

User manual

DEHACO NANO

NEBULISER



Specifications-Safety-Use-Maintenance



ATTENTION!

All persons involved in the initiation, operation, maintenance and repair of this product should receive a copy of these instructions!

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“Translation of “Original user manual”

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10-2010

1. Introduction

Many thanks for the purchase of the DEHACO NANO nebuliser. Consequently you own a state of the art unit that you, if used correctly, can use for years without breakdowns.

The following symbols and attention texts are used in this manual:



WARNING!!!

This text provides information relating to safety!! Non compliance can result directly in physical injury and/or damage to the machine!!



ATTENTION!

This text provides instructions, tips and information for optimal use!

This manual is intended to familiarize you with the operation, to give instructions for safe use and guidelines for regular maintenance.

The Dehaco NANO nebuliser has been delivered completely assembled and tested, ready for use. The delivery includes: a) the machine and b) this manual.

Check immediately at the delivery if the machine is complete and intact. If parts are missing or if there is transport damage, contact directly your supplier!!

This user manual, the name-plate and the stickers on the nebuliser contain important information and are as such part of the delivery.

In case of damage or loss, these should be replaced at once. All these spare parts can be delivered subsequently by Dehaco BV.



ATTENTION!

Make sure that you are acquainted with the contents of this manual before starting the activities so that you can use the machine in the best way.

2. Description

The Dehaco NANO has been developed for small-scale applications. The NANO is a compact unit used to produce a very fine water spray to control dust during (indoor) demolition and renovation projects.

A small rapidly rotating disc supplies a fine water spray, which is distributed by the fan. By an adjustable water supply and a three-speed fan, the water spray and the spreading can be adapted to your specific situation.



WARNING!!!

Never touch the nebuliser during operation: for a correct operation it could not be shielded 100%.



ATTENTION!

***Prevent contamination of the unit!!
Previously provide a clean water hose (rinsed) and a quick release.***

3. Intended use

The DEHACO NANO nebuliser:

- Is meant to produce a water spray and to disperse this spray, to bind it with dust and reducing the amount of dust in the air during demolition and renovation projects.
- Is meant to be used with clean tap water.
- Is meant for use in bigger indoor spaces and smaller outdoor spaces.



WARNING!!!

The DEHACO NANO is NOT suitable for use in explosion hazard areas!!

4. Technical specifications

- Voltage.....220 V-50 Hz
- Power.....230 W
- Isolation.....F/IP 55 (=jet-proof)
- Dimensions.....(l x h x w) 515x550x350 mm
- Water connectorGardena quick release
- Water flow rate.....0-90 ltr/hr (continually variable)
- Motorspeed.....3 positions 600/900/1.400 rpm
- Air output.....1.900 /2.900 /4.500 m³/hr
- Safety devicethermal protection



5. Safety



WARNING!!!

Almost all accidents are a result of:

- ***loss of concentration***
- ***inattention***
- ***negligence***
- ***wrong estimations***

Work calmly and concentrated! You have been warned!



ATTENTION!

You must follow the safety instructions in this user manual under all circumstances. This also applies to the instructions of local authorities!!



WARNING!!!

There exists imminent danger of bodily injury and damage to the machine as a result of inexperienced, incompetent or careless use!!

Keep bystanders at a safe distance when you work!!



ATTENTION!!

Wear always the required Personal Protective Equipment (PPE), that is to say at least: safety footwear, -helmet, -goggles and worker's gloves!

General safety rules

- a) Ensure that your work area is clean and well lit. An untidy and/or poorly lit work area can result in accidents.
- b) Do not use the equipment in areas where there is an explosion hazard. Electrical equipment produces sparks which may ignite the dust or vapours.
- c) Keep children or other persons away from the area when the equipment is in use. You may lose control of the equipment if you are distracted.
- d) Do not use any equipment if you are tired or under the influence of drugs, alcohol or medication. A moment of inattentiveness when using the equipment can result in serious injury and/or damage to the equipment or surroundings.
- e) Remove all loose tools before you turn on the machine.
- f) Wear suitable clothing. Do not wear any loose clothing or jewellery. Keep hair, clothing and gloves out of the way of moving parts. Loose clothing, long hair and jewellery may interfere with moving parts.
- g) Ensure damaged parts are repaired before use. Many accidents are due to poor maintenance.
- h) In addition to the general rules given above, you should also be aware of local working conditions and regulations.

6. Storage

The following actions should be taken if nebuliser will not to be used for a long time:

- Clean the unit.
- Perform maintenance according to the schedule.

Store the unit in a clean, dry area and cover it with a canvas.



7. Transport



WARNING!!!

Avoid damage! Always be careful when transporting the Dehaco nebuliser!

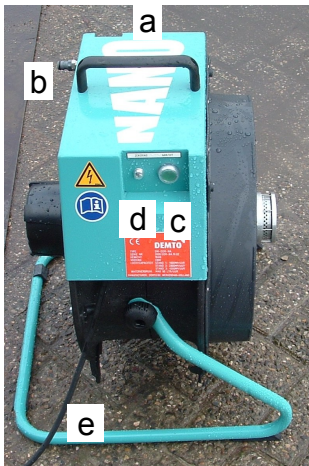
During transport the nebuliser should always be secured with enough tension straps!

8. Switching the unit on



ATTENTION!!

Before connecting the water hose, first flush it out in order to avoid dust or grit in the hose and that the spray unit will become dirty and/or obstructed.



a = waterflow controller

b = water connection

c = on/off switch

d = reset button thermal protection

e = power cable 220V

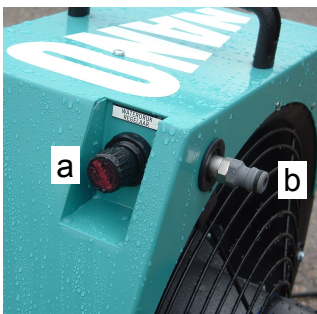
f = speed control fan

1. Place the Dehaco NANO close enough to the work area but not so close that it gets in your way or can be hit by falling objects. Turn off the water flow (a).
2. Clean the water hose connector (b) and connect it.
3. Place the plug in the plug socket.
4. Switch on the spray unit (c).
5. Adjust the desired speed of the fan (f).
6. Open the waterflow controller (a) carefully into desired position.
7. Turn the nebuliser in the desired angle.

Using a different order for switching on the unit is not harmful,

but not very practical:

- if you open the water flow controller before switching on the unit, it will start leaking.
- the fan may be put on the position "0" when the nebuliser is turned on, this will cause no damage.
- the nebuliser may run "dry", this will not cause damage.





9. Turning the unit off

1. Turn off the water supply.
2. *WAIT UNTIL NO MORE WATER COMES OUT OF THE WATER SPRAY!*
3. Turn off the nebuliser and put out the plug from the socket!!
4. Disconnect the water hose from the NANO.
5. Turn the nebuliser 45° forward (photo), so that the remaining water runs out.

10. Prevention of legionella

Legionella is a bacterium that can cause legionnaire's disease. Infection can occur by inhaling the bacterium through very small water droplets dispersed in the air (showers, spray units or whirlpools). The bacterium can grow in standing water with a temperature of 20°-50°C.

Simple basic prevention measures are:

- Use always clean tap water.
- Flush out the water hose before connecting it to the nebuliser.
- Empty the DEHACO NANO carefully after use (see above).



ATTENTION!

*You, the user, are responsible for the prevention of legionella.
You have been warned!!*

11. Maintenance



WARNING!!!

Before carrying out any inspection, maintenance or reparation always remove the plug from the socket !!

Daily

- Inspect the unit visually for damage.
Repair damage, however slight, immediately, or have it repaired.
This is for your safety and to maximise the lifetime of the machine.
- Also inspect the electricity cable.
If damaged, remove it immediately and have it repaired.
Your safety comes first!
- Keep the nebuliser clean!! This reduces the risk of accidents, and works more comfortable!



ATTENTION!

Clean carefully!!! Never use a high pressure cleaner!!

12. Trouble shooting



WARNING!

Repairs must be carried out by qualified personnel only. Use only original spare parts. This guarantees the safety of the equipment!!

- 1) The fan bearings are noisy/not running smoothly.
Replace the bearings. Mount using a liquid thread locker.
- 2) The ventilator will not start
No voltage: Turn on power / turn on regulator / replace fuse.
Voltage present: Carbon brush is worn: *replace the carbon brush.*
- 3) Thermal protection stalls:
Clean / Replace the bearings / Replace the windings.
- 4) Nebuliser is not receiving water.
Check: the water flow / the control valve / clean the filter.

13. End of economic lifetime



ATTENTION!

Get informed (at the local authorities) about the current requirements and guidelines for responsible discharging!

Electrical tools, accessories and packaging have to be reused in an environmentally sound manner.

14. Warranty

A warranty applies to the Dehaco NANO for a period of six months from the time of delivery, in accordance with the *Metaalunie* conditions. Within this period and subject to an assessment made by Dehaco BV, material faults and factory faults will be repaired free of charge. Transport and/or travel costs are for the account of the customer.

The warranty does not apply to defects resulting from:

- overworking the equipment
- using the equipment for activities other than for those which it is intended
- poor maintenance
- not properly following up the information given in these instructions
- using the equipment by persons not qualified to do so
- repairing the equipment with non-original spare parts
- adapting the equipment without the written consent of Dehaco BV.

15. Spare parts

All spare parts required for maintenance or repair are available through your supplier.

CE Declaration of conformity

ACCORDING TO ANNEX II.1.A OF THE MACHINE DIRECTIVE 2006/42/EC

We, Demto B.V.,
Steurgat 3a,
NL-4251 NG WERKENDAM

DECLARE ENTIRELY WITHIN THEIR OWN AREA OF RESPONSIBILITY THAT THE PRODUCT:

Brand: DEMTO
Model: NANO
Type: DM-DDR-NA
Serial number:

TO WHICH THIS STATEMENT APPLIES, IS IN ACCORDANCE WITH THE PROVISIONS OF THE FOLLOWING DIRECTIVES:

Machine Directive	2006/42/EC
Low voltage Directive	2006/95/EC
EMC Directive	2004/108/EC

AND IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND/OR OTHER NORMATIVE DOCUMENTS:.

EN – ISO 12100-1 en -2	Safety of machinery
EN – ISO 14121-1	Risk analysis
NEN 5509	User manuals

DRAWN UP AT :

Werkendam, date: 09-12-2009

DEMTO B.V.
A.K.J.R. Horden.