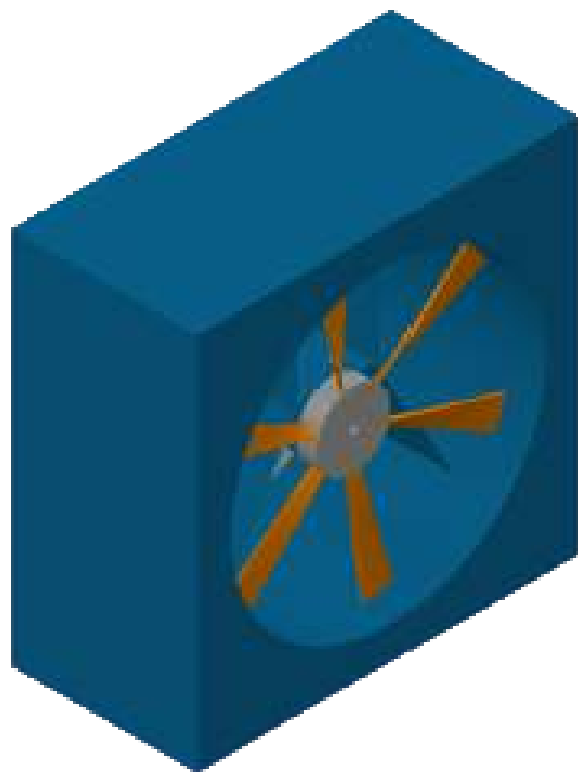
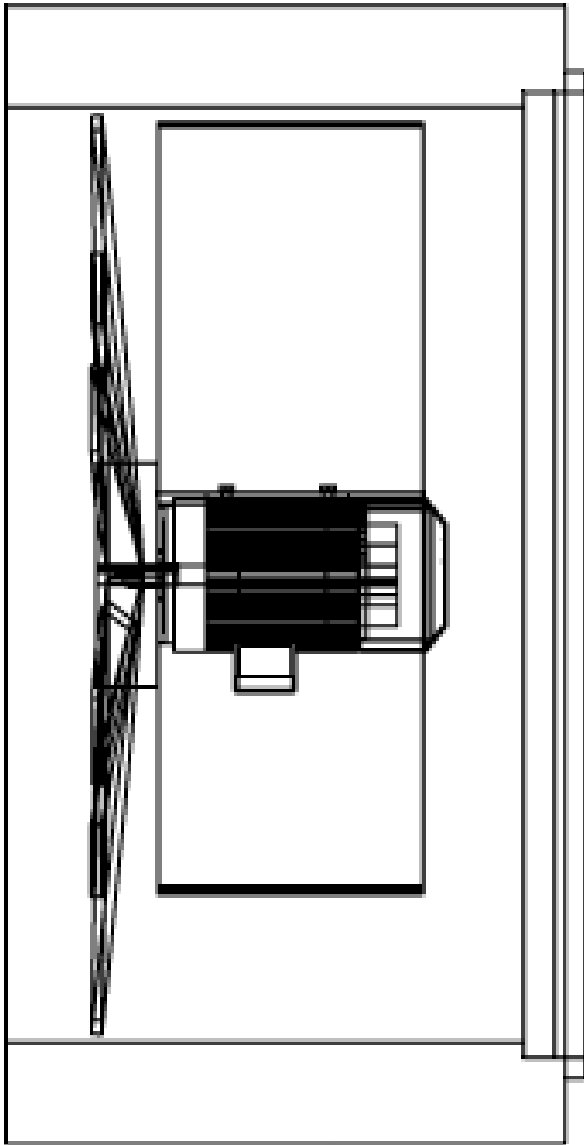


Supply Boxed wall mounted AXIAL FAN Pre-Filter



Contact Us:

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☎ (+2) 01229017782

☎ (+2) 0238838605

☎ (+2) 0238838209

**BETTER SOLUTIONS
FOR BETTER ATMOSPHERE**

Brilliant Engineering Co.

Brilliant Engineering was founded in 2009 by Eng. Ayman Gaber, to become one of the Leading Full Engineering Services in Egypt, with an outstanding portfolio of expertise in Construction and MEP fields, serving and completing projects in various regions all around the country.

Brilliant offers Turnkey project solutions, starting from concept, pre-design, preparation of shop drawings, technical submittals and obtaining approvals, all the way to finishing and preparation of the final as-built drawings. We also provide after sales services, maintenance and on-site training, as well as, distributing several spare-parts throughout the country.

Our Main Specialization:

Industrial Ventilation Systems

- Industrial Air Filtration Systems
- Central Air Conditioning Systems
- Industrial Environmental Treatment
- Duct Work

HasconWing :

Hascon Engineering has been operating in the ventilation field for more than thirty years and our reliable and high quality axial impellers are the result of this rich experience. Since 1997 we have been operating in compliance with ISO 9001 standards, with each phase, starting from the procurement of material passing through all of the process sequences until post sales support, being carried out according to well tested and continuously improving criteria, permitting us to emerge in the international market due to our high quality, efficiency and timeliness, making us a leading company in this sector. In addition, the HasconWing product range, thanks to the numerous types (impeller diameters from 200 to 1275mm and multiple configurations of blade profiles and setting angles), permits to create customized solutions for all air movement needs.

Applications of HW :

- Heat Exchangers
- Axial ventilatory.
- Generators.
- Air Conditioning.
- Radiators.
- Cooling Towers.
- Hovercrafts.
- Blowing Units.



Blades Feature :

- **TM** impellers are manufactured assembling airfoil profile blades with a light aluminum alloy hub. The impellers are thought to be employed in applications that require the highest rotation speeds. The impellers are available in configurations with **5/9/12/16 blades** both for clockwise and anticlockwise rotation. Blades are available in two models: **N and V**, with right or left setting angles ranging from 20° to 50°. TM impellers can produce a sucking or blowing air flow.
- **TS** impellers are manufactured assembling airfoil profile blades with a light aluminum alloy hub. The impellers are thought to be employed in applications that require the highest rotation speeds. The impellers are available in configurations with **6/8/10/14/20 blades** both for clockwise and anticlockwise rotation. TS blades are available in two models: **G, and D**, with right or left fixed setting angles ranging from 25° to 50°. TS impellers can produce a sucking or blowing air flow.
- **C-ALU** impellers shape has been designed to produce higher air flow rates, while ensuring high efficiency and low noise emission levels. C-ALU impellers are thought to be employed in high temperature and corrosive environments and are manufactured assembling airfoil profile blades made of aluminum, with a light aluminum alloy hub. The impellers are available in configurations with 5/9/12/16 blades. Blades are available in two models: **regular (CL) and short (CL-S) blades**, with left setting angles ranging from 25° to 50°. C-ALU fans can produce a sucking or blowing air flow.



C-ALU Impeller



TM Impeller



TS Impeller

HW Certifications :

HW Ventilation is an **ISO 9001** Certified Company.

Our Fans have been tested in **AMCA210/07** wind tunnel and comply with the requirements of EU directive 2015 on energy Efficiency.



Motor Specifications :

Hw roof axial exhaust fans provided with 280/220 V /50HZ B3-B5 Constructed electric moto, IP-55 and IE 2. Insulation Class is F, In accordance with IEC 60034-1. (Foregin Origin)



B5Motor



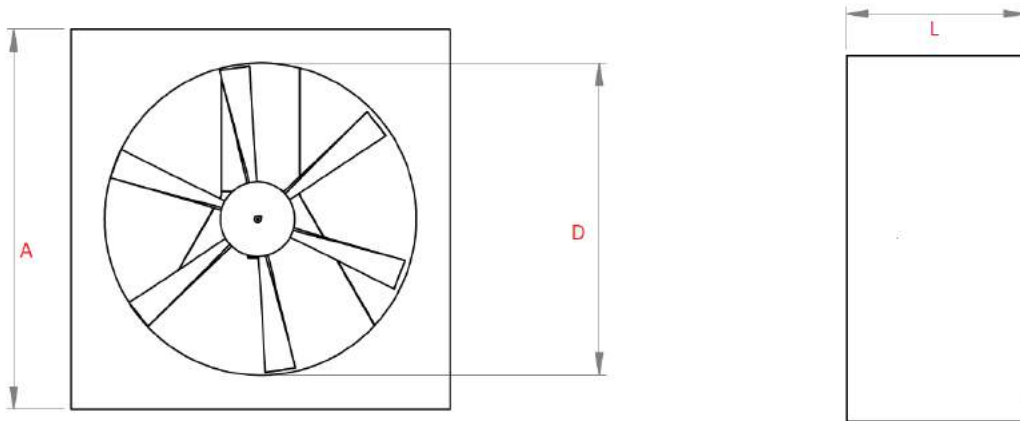
B3 Motor

Fan Feature :

Brilliant Engineering Co. is an agent and distributor for the Italian Hasconwing Ventilation HW ventilation is a leading company in the field of axial impellers and ventilators for industrial applications. With their 30-year experience in the international market, wide range of products: airfoil profile axial impellers (fixed and variable pitch angle blades) made of PPG, PAG, ALU, RYT, PAA, PAX and PAM. to make sure that our customers having the best performance.

Our Boxewall mounted axial ventilator for supply and exhaust air out of brilliant workshops made of carbon steel case and HW impellers to satisfy our clients requirements with best performance. With a flow rate range of 3291 – 42640 m3/hr.

HW Supply Boxed wall mounted AXIAL FAN pre-Filter Are Available 9 Different Sizes with Operating limits Specifications as Follow:



| Size | 1000 | 800 | 710 | 630 | 560 | 500 | 450 | 400 | 355 |
|----------------------|-------------------------------|------------------------------|--------------------------------|------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Model | HW 1000 - 9-9 - 45° - V - PPG | HW 800 - 9-9 - 45° - V - PPG | HW 710 - 9-9 - 37.5° - N - PPG | HW 630 - 9-9 - 45° - N - PPG | HW 560 - 10-10 - 50° - D - PPG | HW 500 - 10-10 - 50° - D - PPG | HW 450 - 10-10 - 50° - D - PPG | HW 400 - 10-10 - 50° - D - PPG | HW 355 - 10-10 - 50° - D - PPG |
| Flow Rate (CMH) | 41,720 | 23,660 | 23,230 | 19,820 | 14,460 | 10,290 | 7,412 | 5,116 | 3,291 |
| Static Pressure (Pa) | 94.81 | 95.16 | 102.50 | 92.39 | 89.40 | 86.78 | 90.37 | 87.20 | 88.45 |
| Speed (RPM) | 960 | 960 | 1,440 | 1,440 | 1,440 | 1,440 | 1,440 | 1,440 | 1,440 |
| Motor (kw) | 5.5 | 2.2 | 3.0 | 3.0 | 2.2 | 1.10 | 0.75 | 0.55 | 0.37 |
| Dimensions | All dimensions in mm | | | | | | | | |
| Box size "A" | 1200 | 1000 | 910 | 830 | 760 | 700 | 650 | 650 | 650 |
| L | 550 | 400 | 430 | 430 | 400 | 400 | 350 | 350 | 300 |
| D | 1020 | 820 | 730 | 650 | 580 | 520 | 470 | 470 | 470 |



4 3 2 1

F

F

E

E

D

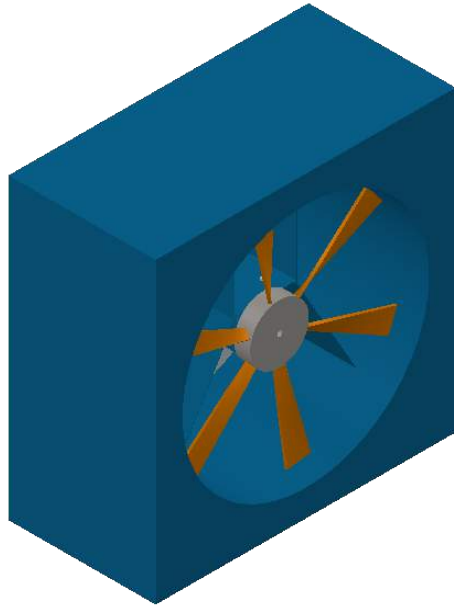
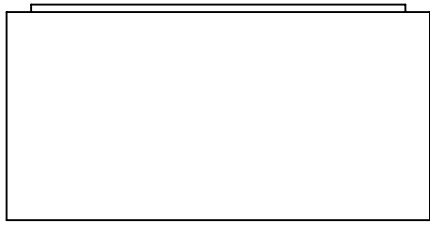
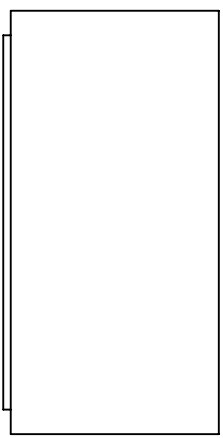
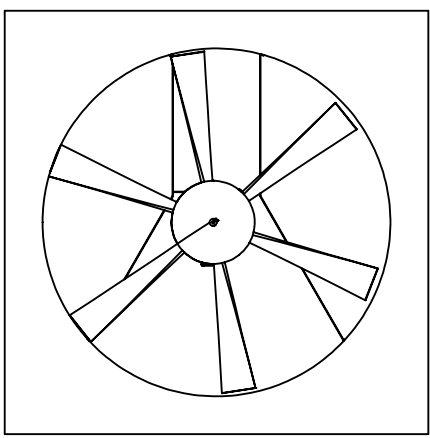
D

C

C

B

B



| | NAME | DATE |
|--------|---------------------|------|
| DRAWN | Eng. Ahmed G. Rahma | |
| CHKD | Eng. Ayman Gaber | |
| APPV'D | Eng. Ayman Gaber | |
| | | |



DWG NO. A4
 Boxed wall mounted c/w pre&bag filter

SCALE:1:50

SHEET 1 OF 1

4 3 2 1

A

A

4 3 2 1

F

F

E

E

D

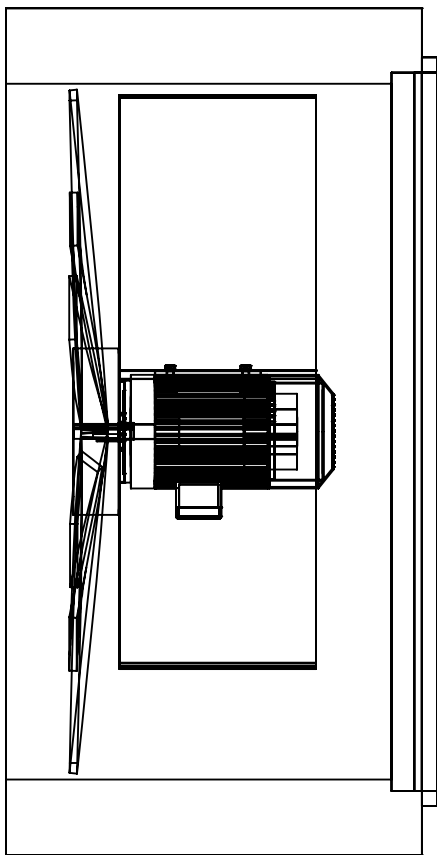
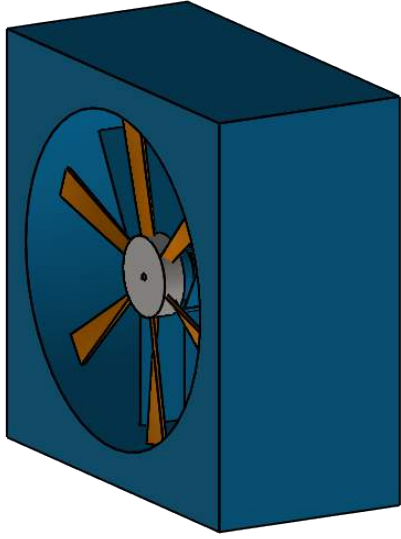
D

C

C

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B



A

A

| | NAME | DATE |
|--------|---------------------|------|
| DRAWN | Eng. Ahmed G. Rahma | |
| CHKD | Eng. Ayman Gaber | |
| APPV'D | Eng. Ayman Gaber | |
| | | |



DWG NO.
 Boxed wall mounted c/w pre- filter

A4

4 3 2 1

SCALE:1:50

SHEET 1 OF 1

IMPELLER HW 355 - 10-10 - 50° - D - PPG

Date : 12/7/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 355 [mm]

Tip clearance (%R) : 1

Blade : D

Angle : 50°

Rotation speed : 1440 [RPM]

Material : PPG

Hub-Blade : 10-10

Working point :

| Q[m ³ /h] | Pst[Pa] | Pdyn[Pa] | Ptot[Pa] | Pshaft[kW] | Eff(t) [%] | Lwt[dB(A)] |
|----------------------|---------|----------|----------|------------|------------|------------|
| 3291 | 88.45 | 52.24 | 140.7 | 0.2467 | 52.1 | 80.01 |

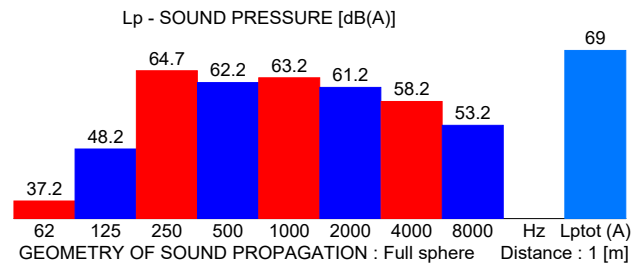
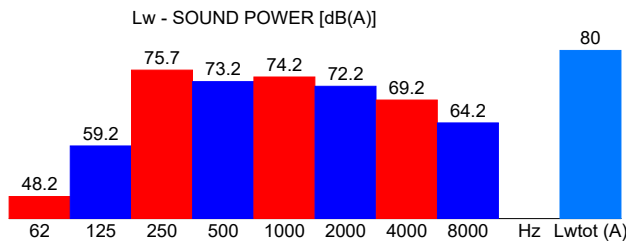
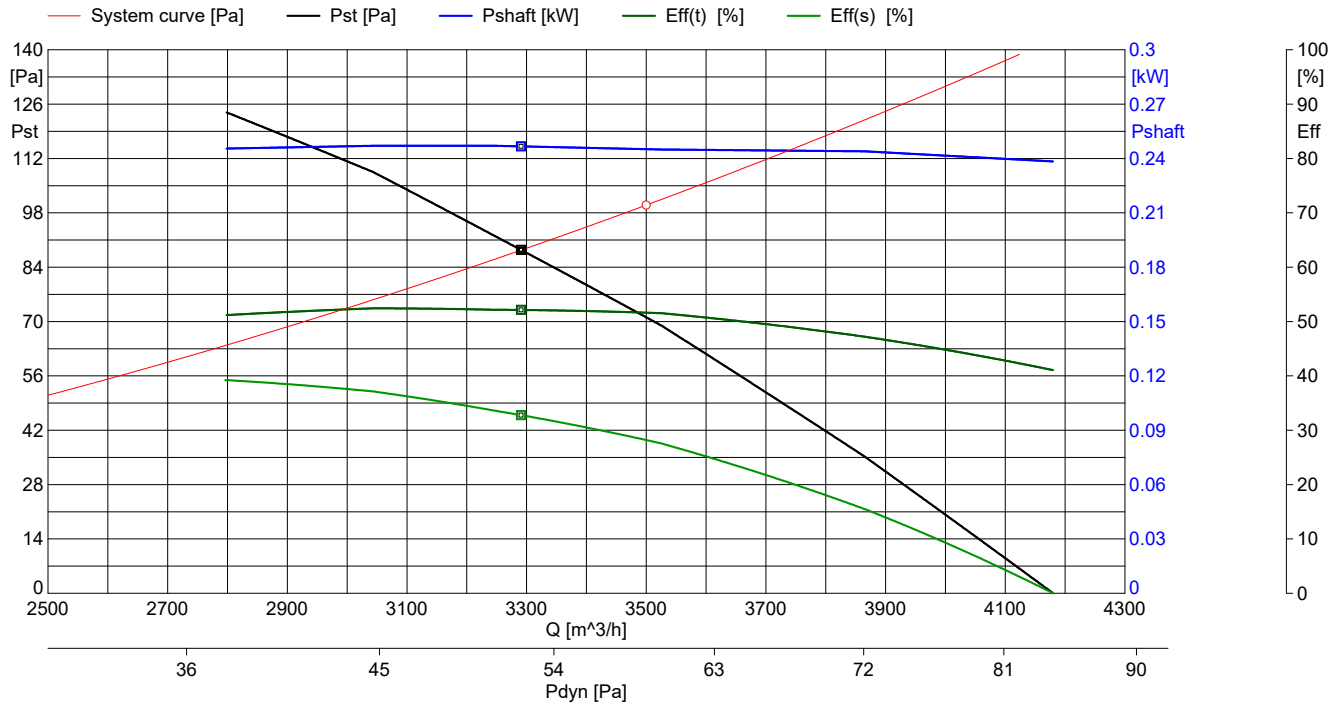
Mechanical info :

Axial force[N]
13.93

Shaft torque[N*m]
1.636

Tip speed[m/s]
26.77

Air speed[m/s]
9.235



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

IMPELLER HW 400 - 10-10 - 50° - D - PPG

Date : 12/7/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 400 [mm]

Tip clearance (%R) : 1

Blade : D

Angle : 50°

Rotation speed : 1440 [RPM]

Material : PPG

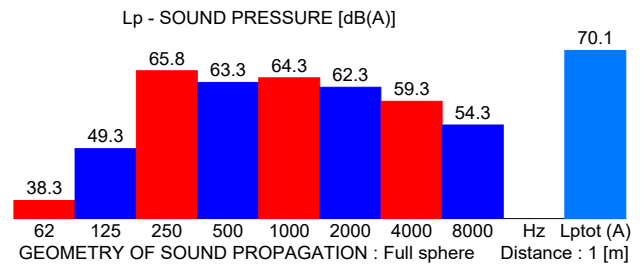
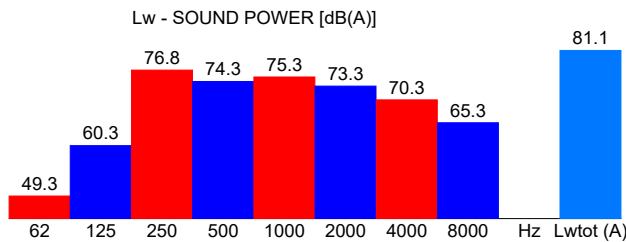
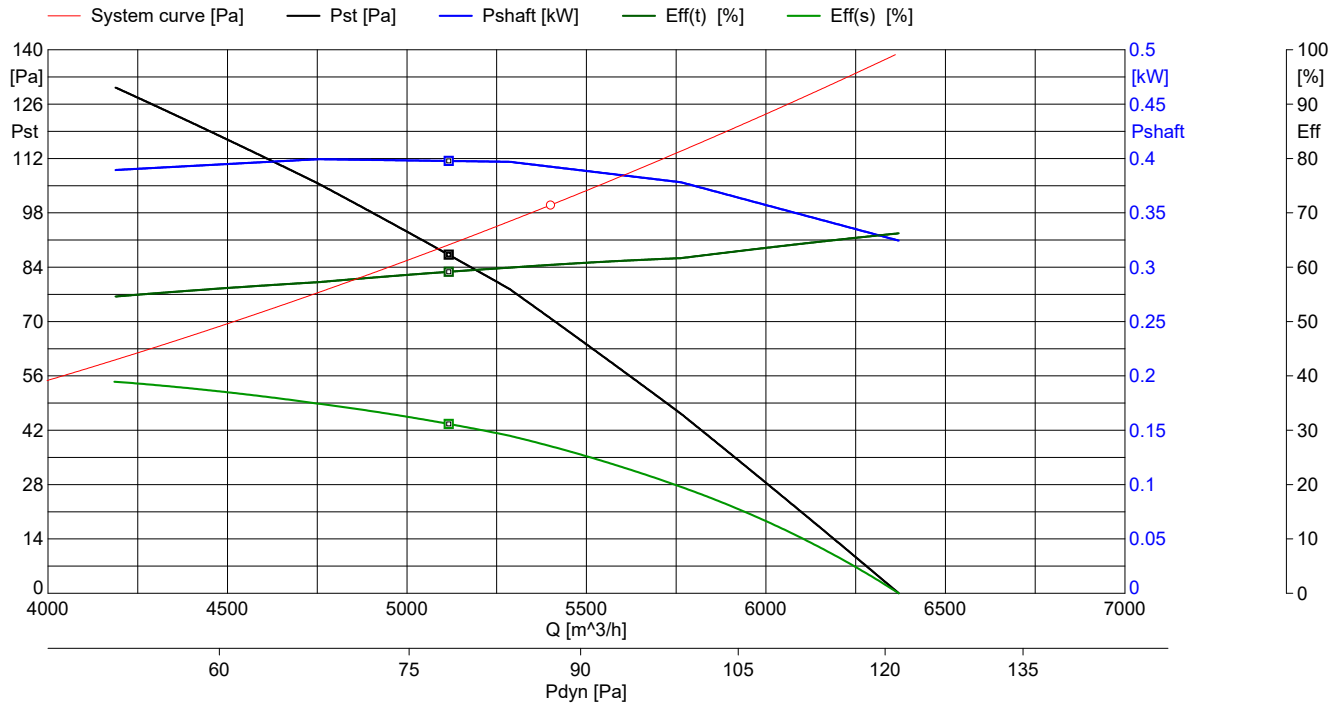
Hub-Blade : 10-10

Working point :

| Q[m ³ /h] | Pst[Pa] | Pdyn[Pa] | Ptot[Pa] | Pshaft[kW] | Eff(t) [%] | Lwt[dB(A)] |
|----------------------|---------|----------|----------|------------|------------|------------|
| 5116 | 87.2 | 78.35 | 165.6 | 0.3977 | 59.2 | 81.11 |

Mechanical info :

| Axial force[N] | Shaft torque[N*m] | Tip speed[m/s] | Air speed[m/s] |
|----------------|-------------------|----------------|----------------|
| 20.8 | 2.638 | 30.16 | 11.31 |



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

IMPELLER HW 450 - 10-10 - 50° - D - PPG

Date : 5/8/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 450 [mm]

Tip clearance (%R) : 1

Blade : D

Angle : 50°

Rotation speed : 1440 [RPM]

Material : PPG

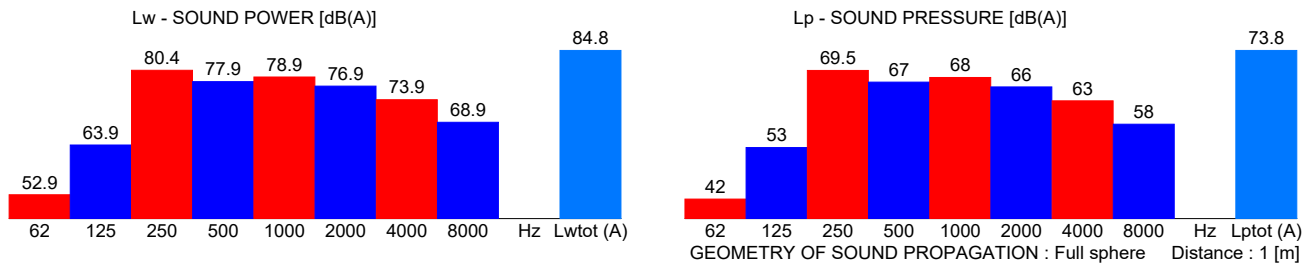
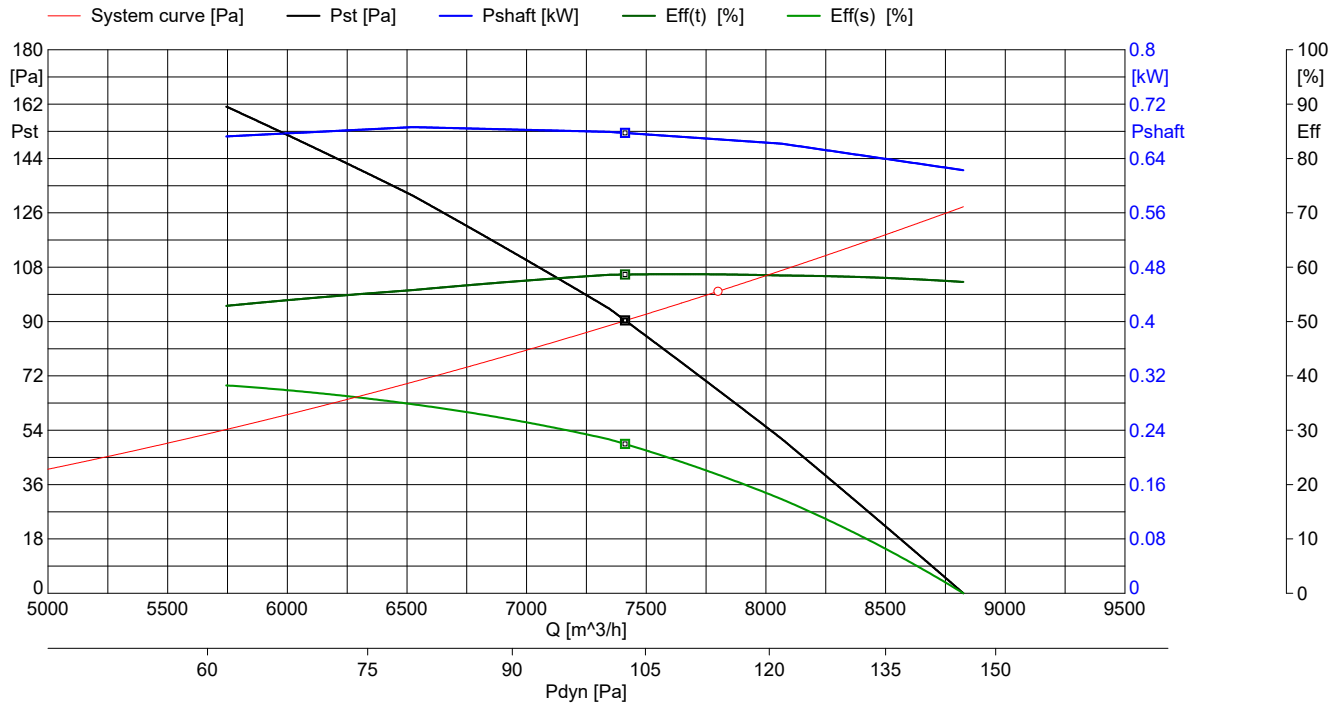
Hub-Blade : 10-10

Working point :

| Q[m ³ /h] | Pst[Pa] | Pdyn[Pa] | Ptot[Pa] | Pshaft[kW] | Eff(t) [%] | Lwt[dB(A)] |
|----------------------|---------|----------|----------|------------|------------|------------|
| 7412 | 90.37 | 102.6 | 193 | 0.6776 | 58.6 | 84.77 |

Mechanical info :

| Axial force[N] | Shaft torque[N*m] | Tip speed[m/s] | Air speed[m/s] |
|----------------|-------------------|----------------|----------------|
| 30.7 | 4.493 | 33.93 | 12.95 |



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

IMPELLER HW 500 - 10-10 - 50° - D - PPG

Date : 12/7/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 500 [mm]

Tip clearance (%R) : 1

Blade : D

Angle : 50°

Rotation speed : 1440 [RPM]

Material : PPG

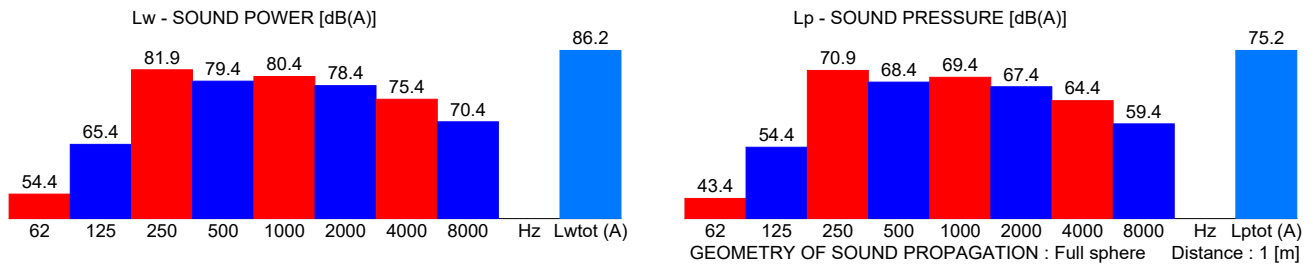
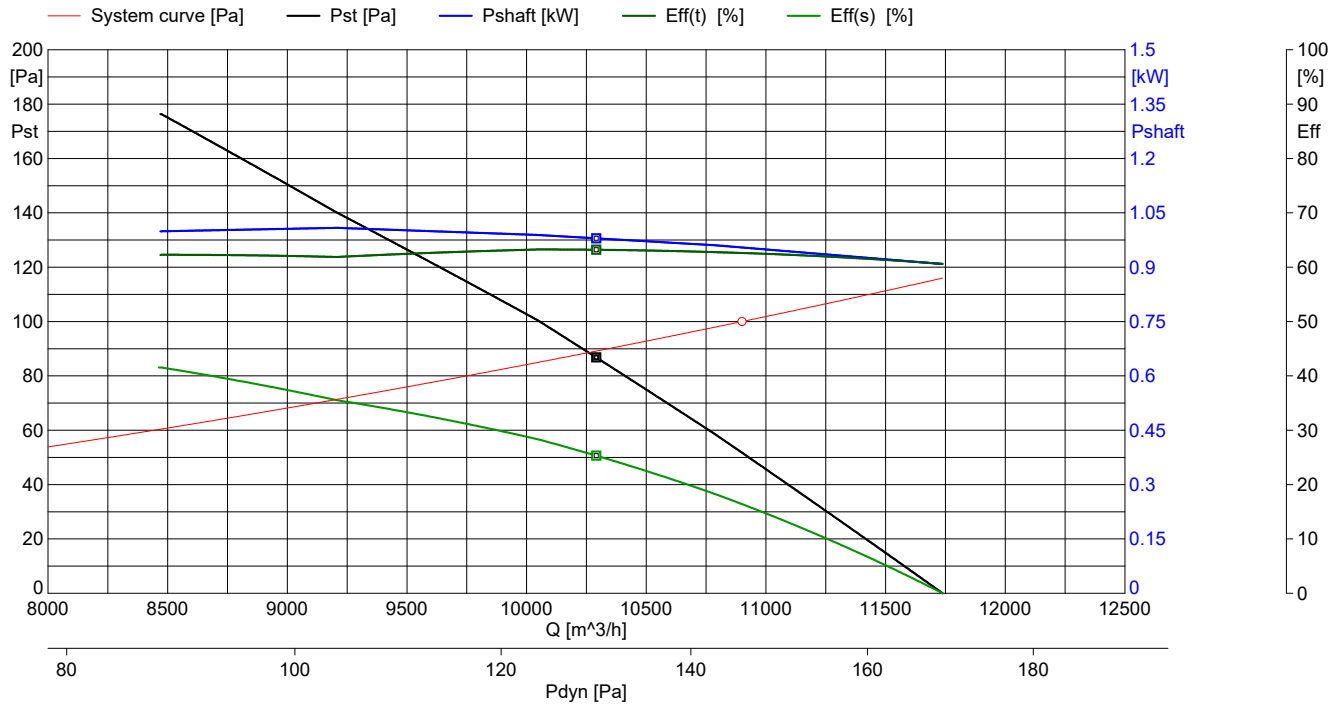
Hub-Blade : 10-10

Working point :

| Q[m ³ /h] | Pst[Pa] | Pdyn[Pa] | Ptot[Pa] | Pshaft[kW] | Eff(t) [%] | Lwt[dB(A)] |
|----------------------|---------|----------|----------|------------|------------|------------|
| 10290 | 86.78 | 129.8 | 216.6 | 0.9796 | 63.2 | 86.17 |

Mechanical info :

| Axial force[N] | Shaft torque[N*m] | Tip speed[m/s] | Air speed[m/s] |
|----------------|-------------------|----------------|----------------|
| 42.53 | 6.496 | 37.7 | 14.56 |



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

IMPELLER HW 560 - 10-10 - 50° - D - PPG

Date : 12/7/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 560 [mm]

Tip clearance (%R) : 1

Blade : D

Angle : 50°

Rotation speed : 1440 [RPM]

Material : PPG

Hub-Blade : 10-10

Working point :

| Q[m ³ /h] | Pst[Pa] | Pdyn[Pa] | Ptot[Pa] | Pshaft[kW] | Eff(t) [%] | Lwt[dB(A)] |
|----------------------|---------|----------|----------|------------|------------|------------|
| 14460 | 89.4 | 163 | 252.4 | 1.507 | 67.3 | 87.63 |

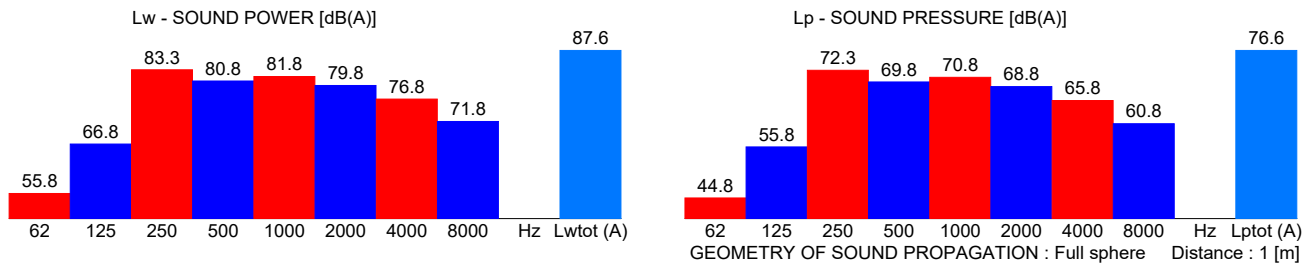
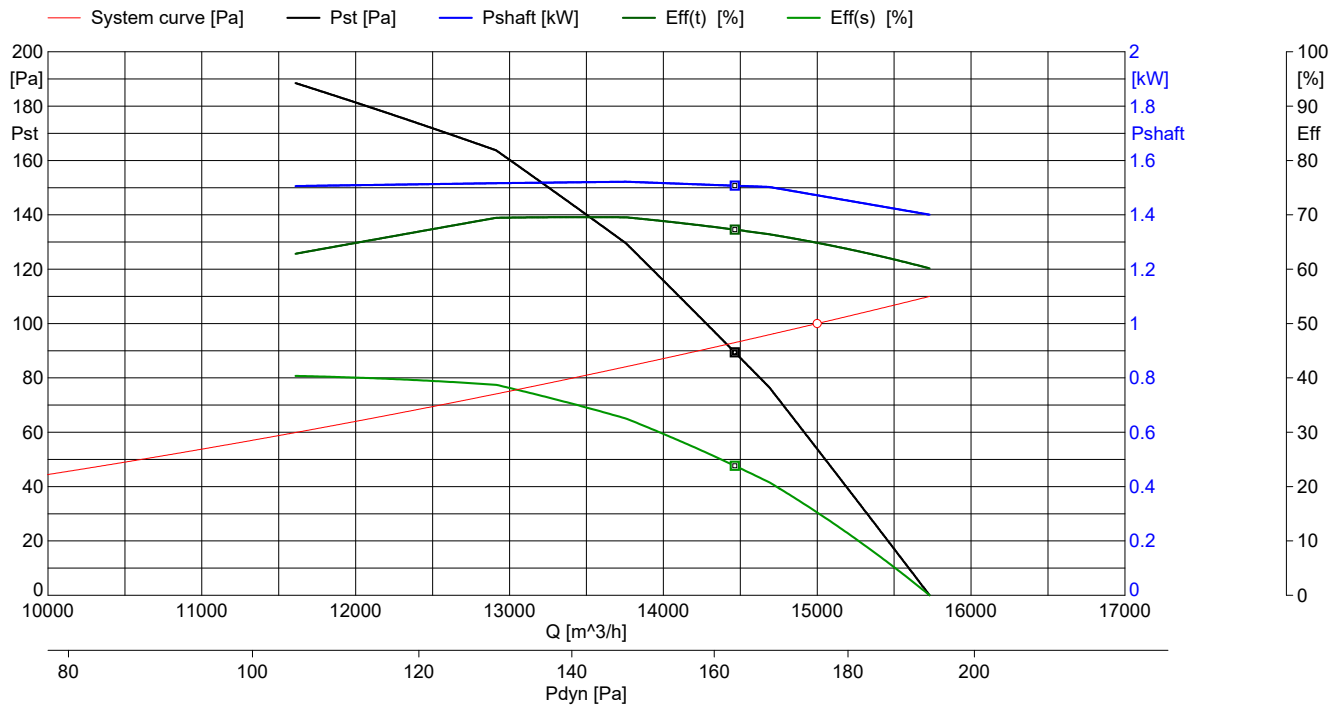
Mechanical info :

Axial force[N]
62.17

Shaft torque[N*m]
9.995

Tip speed[m/s]
42.22

Air speed[m/s]
16.31



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

IMPELLER HW 630 - 9-9 - 45° - N - PPG

Date : 12/7/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 630 [mm]

Tip clearance (%R) : 1

Blade : N

Angle : 45°

Rotation speed : 1440 [RPM]

Material : PPG

Hub-Blade : 9-9

Working point :

Q[m³/h]

19820

Pst[Pa]

92.39

Pdyn[Pa]

191.1

Ptot[Pa]

283.5

Pshaft[kW]

2.56

Eff(t) [%]

61

Lwt[dB(A)]

92.87

Mechanical info :

Axial force[N]

88.36

Shaft torque[N*m]

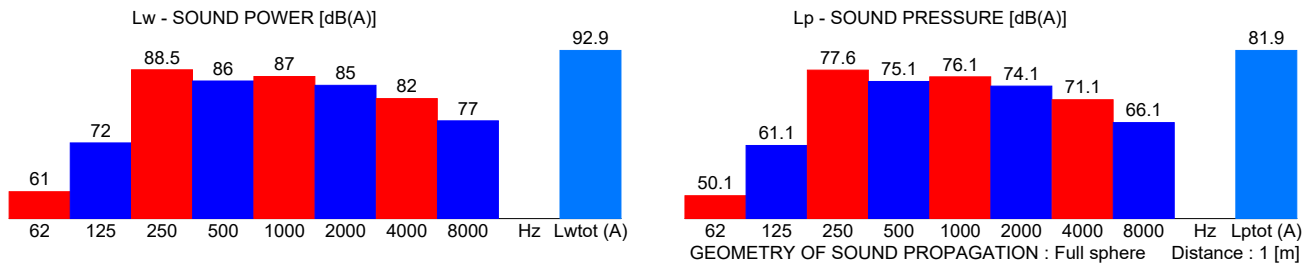
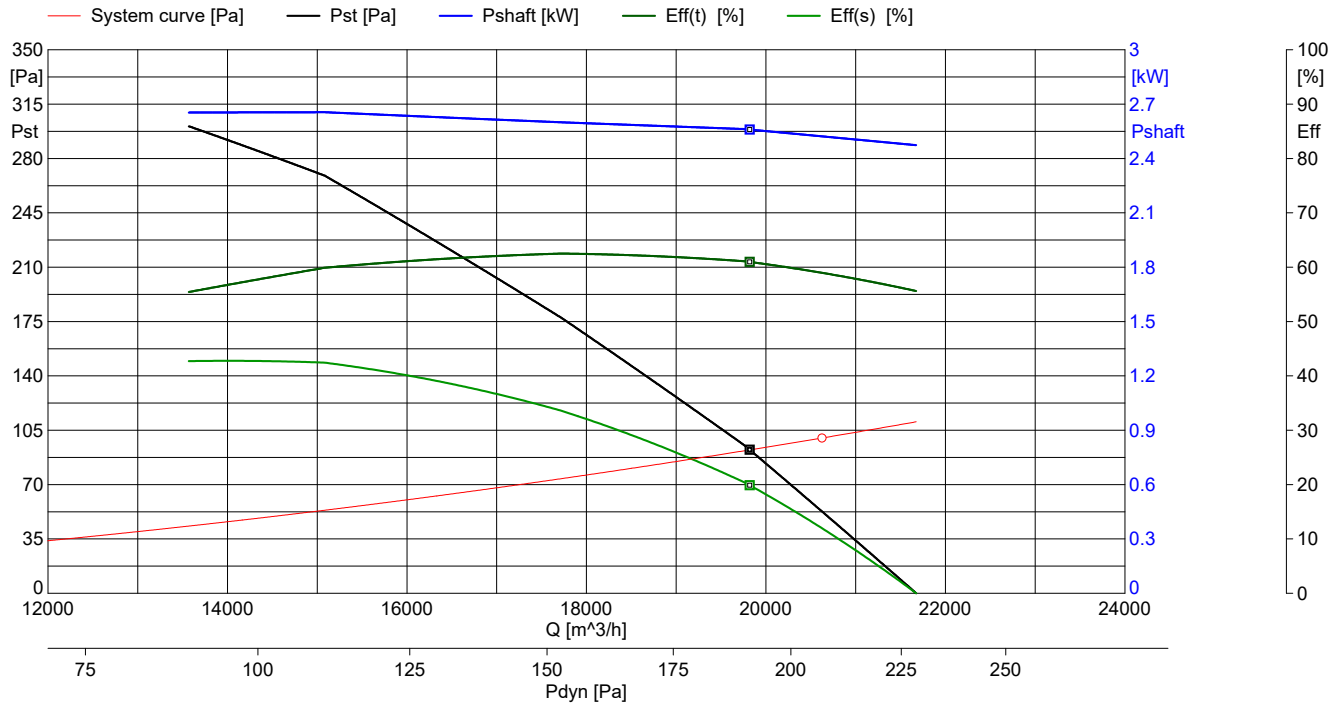
16.97

Tip speed[m/s]

47.5

Air speed[m/s]

17.66



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

IMPELLER HW 710 - 9-9 - 37.5° - N - PPG

Date : 12/7/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 710 [mm]

Tip clearance (%R) : 1

Blade : N

Angle : 37.5°

Rotation speed : 1440 [RPM]

Material : PPG

Hub-Blade : 9-9

Working point :

| Q[m ³ /h] | Pst[Pa] | Pdyn[Pa] | Ptot[Pa] | Pshaft[kW] | Eff(t) [%] | Lwt[dB(A)] |
|----------------------|---------|----------|----------|------------|------------|------------|
| 23230 | 102.5 | 162.8 | 265.3 | 2.643 | 64.8 | 86.7 |

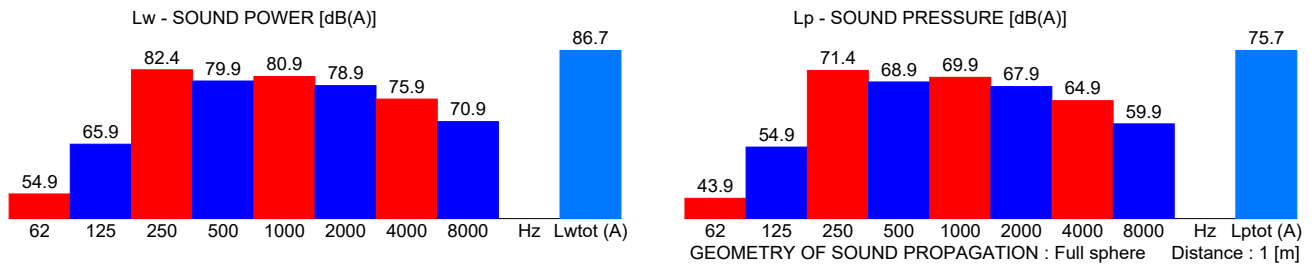
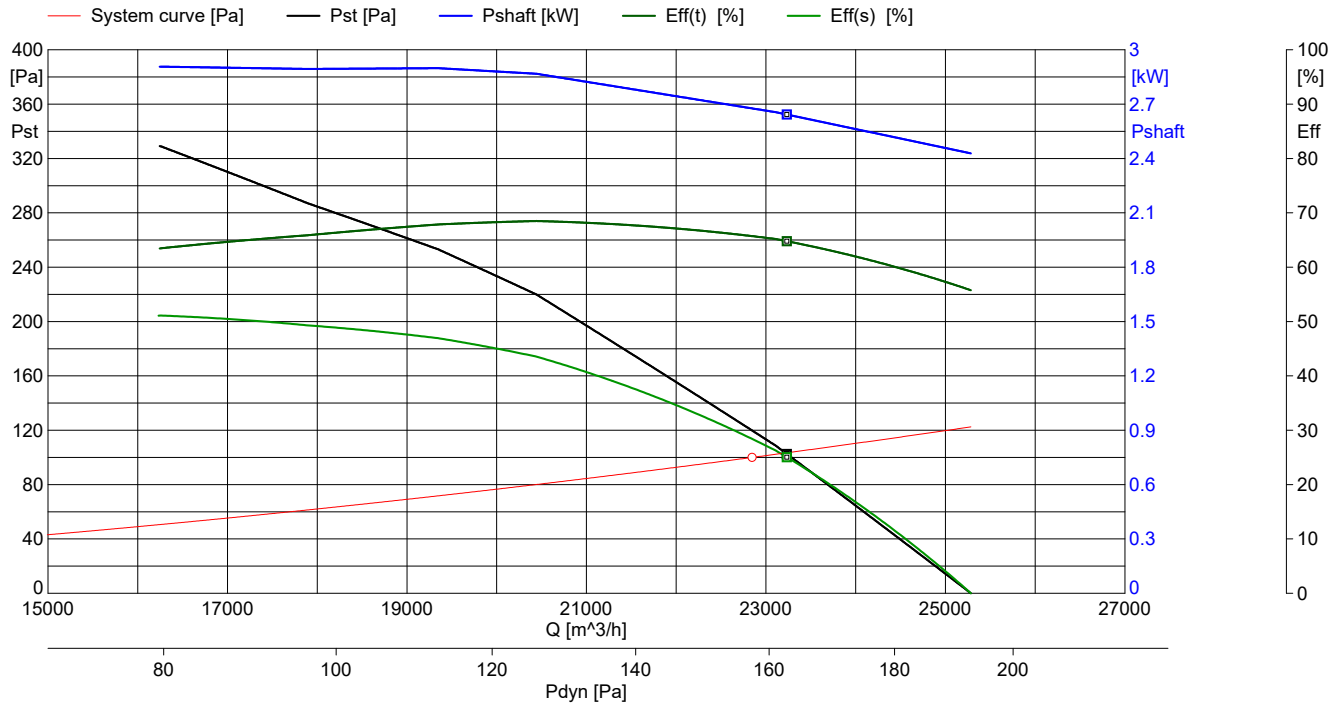
Mechanical info :

Axial force[N]
105

Shaft torque[N*m]
17.52

Tip speed[m/s]
53.53

Air speed[m/s]
16.3



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

IMPELLER HW 800 - 9-9 - 45° - V - PPG

Date : 12/7/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 800 [mm]

Tip clearance (%R) : 1

Blade : V

Angle : 45°

Rotation speed : 960 [RPM]

Material : PPG

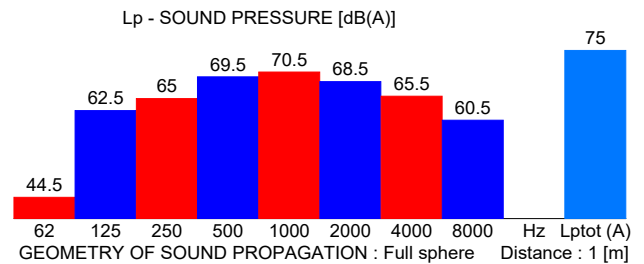
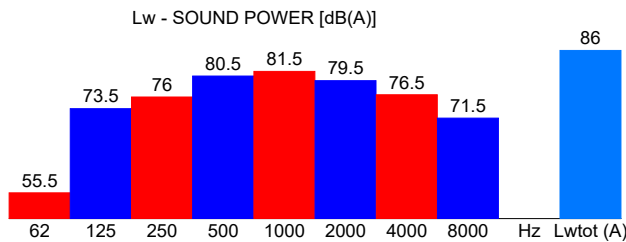
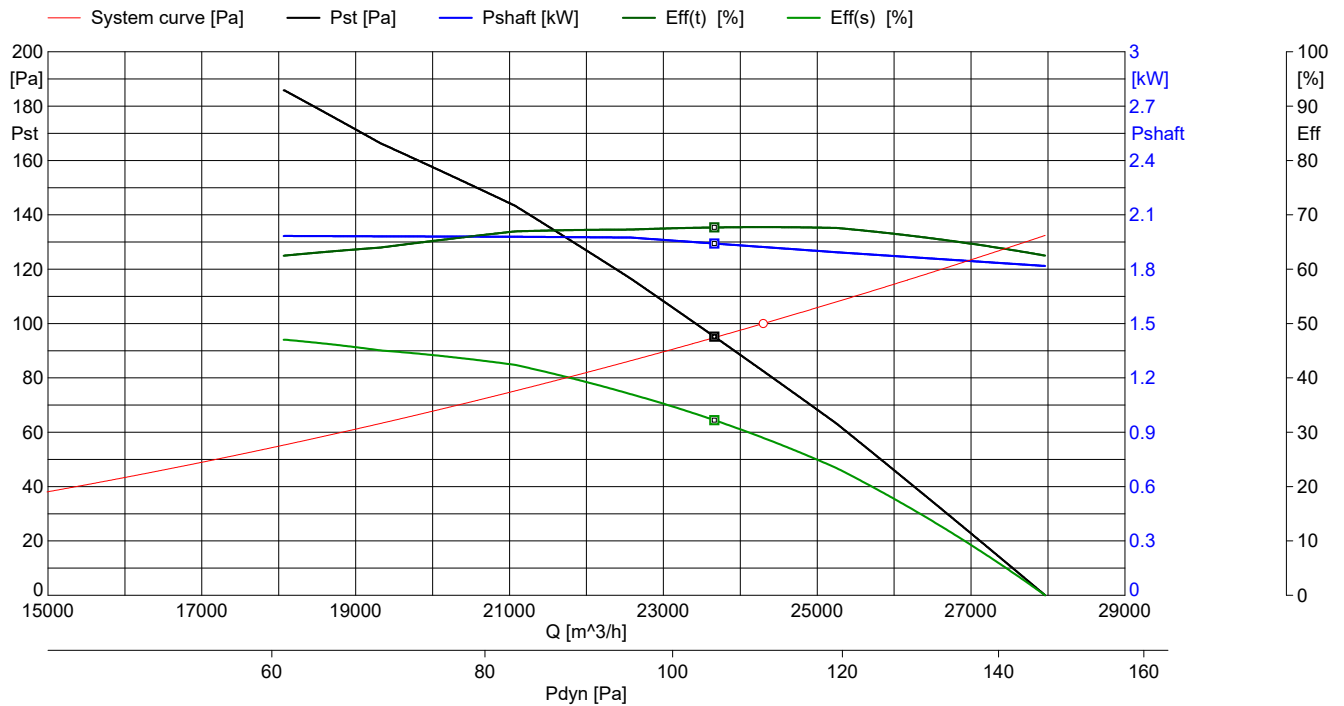
Hub-Blade : 9-9

Working point :

| Q[m ³ /h] | Pst[Pa] | Pdyn[Pa] | Ptot[Pa] | Pshaft[kW] | Eff(t) [%] | Lwt[dB(A)] |
|----------------------|---------|----------|----------|------------|------------|------------|
| 23660 | 95.16 | 104.7 | 199.9 | 1.942 | 67.7 | 86.04 |

Mechanical info :

| Axial force[N] | Shaft torque[N*m] | Tip speed[m/s] | Air speed[m/s] |
|----------------|-------------------|----------------|----------------|
| 100.5 | 19.31 | 40.21 | 13.08 |



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

IMPELLER HW 1000 - 9-9 - 45° - V - PPG

Date : 4/8/2020

To :
Telephone no. :

Fluid properties :

Density : 1.225 [kg/m³]

Temperature : 15 [deg. C]

Impeller properties :

Diameter : 1000 [mm]

Tip clearance (%R) : 1

Blade : V

Angle : 45°

Rotation speed : 960 [RPM]

Material : PPG

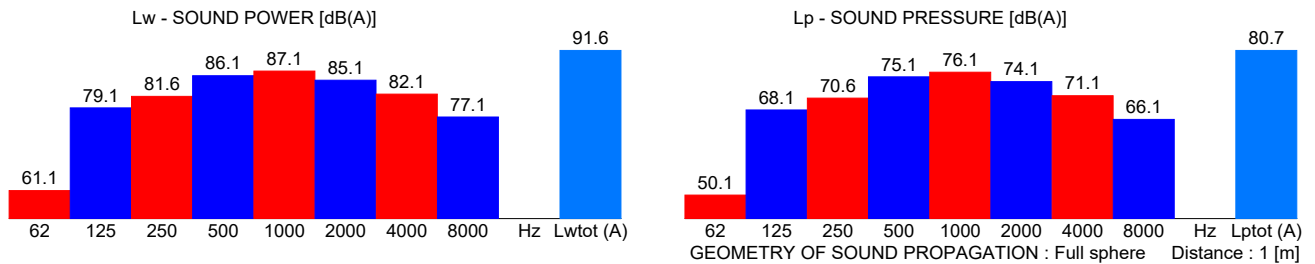
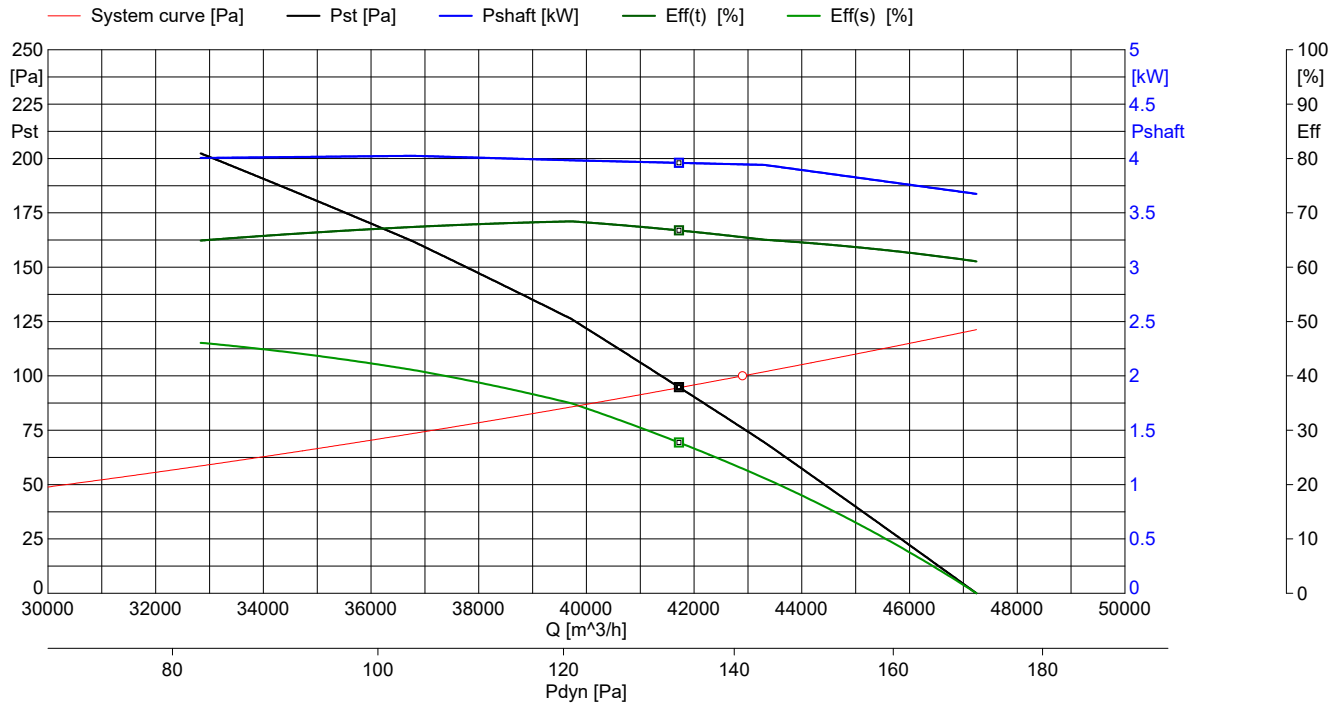
Hub-Blade : 9-9

Working point :

| Q[m ³ /h] | Pst[Pa] | Pdyn[Pa] | Ptot[Pa] | Pshaft[kW] | Eff(t) [%] | Lwt[dB(A)] |
|----------------------|---------|----------|----------|------------|------------|------------|
| 41720 | 94.81 | 133.4 | 228.2 | 3.96 | 66.8 | 91.64 |

Mechanical info :

| Axial force[N] | Shaft torque[N*m] | Tip speed[m/s] | Air speed[m/s] |
|----------------|-------------------|----------------|----------------|
| 179.2 | 39.39 | 50.27 | 14.75 |



Warning : different applications may have a different impact on the air performance and sound performance of the impellers.

HW Ventilation is an ISO 9001 certified company

Our Client



Thank you!

FOR BEING ONE OF OUR CLIENTS



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Telephone: +2 02 388 38 605 Mobile: +2 01 229 017 782 Fax: (+202) 38838209

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