

FANMASTER

Industrial Fume Extractor

IFA2-160-2

Operation and Maintenance Manual

Fanmaster Pty Ltd

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1. Product Profile

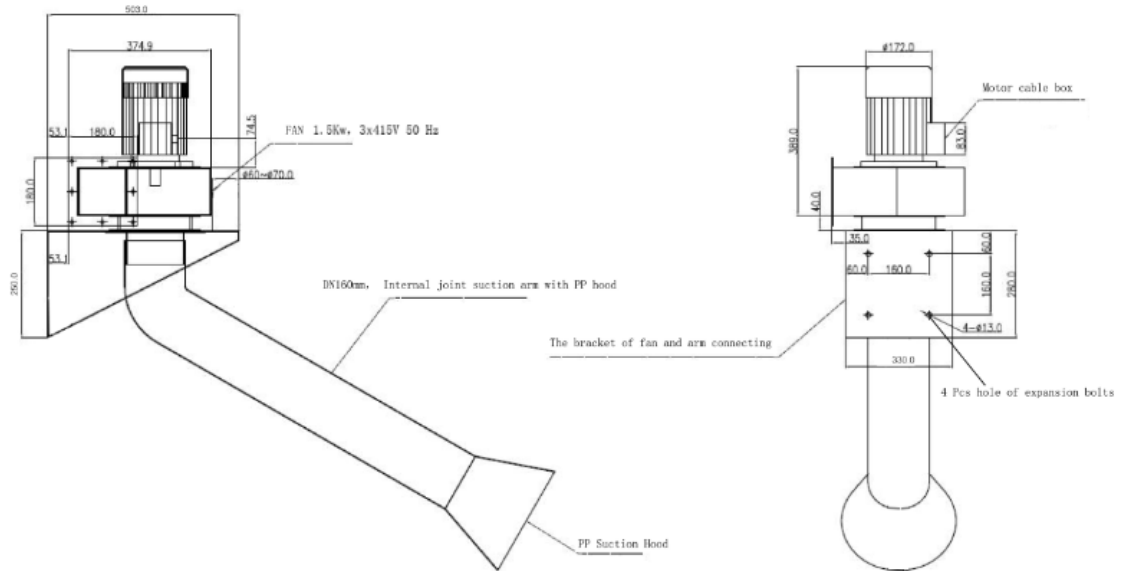
The supplier of Fanmaster Pty Ltd is a professional company which specializes in air purification machines' research & development, manufacturing, project design and installation. With advanced technology introduced from Germany, Sweden, and using many imported parts, our products are widely used in over 200 fields such as welding, foundry, metal cutting, grinding, wood processing, paper making, ceramics, tobacco, chemistry etc.

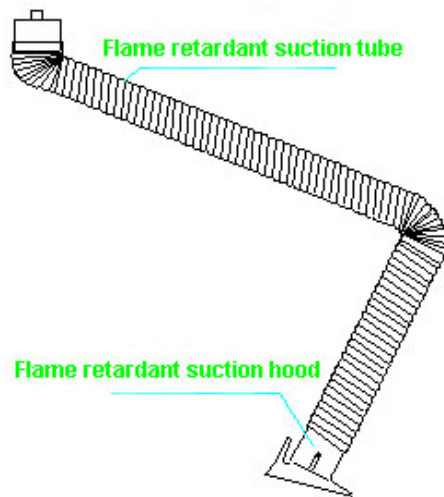
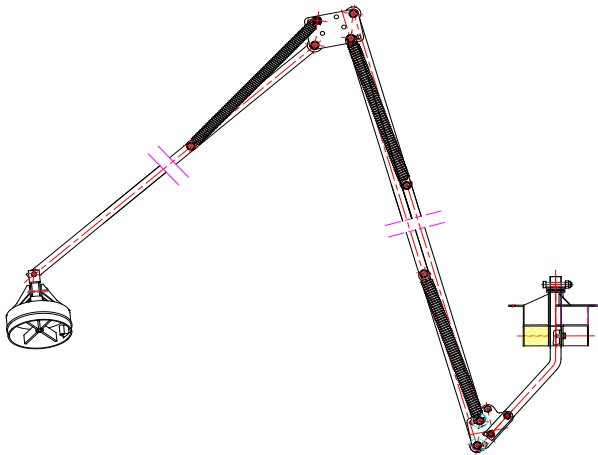
Incorporated world leading environmental technology, economical mobile fume extractor is a technically advanced industrial dust & fume extractor, it's developed with full consideration of the forming, characteristics and harm of fumes and based on actual conditions of cutting and welding workshop.

2. Technical data

No.	Item	Parameter
1	Fan type	Centrifugal fan
2	Treatment of air flow	1500±100 m³/h
3	Full wind pressure	1800 Pa
4	Motor power	1.5kW
5	Power supply	415V ~/50Hz , 10AMP
6	Switch box	Circuit breaker, plug and wire
7	Noise	≤74±5dB(A)
8	Suction arm	Φ160mm, 2m length, PP hood
9	Installation bracket	280x330x503mm
8	Weight (including suction arm)	43±2KG
9	Dimensions(including suction arm)	910×720×400mm

Product Layout & Photo





Suction arm with hood

3. How it Works

Through installing the centrifugal fan and the flexible arm on triangle fixed bracket, to arrange the suction arm with hood near the source point of the smoke, again through the electronic control box operation button to start the fan, the fan inhales smoke through the flexible suction arm and discharge room outlet. So as to achieve smoke entering through the flexible boom from intake hose, finally from the flow of fan outlet discharge process.

4. Operation Instructions

- 1) Please read the instruction manual carefully before using the fan, check whether voltage of power supply matching the system power voltage indicated in the instruction manual (**3×415V/50Hz**, voltage fluctuation $\pm 10\%$), insert the power plug into a specialized power socket.
- 2) After making sure the power supply is correct, turn the on-load switch to “on” to connect power supply. Press fan control button to start the fan, suction force is induced at the suction hood.
- 3) Please check if the fan's impeller rotation direction is correct after connecting the power supply. If it is wrong, please change any one wire connection in the plug.
- 4) Suction arm can be rotated 360° horizontally, according to actual working condition, suction volume can be adjusted by adjusting volume valve in suction hood.

5. Safety

- (1) Please carefully read the instruction manual before starting the fan. Check whether power supply and grounding wire are properly connected.
- (2) This fan use **3×415V/50Hz** power supply, if the voltage fluctuation exceed $\pm 10\%$, the extractor possibly can't be started, and you should stop starting it.
- (3) Use independent power socket and ensure a reliable grounding, don't remove the grounding pin. Please unplug the power plug when you won't use the fan for a long time.
- (4) Don't damage the fan's power line. Don't unplug the power plug by pulling the power line.
- (6) The fan's repair should be done by professionals.
- (7) Fume hose should avoid being punctured by sharp objects.
- (9) Suction hood's distance to welding spot should be 0.3m-0.5m, exceeding this distance suction effect will be affected.

6. Service and repair

- 1) Regularly (every 6 months) check electronic components and power line, ensuring the fan to be in proper working condition.
- 2) Regularly (one year) check fan, ensuring its firmness and equilibrium.
- 3) Regularly (one year) clean motor's bearing, replace lubricant.

- 4) Regularly (one year) tighten the nut which connect fixing flange and the extractor's upper housing, stainless steel clamp which connect fixing flange and positioning flange, to prevent leakage from affecting suction.

7. Fault finding

Fault	Reason of the fault	Solving method
The fan can't be started	1) Power supply lack of phase or power supply is not connected. 2) The motor circuit-breaker trip when the electric current reaches current setting. 3) Electronic components break down.	1) Check power supply. 2) Please connect circuit –breaker. 3) Please contact the manufacturer.
Noise is loud	1) Fan turn reversely. 2) Connecting pin or nut come loose. 3) Dust accumulated on the fan.	1) Please exchange any two phase sequence of the power supply. 2) Check the fan's fixing. 3) Clean the fan.
Suction arm can't be positioned	1) Joint tightening nut come loose. 2) Joint spring receive unbalanced force.	1) Tighten the nut. 2) Please contact the manufacturer.

8. Parts list

No.	Name	Model	Quantity	Remarks
1	motor	MY801-2/1.5KW 3P B5/3x415V 50Hz	1 set	Shanghai Quanfeng
2	Fan	CY-230	1 set	Shanghai Quanfeng
3	On-load switch	GV2ME10C 4-6.3A	1 piece	Schneider
4	Hose	KSJ-0.7S-150	1 piece	Shanghai Kaisen

5	Suction hood	JS00-21-00	1 piece	Shanghai Kaisen
6	Suction arm joint	KSJ-0.7S -GJ	1 piece	Shanghai Kaisen
7	Connecting bracket	503x250x330mm	1 piece	Shanghai Kaisen

9. How to adjust arm

- (1) Below is after installation, the suction arm's adjustment.
- (2) All mechanical parts have connection joints loose problems in the using process, and suction arm is no exception. When working with the spark of high temperature and high temperature contact welding soot over a long period, loosening of the connection parts will appear making suction arm use reduced comfortable level.
- (3) The adjustment process is as follows: first, in the opposite order of installing a suction arm unwrapped suction arm, clean up the dust inside and other parts, rules in order to facilitate the subsequent installation. Then inspect the internal connection joints and check whether there is damaged friction disc or the phenomenon of bolt looseness, if both have the bolt should replace the piece, and adjust its fixed position. Then check extension spring working location in the right position.
- (4) Check if other parts appear the phenomenon of damage or deformation, if it the deformation of the parts, replace them.

10. Maintenance of arm

- (1) The outside of the suction arm need clean and maintenance every working day.
- (2) The inside of the suction arm need clean the dust and maintenance every two working days.
- (3) Check the spare parts of the inside of the suction arms every month, especially the degree of wear friction plate.
- (4) If the spare parts have any breakage, it should change it in time to avoid the whole effect.
- (5) Only specialized workers can open the suction arm to avoid the unnecessary trouble.

11. Contact information

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