230 V / 460 V

Working point	
Airflow (cfm)	891
Working speed (RPM)	3450
Ps (inwg)	4.66
Pt (inwg)	5.1
Pd (inwg)	0.43
Tolerance (RPM %)	7.39 %

Frequency variation	
Working speed (RPM)	3195
Frequency (Hz)	56
Airflow (cfm)	825
Ps (inwg)	4
Pt (inwg)	4.37
Pd (inwg)	0.37



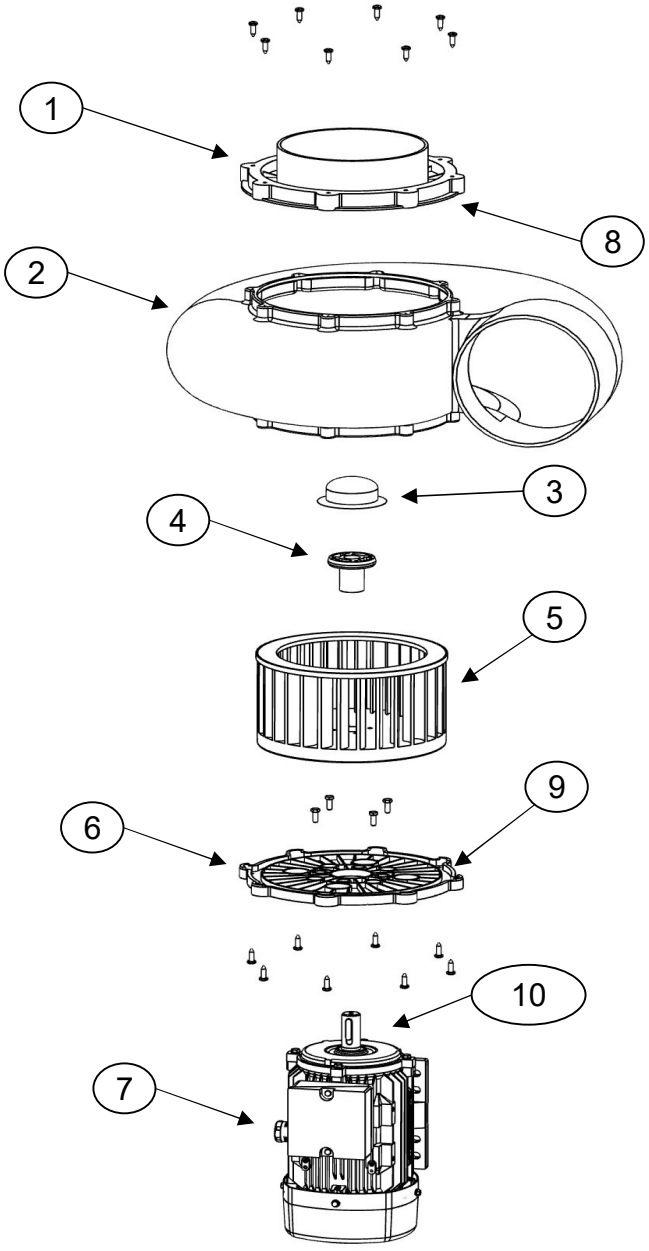
Accoustic data at 3195 RPM

	Qv	Ps	LwA	LpA	Octave band (Hz)							
	cfm	inwg	dB(A)	dB(A)	63	125	250	500	1000	2000	4000	8000
Casing	-	-	-	-	-	-	-	-	-	-	-	-
Inlet	983	3.65	87	76	90.9	79.8	88.9	86.4	81.5	72.7	70.2	63.8
Outlet	983	3.65	88.1	77.1	89.9	82.9	89	88.1	82	75	72.7	66.8

Accoustic pressure at 1 meters

Expanded View

GUILDFORD AQUATIC CENTRE - GAS STRIPPER RETROFIT



1	Inlet Flange
2	Housing
3	Hub Cap
4	Hub
5	Impeller
6	Motor Plate
7	Motor
8	Inlet Gasket
9	Motor Plate Seal
10	Shaft Key

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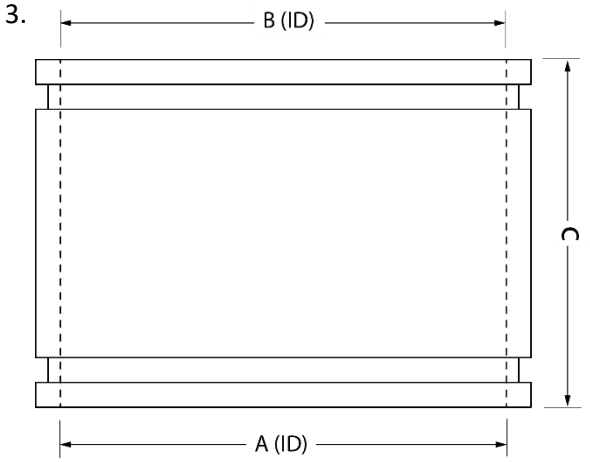
FLEXIBLE PVC REDUCER/COUPLING

3.



Model Number	A in	B in	C in	Weight Lbs	Blower compatibility
156-33	3.4	3.4	4.25	0.83	S10
156-43	4.4	3.4	4	1	S10/S12
156-44	4.5	4.5	4.25	1.25	S12
156-54	5.5	4.4	4	1.25	P15/S14/S12
156-63	6.4	3.4	6	2.1	P20/S16/S10/J20
156-64	6.4	4.4	5.63	2.25	P20/S16/S12/J20
156-65	6.4	5.5	4.75	1.5	P15/S14/P20/S16/J20
156-66	6.4	6.4	6	2.5	P20/S16/J20
156-84	8.55	4.4	6	3.33	P25/S18/S12/J25
156-86	8.55	6.4	5.88	3	P25/S18/P20/S16/J20/J25
~~**156-88**~~	~~8.55~~	~~8.55~~	~~5.75~~	~~7~~	~~P25/S18/J25~~
156-106	10.6	6.4	6.63	5	P30/P20/S16/J30/J20
~~**156-108**~~	~~10.6~~	~~8.55~~	~~6.38~~	~~5~~	~~P30/P25/S18/J30/J20~~
156-1010	10.6	10.6	5.88	11	P30/J30
156-126	12.6	6.4	6.25	9	P35/P20/S16/J20
156-128	12.6	8.55	6.5	4	P35/P25/S18/J25
156-1210	12.6	10.6	6.25	5	P35/P30/J30
156-1212	12.6	12.6	6.38	7	P35
ISLDC20	20	20	9	12	P50
156-LDC2320	20	23	9.5	16	P50

FEATURES

Manufactured from flexible PVC materials that comply with the applicable requirements of ASTM C 1173 Standard Specification for Flexible Transition Couplings. Can be used to form a leak proof joint between section plain end pipe or fittings of the same or different materials such as iron, clay, ductile iron, concrete, and plastic.

- Manufactured out of elastomeric Polyvinyl Chloride.
- 300 premium grade stainless steel hose clamps.
- Deflection sealing resistance up to 4.3 psi.
- Shear testing up to 50lbs per inch of nominal diameter.
- Shore “A” durometer hardness testing up to 50-75.

Project Name	GUILDFORD AQUATIC CENTRE - GAS STRIPPER RETROFIT
Date	
Engineer / Sales Rep	
Client	
Contractor	

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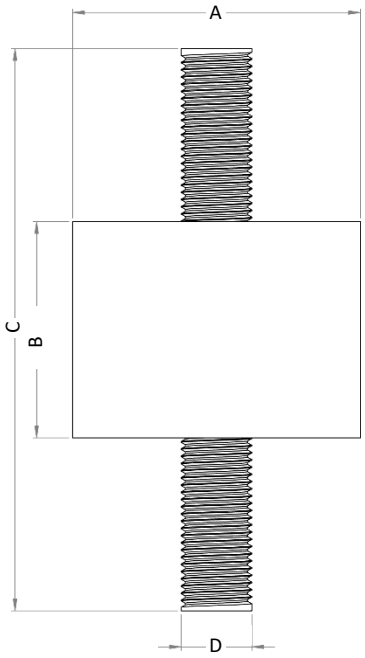
NEOPRENE VIBRATION ISOLATOR



					Compression		Shear	
Model Number	**A** mm (in)	**B** mm (in)	**C** mm (in)	**D** mm	Load Kg (Lbs)	Deflection mm (in)	Load kg (Lbs)	Deflection mm (in)
VI4S	20 (0.79)	25 (0.98)	55 (2.16)	M6	25 (55)	5.0±1.0 (0.2)	2.5 (5.5)	5.0±1.0 (0.2)
VI4M	25 (0.98)	25 (0.98)	65 (2.56)	M8	40 (88)	5.0±1.0 (0.2)	6 (13)	5.0±1.0 (0.2)
VI4L	40 (1.57)	28 (1.1)	78 (3)	M10	100 (220)	5.5±1.0 (0.2)	16 (35)	5.5±1.0 (0.2)

FEATURES

Manufactured of rubber. Mounting hardware made of stainless steel and clear zinc plated threads. Temperature recommended up to 140ºF.

- Installed between motor feet and support stand or weather hood/pedestal system.
- Absorbs vibrations, reduces noise, reduces structural damage.
- Color: Black
- Pack Content: 4 pcs
- Material: Rubber + Zinc plated Steel
- Compression mounting only

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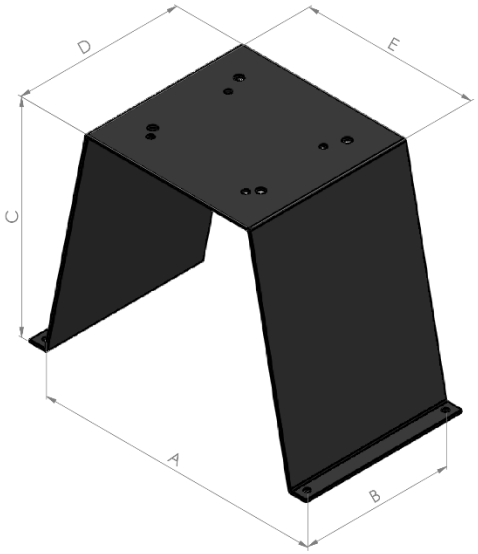
SUPPORT MOUNTING STAND



Model Number	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	Weight Lbs (kg)	Blower compatibility
MB15	11.9 (302)	6.3 (160)	9.4 (240)	7.1 (180)	7.4 (187)	4.5 (2)	P15/P20/S10/S12/S14
MB251	15 (382)	6.3 (160)	11.8 (300)	7.1 (180)	7.4 (187)	5.5 (2.5)	P20/P25
MB30	16.6 (422)	8.7 (220)	13.8 (350)	9.4 (240)	7.7 (197)	12 (5.5)	P25/P30/S16
MB35*	21.2 (540)	12.4 (315)	18.4 (468)	13.8 (350)	11.7 (297)	35 (16)	P35/S18
MB15SS**	11.9 (302)	6.3 (160)	9.4 (240)	7.1 (180)	7.4 (187)	4.5 (2)	P15/P20/S12/S14
MB30SS**	16.5 (420)	8.3 (210)	13.7 (350)	9.4 (240)	7.7 (197)	12 (5.5)	P20/P25/P30/S12/S14/S16
MB35SS**	21.2 (540)	12.4 (315)	18.4 (468)	13.8 (350)	11.7 (297)	5.5 (2.5)	P35/S18

* MB35 shall be provided with additional brace brackets between legs to provide more rigidity.
**304 Stainless steel version

FEATURES

Rigid support/stand flanged with pre-punched holes for securing blower system. Enamel coating (black) to provide an excellent resistance against corrosion, weather, and UV. Can be used to mount the blower on floors, walls, and ceilings.

- Color: Black
- Stainless Steel motor mounting hardware supplied.
- Powder Properties
  - Particle size: <100 μm
  - Density: 1.3 – 1.6 $kg.l^{-1}$
- Film Properties:
  - Cross-cut adhesion test: Gt 0
  - Mandrel bending test: $\leq 5mm$
  - Impact test: $\geq 10\ inchp$
  - Erichsen cupping: $\geq 5mm$
- Corrosion tests:
  - Condensation water test, 1000hr: No infiltration, No blister
  - Natural salt spray test, 1000hr: No infiltration, No blister

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FREQUENCY VARIABLE DRIVE

Model Number	Type	HP	Amps	Input voltage	Input phase	Output Voltage	Output phase	Weight (Lbs)	HxWxD
D15011	S100	1.5	6	100	1	200	3	2.01	6.14x2.7x5.12
D30020	S100	3	10.6	200	1&3	200	3	2.04	6.14x2.7x5.12
D50023	C200	5	17.6	200	3	200	3	6.9	10.9x4.5x6.9
D100023	C200	10	30	200	3	200	3	16.3	15.4x5.6x7.9
D30043	S100	3	7.2	400	3	400	3	2.04	6.14x2.7x5.12
D50043	S100	5	8.8	400	3	400	3	2.04	6.14x2.7x5.12
D75043	C200	7.5	13.5	400	3	400	3	6.9	10.9x4.5x6.9
D100043	C200	10	17	400	3	400	3	6.9	10.9x4.5x6.9
D30053	C200	3	3.9	575	3	575	3	16.3	15.4x5.6x7.9
D50053	C200	5	6.1	575	3	575	3	16.3	15.4x5.6x7.9
D75053	C200	7.5	10	575	3	575	3	16.3	15.4x5.6x7.9
D100053	C200	10	12	575	3	575	3	30.9	14.4x8.3x9

	S100/C200	
ENVIRONMENT		
Ambient Operating Temperature	-20°C to 40°C (-4°F to 104°F) @ 3 kHz switching freq. | Operation to 60°C (140°F) with de-rating	
Storage Temperature	-40°C to 60°C (-40°F to 140°F)	
Cooling Method	Forced convection (cooling fan)	
Humidity	95 % non-condensing at 40°C / 104°F - EN61800-2(3k3)	
Altitude	≤3000m (1000 m to 3000 m derate 1 % over 100 m)	
Vibration	Tested to IEC 60068-2-6	
Enclosure Rating	IP20, NEMA 1	
Electromagnetic compatibility	EN 61000-6-4: Generic emission standard for industrial environments	
Maximum Motor Cable Length	50 m (164ft)	
AC SUPPLY REQUIREMENTS		
Voltage	100 V models: 100 to 120 Vac ±10% 200 V models: 200 to 240 Vac ±10% 400 V models: 380 to 480 Vac ±10% 575 V models: 500 to 575 Vac ±10%	
Maximum supply imbalance	2% negative phase sequence, 3% voltage imbalance between phase	
Input Frequency	45 to 66 Hz	
Output Frequency	0 to 300Hz	
Switching Frequency	4, 6, 8 12 kHz	0.667, 1, 2, 3, 4, 6, 8 12 & 16kHz
APPROVALS & LISTINGS		
CE, UKCA, cUL, C-Tick, EAC, KC		

Project Name	GUILDFORD AQUATIC CENTRE - GAS STRIPPER RETROFIT
Date	
Engineer / Sales Rep	
Client	
Contractor	

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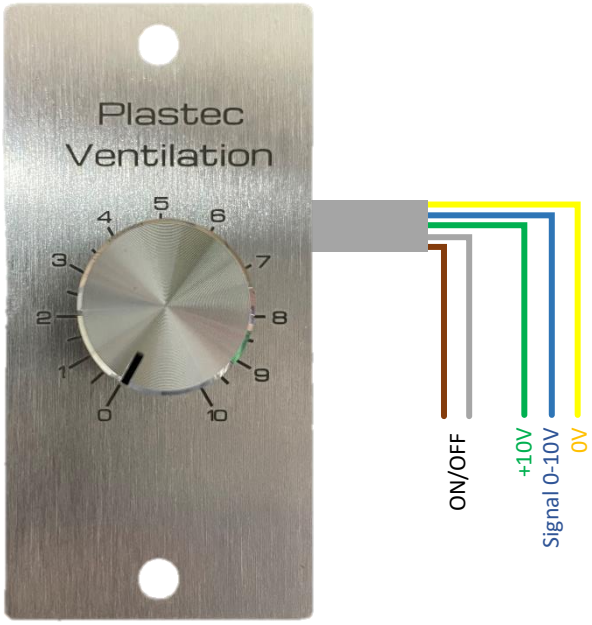
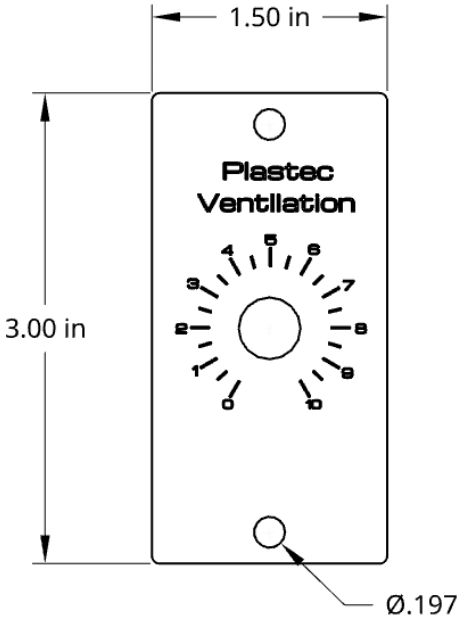
DIAL POTENTIOMETER





FEATURES

0/10V potentiometer with a dial to increase/decrease fan RPM thru a VFD or any device working with 0/10V signal.

- Cable length: 7.5ft
- 5 wires 22AWG (0.34mm²)
- Color coded wires.
- Dial features an ON/OFF switch in position “0” with brown and grey wire.
- Aluminum front panel with laser engraved numbering.

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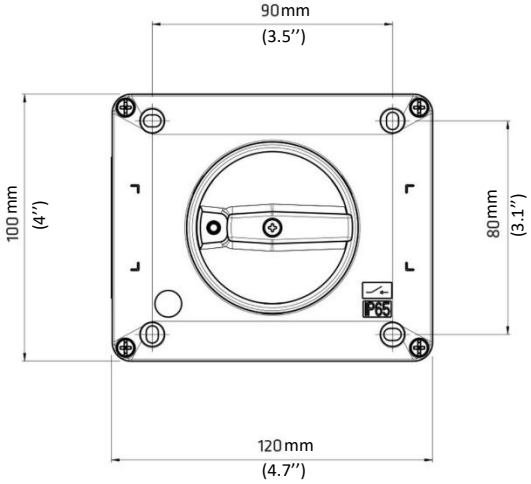
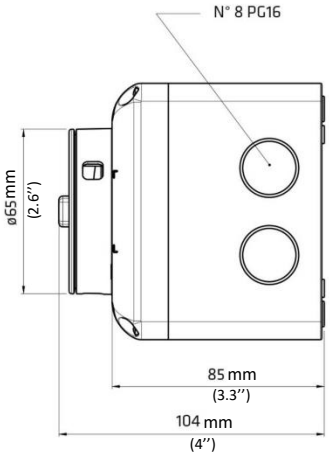
DISCONNECT SWITCH





FEATURES

Enclosed motor disconnect switch or rotary disconnect switch with 3 poles can be used with single phase and three phase motors. UL508 Listed with ratings of 600 volts, 32 amps for motors rated from 1.5 HP to 15 Hp. With an IP65 / NEMA 4X rating, suited for outdoor applications, weatherproof. The housing is black with a yellow cover and includes a red lockable handle that can accept up to 3 locks in the 0 to Off position. For secure wiring, the enclosed motor disconnect switch has PG16 cable gland knockouts.

Weight	0.95 lbs
Dimensions (DxWxH)	5 × 4 × 4.5 in
Current rating	32 A
Protection type	NEMA 4X and IP65
Voltage	600 V
Number of poles	3

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APPLICATION

PLASTEC® Series blower system designed to operate in highly corrosive and hazardous air applications such as: Laboratories, Chemical / Pharmaceutical Industries, Wastewater Treatment Plants, Petroleum Industries, EV Industries, Aquatic Industries, etc...

MANUFACTURER

PLASTEC® Series blowers shall be manufactured under the authority of PLASTEC Ventilation, Inc. located in Bradenton, Florida.

HOUSING

The housing is manufactured from a robust high-density UV treated polypropylene composite material to ensure superior corrosion and hazardous resistance. Constructed as a single seamless piece, either blow molded or injection molded, to prevent any gas or fume leakage. Split molded housings are not permitted. Housing comes with high-grade stainless-steel hardware, which supports the motor plate to the housing securely. It allows for field reversibility, except for PLASTEC® 35 & 50 models, and can be rotated to any eight (8) standard discharge positions. It's essential to note that the presence of metal within the housing's air stream will not be tolerated. (*Option: Carbon Impregnated Polypropylene (CIP) Spark A compliant housing available upon specific request. See Specification Submittal Data for Explosion-Resistant Series)*

IMPELLER

The impeller shall be of forward-curved type, constructed of robust and uniformly infusion molded high-density polypropylene composite material. The impeller shall be both electronically and dynamically balanced. The blower impeller shall be equipped with a keyed motor hub bushing and O-ring sealed hubcap manufactured from polypropylene material to fully safeguard the motor shaft end from any contact with corrosive gases and fumes. The impeller will be suitable for up to 3600RPM on models PLASTEC® 15, 20, and 25, and up to 1800RPM on models PLASTEC® 30 and 35. *(Option: High-grade stainless-steel impeller available for models PLASTEC® 20, 25, 30 & 35 upon specific request)*

SUPPORT STRUCTURE

The PLASTEC® Series blower system offers multiple optional support stands: 1. A galvanized enamel pickled black coated support stand with high-grade stainless-steel hardware. 2. A high-grade stainless steel support stand with high-grade stainless-steel hardware. 3. A Weather Hood/Pedestal enclosure manufactured from high-density UV treated polypropylene composite material. This enclosure is designed to protect the motor against elements and provide support for the entire blower system. 4. An Aluminum gray powder coated finish Weather Hood/Pedestal enclosure. This enclosure is designed with a reversible inspection access hood, ensuring complete protection for the motor against elements while supporting the entire blower system.

MOTORS

The motors shall be of high premium efficiency, direct drive, heavy-duty ball bearing type, suitable for continuous and/or inverter duty operations with multi-voltage capability. Totally enclosed fan cooled (TEFC) IP55 rated with a 1.15 safety factory. Motors will have an aluminum material construction with heatsink fins throughout, ensuring efficient cooling. Motor features a high-strength high carbon steel shaft, which is electronically and dynamically balanced, specifically selected for continuous operations at indicated rated RPM on the nameplate. Includes an airtight seal around shaft on drive side to prevent any internal motor exposure. All motors comply with IEC, UL, and CSA approval standards. *(Option: Explosion-resistant IP66 rated motors available upon specific request. See Specification Submittal Data for Explosion-Resistant Series)*

MATERIALS OF CONSTRUCTION TEMPERATURE LIMITATION

Polypropylene housing and impeller are designed and approved for continuous option within a temperature range of -40°F to 140°F. Also, capable of handling shot periods of operations at high temperatures, up to 190°F, in 15-minute intervals.

PERFORMANCE

PLASTEC Ventilation, Inc. certifies that the PLASTEC® Series, JET® Series and STORM® Series are licensed to bear the AMCA Seal. The ratings are based on the tests and procedures performed in accordance with AMCA publication 211 and 311 comply with the requirements of the AMCA CRP. Performance certified is for installation type D – Ducted inlet, Ducted outlet. The sound power level ratings shown are calculated per AMCA standard 301. Acoustic values shown are sound power levels for installation Type D: Ducted inlet, Ducted outlet. Ratings include the effects of duct end corrections.

WARRANTY

Plastec Ventilation, Inc. warrants its equipment, products, and parts, to be free from defects in workmanship and material under normal use and service for two years (2) after delivery to the first user. Motors carry a one-year (1) warranty. *(See full warranty available in the Installation, Operation & Maintenance Manual)*

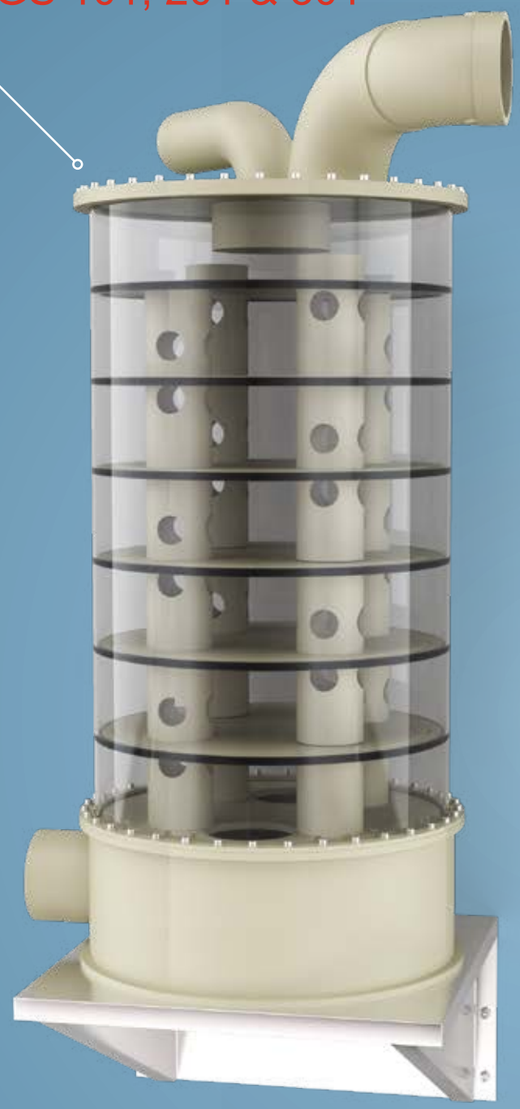
REDUCING GASEOUS CHLORAMINES AND TRIHALOMETHANES

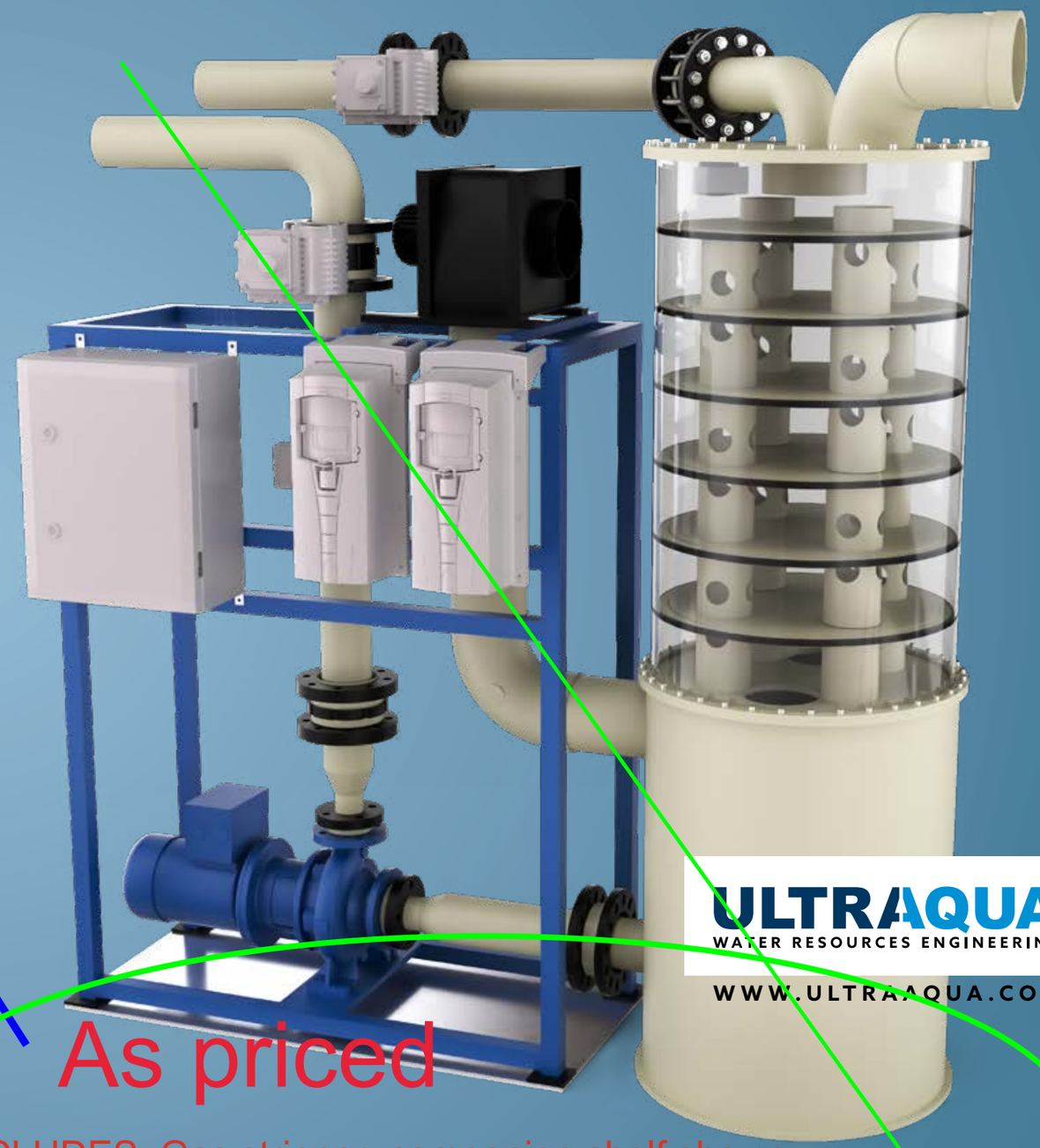
GAS STRIPPER

FOR VOLATILE DISENFECTION BYPRODUCT REDUCTION

ALSO AVAILABLE IN GRAVITATIONAL VERSION FOR EASY MOUNTING AND IMPLEMENTATION IN TECHNICAL ROOMS ALLOWING GRAVITY RETURN

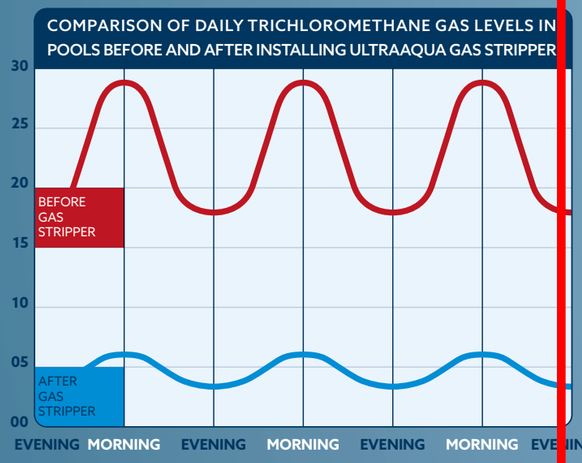
GS 101, 201 & 301





OPTIMAL CONTROL OF THMS AND GASEOUS CHLORAMINES IN POOLS

The variation of Gaseous THMs and chloramines over one day typically follows a pattern where the concentration drops from opening time to closing time of the pool due to venting caused by bathing activity. It rises again during the night to a maximum concentration just before opening. Based on bather load, system data and installed water treatment technology the ULTRAAQUA science department can predict the concentration dynamics of DOC and THM in each pool



GENERAL SPECIFICATIONS

MODEL	TYPE	HP	FLOW	AIR OUT	WATER IN	WATER OUT	WITH	LENGTH	HEIGHT	WEIGHT
UAQ1	GAS Stripper Gravitation*1	1,5 kW	10-30 m³/h	Ø160	Ø160	Ø160	800 mm	1000 mm	2300 mm	100 kg
UAQ2	GAS Stripper Pressure*2	1,5 kW	10-30 m³/h	Ø160	Ø160	Ø160	1000 mm	1800 mm	2300 mm	180 kg
UAQ1 Stand	Shelf for gravitaion Stripper	-	-	-	-	-	900 mm	900 mm	-	-

*1 If levels in technical room allows for gravity return to balance tank or pool the gravitational version is simple in design and operation

*2 For basement installation a pressure system offers pressurized return to pool

As priced

INCLUDES: Gas stripper; companion shelf shown
& adaptors for air & water connectors DIN to N American sizes

ULTRAAQUA
WATER RESOURCES ENGINEERING

WWW.ULTRAAQUA.COM

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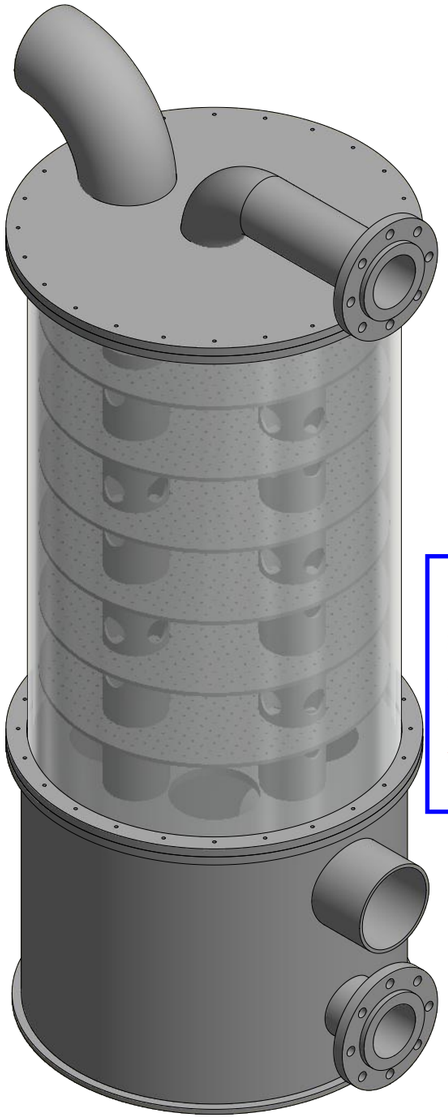
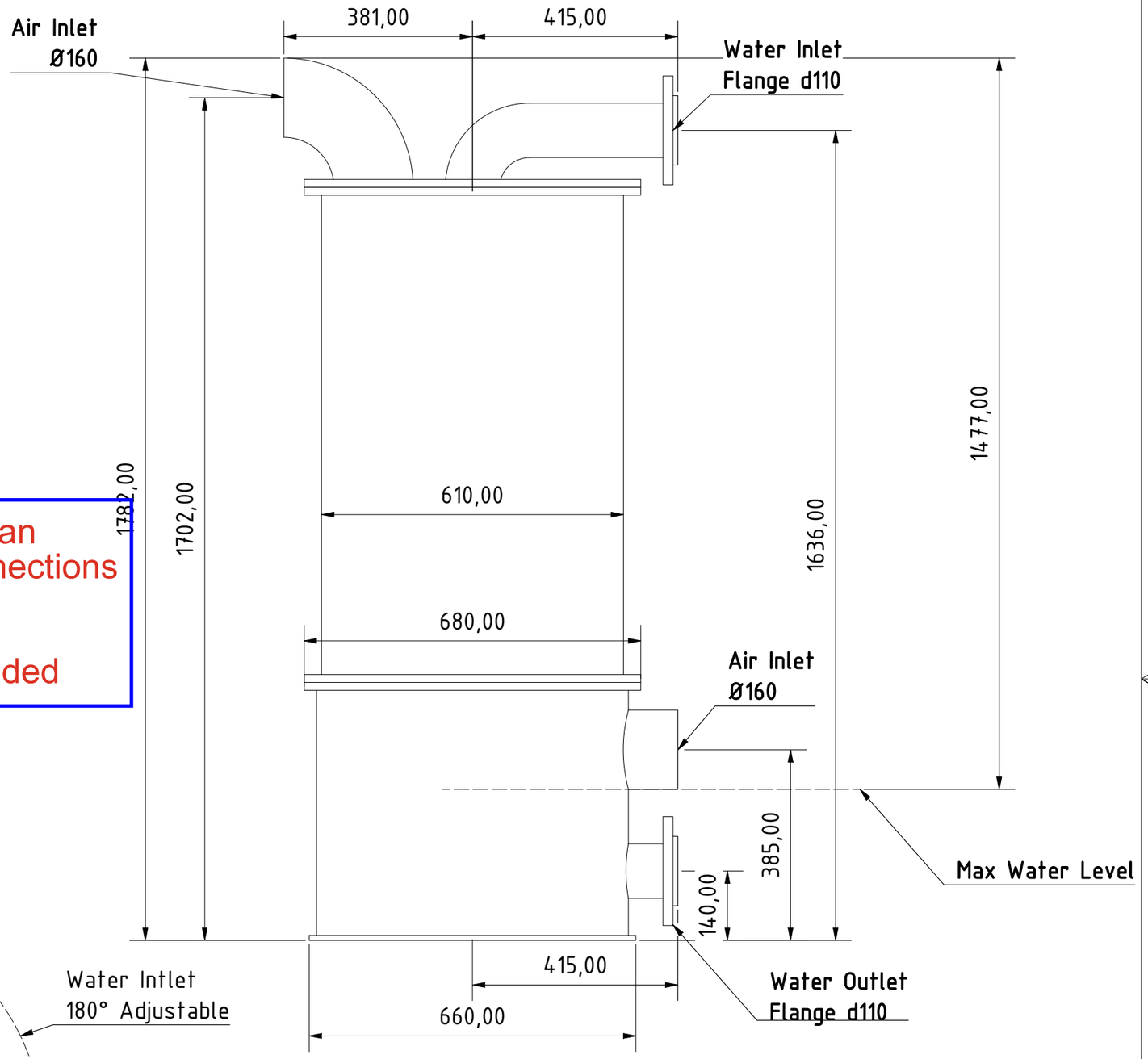
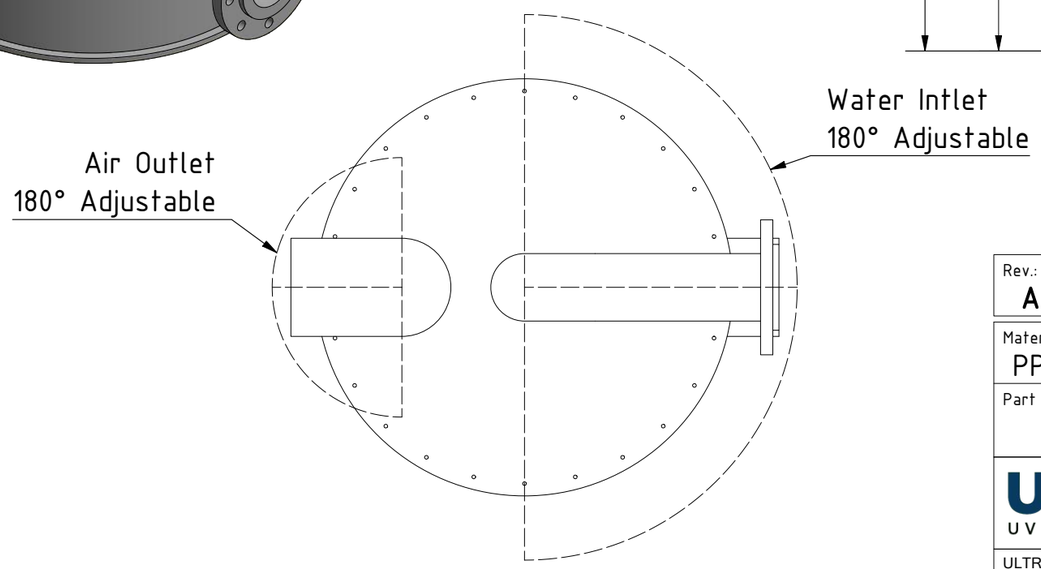
STRIPPING THM OUT OF WATER ALLOWS FOR MORE PEOPLE IN POOLS



Euro DIN to N American adaptors for all 4 connections are inlcuded.

Wall mount shelf included





Rev.:	Date:	Description:	Init.:
A	11/17/2021		MMS

Material:	Dimensions without tolerance according to DIN ISO 2768-mk
PP	

Part No:	Component Name:
	THM-STRIPPER

ULTRAAQUA
UV DISINFECTION SYSTEMS

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