

# Owners manual for Danduct Clean® cleaning machine DC5



## **Danduct Clean®**

Teglvaenget 63 7400 Herning Denmark

Phone: +45 97 12 30 30 Fax.: +45 97 22 54 44 Email: danduct@danduct.com





- 1. Introduction
- 2. EU Agreement statement
- 3. Guarantee
- 4. Assembly of the equipment
  - 4.1 Using applications or special brushes
- 5. Operation of the equipment
  - **5.1. Operating environments**
  - 5.2. Operating the equipment
- 6. Trouble shooting
- 7. Technical specifications
- 8. Spareparts for cleaning machine and shaft
- 9. Practical use
- 10. Delivery report





#### 1 Introduction

We are pleased that you have chosen the Danduct Clean cleaning machine for your duct cleaning. We are sure that you will be satisfied with the equipment, but would however urge you to read this manual for obtaining a good and trouble free operation of the cleaning equipment.

The machine is manufactured in accordance with the machine council directive 89/392JEØF with changes 93/44IEØF and 93/6B/EØF as well as the Low voltage council directive 73/23/EØF.





## 2 EU Agreement statement / CE Declaration of Conformity

Supplier:

Company name: Danduct Clean®

Address: Teglvaenget 63

7400 Herning
Denmark

Phone: +45 97 12 30 30 Fax: +45 97 22 54 44

declares hereby that

Machine: Ductcleaning machine DC5

Brand name: **Danduct Clean**®

Type: 50610330

is in accordance with

73/23IEØF Low voltage Council directive

referring to the rules in the Councils Directive from the 1th. of June 1989, about the mutual approach of the legislation by the member states for machines (89/392JEØF and changed by 91/368IEØF, 93/441EØF and 93/68/EØF) under special reference to the directives enclosure No. I about essential safety- and health demands in connection with the construction and manufacturing of machines.

The machine is produced in accordance to the following Danish standards, which are implemented in a harmonised standard according to article 5 subsection 2:

EN 292-1 Maskinsikkerhed-Grundlæggende terminologi, metodik

EN 292-2 Maskinsikkerhed-Tekniske principper +specifikation

EN 294 Maskinsikkerhed-Beskyttelse af hænder og arme

EN 60204-1 Alm. bestemmelser for elektrisk materiel

Title: Managing Director
Name: Tim Larsen
Company: Danduct Clean

**Date** Signature





#### 3 Guarantee

The engine of the equipment is covered by a 12 months guarantee, which comes into force after Danduct Clean having received the signed delivery report.

The guarantee covers parts and replacement in our factory, or by one of our appointed distributors.

It is however a condition of the guarantee, that the instructions in this Owners manual has been followed, and that the equipment has been proper maintained.

Brushes and shafts are not covered by the guarantee.

Equipment which has been repaired locally without our written consent, is not covered by this guarantee.

Claims to the guarantee from a third party is not covered.





## 4 Assembly of the equipment for operation.

The cleaning machine consists of the following basic items:

Machine with control box and frequency converter. 20 m Shaft

The equipment is made operational in the following way.

4.1 Connect the brush on the shaft.

Please make sure, that the voltage and the frequency of the machine is corresponding with the supply 220/240 V 50/60 HZ (or 110 V if ordered).

4.2 Mount a brush at the brush-end of the shaft, screw fix.

If left-run is used on the machine, then the umbraco nut has to tighten. If it is not used, the brush will unscrew itself inside the duct.

4.3 When the switch is on O - the motor does not run

Turn the switch on R - the brush will run right

Turn the switch on L - the brush will run left

By turning the SPEED CTR knob you can regulate the speed of the engine

4.4 The machine is activated by means of the foot switch.







### 5 Operation of the equipment.

#### 5.1 Operating environments

The duct cleaning machine is designed to be used in tubes and ducts in suction plants and ventilation systems.

The following guidelines should be observed.

The machine is not designed for working in greasy ducts and ducts containing hard deposits like lime etc.

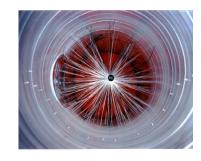
Note, the equipment may not be used in an explosive environment. Do not use the equipment in chemical environments which might damage metal, the polypropylene brush or the PVC hose.

#### 5.2 Operating the equipment

Choose the direction for the rotations.

Insert the brush into the duct.

The machine is activated by means of the footswitch, and the shaft is entered to the duct.



By cleaning please note the following.

By cleaning of round ducts you can choose either to rotate left or right

By cleaning of rectangular ducts where the width is not more than twice the heights you can choose to go right in. Change the direction of the switch and you will go out rotating the opposite way.

With the SPEED CTR the desired speed is set.

Always use the right size of brush. If the brush does not fit the maximum 25% can be used.



Do not try to force the brush further than a normal person can push the shaft. If the brush meets an obstruction like dampers, reductions etc., the extra force is producing a reaction to the shaft. The shaft might start to move, and the cleaning should only be continued carefully or stopped.





- Adjust the speed of the brush all depending on the size of the brush that is being used (Small brush needs less speed than a big brush)
- Take care that the shaft is not caught in a door or in any other way squeezed.
- The shaft is not being squeezed under transportation
- The Centralizer is needs to be used with the speed of the brush is not enough to centralize the brush in the duct. Our recommendation is to use the centralizer from ducts from duct diameter of 350-400 mm



Make the DC5 machine stand directly under the ventilation duct and make the DC5 machine point in direction of the ventilation duct.





# 6 Troubleshooting.

Problem	Cause	Solution
Machine does not run	No power	Check power supply
Machine running, brush not	Brush has fallen of	Mount brush and tighten the
Rotating		Umbraco nut
	Broken shaft	If the shaft is broken at the
		Brushend, a new connection can
		be mounted. Please contact a
		distributor appointed by us.

7.: Sparepartlist for ductcleaning machines - DC 5		
59610023	DC5 - Brushconnector	1
59610024	DC5 - Innershaft 10 mm - price per meter	2
59610025	DC5 - Bush for hose	3
59610007	DC5 - Footpedal including 2 m cable	4
59610026	DC5 - 7 m cable for 220 V complete	5
59610027	DC5 - Rear wheel (large) price each	6
59610028	DC5 - Front wheel (small) Price each	7
59610029	DC5 - Elbox large white	8
59610030	DC5 - Switch on/off	9
59610031	DC5 - Direction switch	10
59610032	DC5 - Emergency stop	11
59610033	DC5 - Potentionmeter/speed regulator complete	12
59610034	DC5 - Outhose antistatic 18 mm - price per meter	13
59610035	DC5 - Screew for large rear wheel - price each	14
59610036	DC5 - Coubling for shaft at motor	n
59610037	DC5 - Motor with gear	n
59610021	DC5 - Frequency converters	n
50613105	Tool for repairing shaft for both DC4 and DC5 complete	
50613106	Inserts for presstool to DC5 shafts - KZ11	











#### 8 Technical data.

#### Machine

Voltage: 240 or 110V AC Frequency: 50 or 60 Hz

Current: 110V = 4.8 amp or 220V = 2.3 amp

Power: 0,370 Kw
Engine speed: 630 - 1400 rpm
Noise level: < 70 dB (A)

Weight machine: 23 kg

#### Shaft

Lengths: 20m

Hose: 18 mm antistatic PCV hose. Shaft core: 10 mm turned steel coil shaft





#### 9 Practical use

To avoid breaking the **DC5** shaft please be aware of following:

- 1. The brush is maximum 25% in oversize than the size of the duct that has to be cleaned!
- 2. Adjust the speed of the brush all depending on the size of the brush that is being used (Small brush needs less speed than a big brush)!
- 3. The shaft is not being squeezed under transportation!
- 4. Do not use force when an obstacle occurs inside the duct. Make the brush do the work!
- 5. Make the DC5 machine to point in the direction of the longest part of the shaft (Many times the away from the opening in the duct).





# 10 **Delivery report.** Dealer name: Owner's name: Owner's address: Equipment number: Extent of delivery: DC5 duct cleaning machine.: Signed: Date: Dealer Delivery report - to be completed by the end-user. I have received: Operation and maintenance manual for danduct Clean® inspection equipment The equipment has been delivered to me in a satisfactory condition, and I fully understand that the warranty is for a period of 36 months after the date of delivery. I accept that neglect of misapplication of the equipment as well as unauthorized modifications shall cause to void this warranty. End-user's signature: Title: Date: Warranty of the above equipment will not be effective before this form has been completed, properly signed and this original within 20 days after delivery returned to Danduct Clean A/S Teglvaenget 63 7400 Herning Denmark

Comments:

