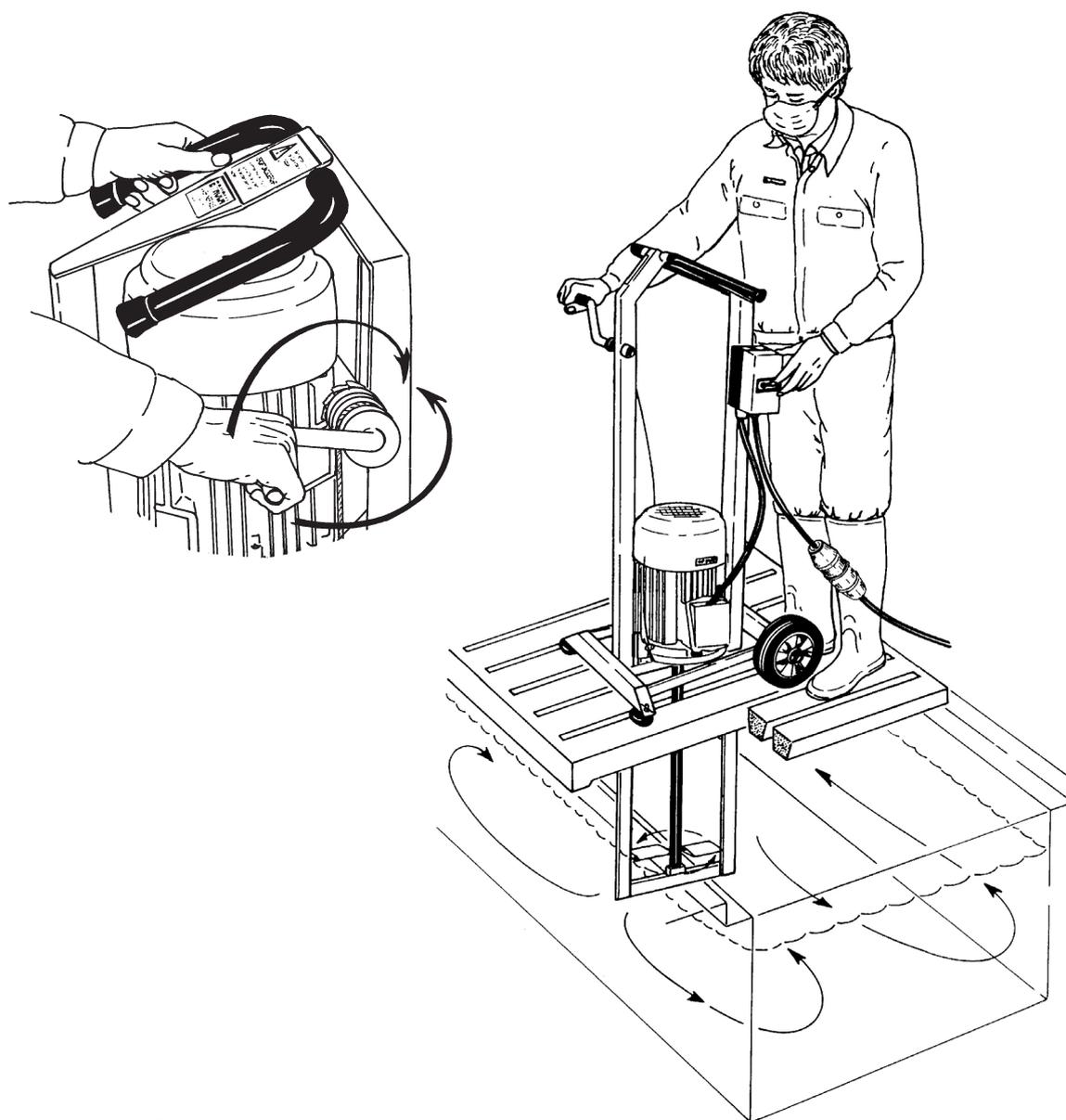


# USER MANUAL

## Slurry agitator for pigs S 65 - S 95

PLEASE READ THIS MANUAL BEFORE USE, AND MAKE SURE TO ALWAYS STORE IT WITH THE MACHINE. THIS MANUAL CONTAINS IMPORTANT INFORMATION ABOUT USE, MAINTENANCE, SAFETY, AND WARRANTY



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# INTRODUCTION

Dear Customer

Congratulations on your purchase of an Højgaards Slurry Agitator for pig houses.

Please read through these operating instructions before using the machine for the first time; they contain information that will enable you to make maximum use of the slurry agitator, as well as details about the safety aspects surrounding the use and maintenance of the machine and any replacements needed.

The Højgaards slurry agitator has been manufactured and approved in accordance with the Danish Working Environment Authority's Executive Order No. 561 of 24 June 1994.

These operating instructions form part of the agitator equipment and must accompany the machine when it is sold.

The illustrations and text in this edition were correct at the time of printing. Since it is Højgaards policy constantly to make improvements, we reserve the right to alter specifications and equipment at any point without notice.

The Højgaards slurry agitator has a number of different devices to ensure maximum safety, both for the user and for the surroundings. We would therefore ask you to pay particular attention to section 1 regarding safety and section 3 regarding inspections and maintenance.

The Højgaards slurry agitator adheres to the requirements in the EU Machinery Directive, attested to by the CE label and accompanying Declaration of Conformity.



As you go through the operating instructions you will notice that certain things are marked by this symbol as a warning. This warning is to remind you of places where you must take particular care to avoid personal injury or damage to the agitator.



# GENERAL INFORMATION

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# GENERAL INFORMATION

## 1.1 Safety instructions

Agitating can produce toxic gases.



# WARNING TOXIC GASES



Make sure you have good ventilation when agitating. Use a protective mask with a hydrogen sulphide filter or a breathing mask with a fresh air supply.

The agitator must not be plugged in when the propeller is over the slatted floor.

## 1.2 Højgaard's Machine plate

All products from Højgaard are equipped with a machine plate in accordance with the EU Machinery Directive. The information from the machine plate is necessary when we need to help you find spare parts.

The plate is attached to the motor consol.

**TYPE:** The machine's type and size

**NR:** The machine's manufacturing number

**ÅR:** The machine's production year



## 1.3 Technical data

Motor	Three-phase AC motor 380 V, 16 A. 1440 RPM. 4 kW / 5.5 HP. Splashproof (IP44). Sparkless.
Protective motor switch	Sealed setting: 9.6 A. Low voltage release
Noise level	Under 70 dB

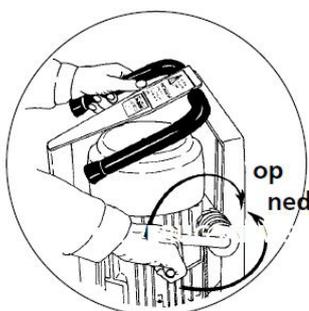


# INSTRUCTIONS FOR USE

## 2.1 Before you start

1. Empty the drain of any liquid or loose slurry, and fill it with water.
2. Place the agitator on the slatted floor in the spot where the agitating is to be performed. Make sure the propeller is parallel to the gaps. Lower the agitator at least 50 cm from the wall of the drain.
3. The agitator is lowered by turning the handle anticlockwise (fig. 1)
4. To prevent vibrations, the sliding parts of the agitator must not touch the bottom of the drain.

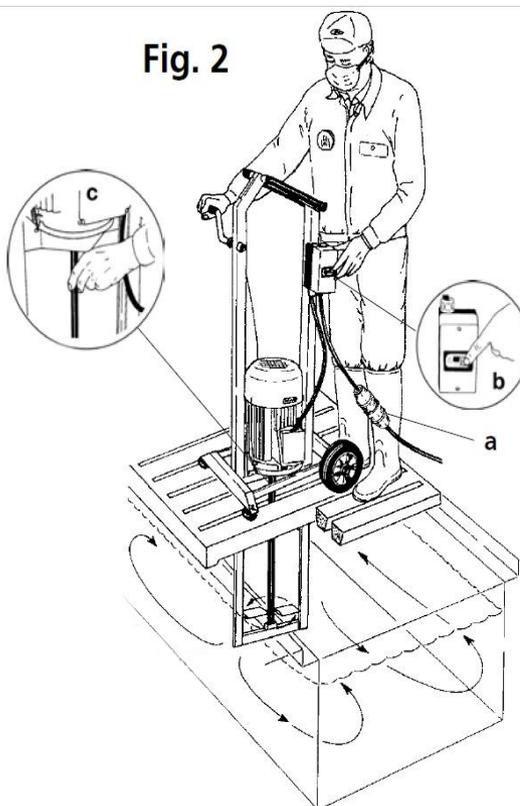
Fig. 1



## 2.2 Use

1. Join the machine's male connector (fig. 2 a) to a GT extension female connector type 301. Make sure that the extension cable is strong enough (min. 16 amp.)
2. Start the motor by pressing the grey button (fig. 2 b).

Fig. 2



## 2.3 Agitating

1. The blades unfold, and the slurry is pressed down forcefully along the bottom of the drain and up along the sides. This scrapes caked matter back towards the blades. This breaks up and dissolves stuck-on slurry residues.
2. Repeat the process at other points in the drain.
3. The agitator cannot run in slurry containing uncut straw.



# INSTRUCTIONS FOR USE

## 2.4 Finishing agitating / moving the machine

1. Stop the motor by pressing the red button (fig. 2 b)..
2. Remove the extension cable from the machine.
3. Raise the movable part of the agitator to the underside of the gaps by turning the handle clockwise (fig. 1).
4. To get the propeller up through the gaps, turn the shaft so the propeller can fit through the gaps (fig. 2 c).
5. Continue to turn the handle until the movable parts of the agitator cannot come up any further.

# MAINTENANCE

## 3.1 Maintenance instructions

Rinse off the agitator after use.

The handle must be lubricated regularly, using the lubricator nipple provided for this purpose. Check the bottom bearing and propeller blades regularly and replace these parts as necessary. Make sure the bolts holding the bottom bearing in place are secure.

Replace the bottom bearing by laying down the agitator. Then unscrew the two screws under the bearing. The shaft and bearing can now be pressed to the side and the bearing can be removed. The blades of the propeller are removed and replaced by unscrewing the two screws securing them to the shaft.

The nut on the handle shaft should be tightened regularly. This nut adjusts the function of the friction brake. The nut must be tightened so the handle can stand on its own and hold the movable parts of the agitator at the required height.

Defective parts must be replaced with original Højgaards spare parts.

## 3.2 Servicing and spare parts

If during service or repair works, spare parts that are not identical to those recommended are used, the warranty from Højgaards will no longer apply.

## 3.3 Démontering

When the agitator is no longer functional, it should be disposed of responsibly, following national legislation concerning the disposal of hazardous waste.

1. Plastic and rubber components should be removed and placed in a waste bin.
2. After dismantling the above, the agitator can be taken to one of the municipality's approved product dealers.



# Warranty and Guaranties

## 4.1 Terms of sale and delivery

### 1. General

- 1.1 The following terms of sale and delivery apply to all sales, unless otherwise separately agreed in writing.
- 1.2 The seller's indication of prices, quantity, qualities and dimensions in price lists, brochures, catalogues etc. are approximate and binding only insofar as the agreement between the seller and the buyer explicitly refers to them.
- 1.3 All drawings and other technical documents, or the like, which are handed to the buyer by the seller before or after the conclusion of the agreement belong to the seller. Without the consent of the seller, drawings/documents cannot be used for anything other than the purpose for which they were handed over. The Buyer is not entitled to copy or otherwise reproduce the material without the seller's consent.
- 1.4 The buyer is required to keep secret any technical or commercial information about the seller, of which the buyer has become aware prior to or after the conclusion of the agreement.

### 2. Offer and Order Confirmation

- 2.1. The seller's offer is based on the prices of raw materials, consumables, labour wages as well as freight, insurance, tariffs and exchange rates, etc. applicable at the time of the making of the offer.
- 2.2. The seller reserves the right to change the prices stated in the offer and/or order confirmation if changes in exchange rates, tariffs, taxes or transport costs occur prior to the date of delivery.
- 2.3. All offers made by the seller may be changed and revoked until the seller has sent the order confirmation to the buyer.
- 2.4. An offer is valid for a maximum of 60 days from the date of the offer.
- 2.5. Spoken agreements on specifications for the parts ordered must be confirmed in writing by the seller in order to be valid.
- 2.6. Deliveries include only the parts and/or services expressly mentioned in the offer/ order confirmation.
- 2.7. Orders placed and confirmed cannot be cancelled without Højgaard's written consent.



# Warranty and Guaranties

## 3. Consultation

- 3.1. Højgaard advises the customer within our field of experience, this is done based on Højgaard's best knowledge at the time of providing. The advice and Højgaard cannot accept liability if later experiences lead to other solutions.
- 3.2. Consultation takes place based on the information submitted to Højgaard by the customer.
- 3.3. All advice is indicative and shall not be construed as a genuine functional guarantee without Højgaard's express written confirmation in connection with the conclusion of the purchase contract.
- 3.4. For areas where there is a requirement of the material recommended by Højgaard, Højgaard is not responsible for compliance with norms not communicated in writing to Højgaard.
- 3.5. If Højgaard's products are to be used in processes or constructions such as tanks, to which special requirements apply, the customer is obliged to disclose these requirements. Otherwise, Højgaard is not responsible for compliance.
- 3.6. The provisions set out in clause 3.5 also apply if the goods are sold to a country where requirements differ from Danish requirements.

## 4. Delivery

- 4.1. The buyer is obligated, at the seller's request, to prepay in part or in full, provided that the amount exceeds DKK 100,000.
- 4.2. Delivery takes place at the agreed time. It is a prerequisite, for the seller to be able to deliver on time, that all information necessary for the completing of the order, has been communicated to the seller at the time of making the order, including all necessary drawings and information, etc.
- 4.3. The agreed date of delivery, stated by the seller, is subject to change based on war, fire, strike, lockout, transport barriers or other force majeure, including delays on the part of subcontractors. If such conditions occur, the delivery time is extended accordingly. The seller has the right to make partial deliveries.
- 4.4. If delivery is delayed due to the buyer's circumstances, the buyer is obligated to make payment at the agreed upon time, just as the buyer must pay the seller's storage costs based on the seller's calculation and at the storage prices determined by the seller.



# Warranty and Guaranties

## 5. Installation works

- 5.1. If the seller is responsible for all or part of the installation of the delivery, the seller must receive separate payment for this. Payment for installation is carried out per account rendered, unless otherwise agreed in writing.
- 5.2. It is the responsibility of the buyer to provide a firm access road intended for a fully loaded lorry with a crane, to ensure that access conditions in no way hinder the seller's ability to deliver or assemble the delivery.
- 5.3. Unless otherwise agreed, Højgaard's will charge for the necessary labour of being at the disposal of the seller at the workplace.
- 5.4. The buyer must provide toilet facilities for the installation staff, at or near the installation site.
- 5.5. The buyer is responsible, to the seller, for the installation to be able to be carried out, under conditions complying with applicable laws and regulations, for the working environment at the installation site.
- 5.6. The Buyer is responsible for notifying the seller in writing, of the safety regulations applicable to staff at the installation site.
- 5.7. It is the buyer's responsibility to provide notification when sufficient safety equipment is not available at the installation site. Rental of scaffolding, work platform, diver, etc. necessitated by a failure to do so is arranged at the seller's initiative and the costs incurred are invoiced to the buyer.
- 5.8. Until such time that the seller's installation is completed, the buyer is obligated to take out the standard contractor's insurance which provides cover against damage for any reason, so that the seller is directly insured according to the insurance policy. If such insurance is not taken out by the buyer, the seller must be put in a position as if the insurance had been taken out.
- 5.9. In the case of electrical work and other types of installation, where an authorisation or expertise other than that possessed by Højgaard's (e.g. a diver) is required, the buyer is obligated to make separate payments for the completion. Only Højgaard's assesses whether it possesses the necessary competences or whether other expertise must be acquired.

## 6. Payment

- 6.1. Unless otherwise agreed and confirmed in writing, the purchase price is due for payment no later than 21 days from invoice date.
- 6.2. Any bank charges and fees in connection with payment are paid for by the customer.
- 6.3. If timely payment is not made, interest will be calculated at the applicable rate from the due date.



# Warranty and Guaranties

- 6.4. Deferral of the agreed delivery date does not justify a corresponding deferral of payment.
- 6.5. When placing an order, the seller can demand advance payment, if the buyer cannot be credit insured. This can be done by dividing payment into instalments when the order is placed, and the remaining payment before dispatch, or by paying the full order amount, including any shipping costs, when placing the order.

## 7. Property Rights

- 7.1. The seller retains all rights to the product/service sold until the entire purchase price has been paid, incl. interest and possibly costs.

## 8. Defects

- 8.1. The product is delivered in the design and condition that is the applicable standard at the time of delivery.
- 8.2. The customer must immediately, upon receipt, inspect the delivery to ensure that it is not defective. Complaints about defects that were, or should have been, discovered during such an inspection, must be made within 14 days of receipt, for the customer to rely on these.
- 8.3. Højgaard only provides compensation in the event of freight damage, if the customer has refused receipt of damaged freight, and reported it to Højgaard within 24 hours.
- 8.4. Return of goods without Højgaard's prior written consent will not be accepted.
- 8.5. Upon notification to Højgaard within a 12-month period from receipt of the goods, defective materials and manufacturing defects are subject to guarantee.
- 8.6. Højgaard undertakes and reserves the right to remedy any defective products at its factory or to replace defective products. Replaced parts will automatically become Højgaard's property and must be returned to Højgaard by agreement.
- 8.7. Services and deliveries that have not been accepted in advance and in writing by Højgaard as services under a guarantee are invoiced following the above general conditions.
- 8.8. Any warranty obligation expires if, without Højgaard's prior written consent, changes are made to the delivered product, or if Højgaard's request for the return of the damaged product is not complied with.
- 8.9. Expenses or costs associated with repatriation and reassembly or similar measures, are not recoverable. This also applies to indirect losses and damage, including operating losses of any kind that are also not recoverable.



# Warranty and Guaranties

- 8.10. Any cost of repairs carried out by the customer or any third party without Højgaards' prior written consent will not be reimbursed.
- 8.11. Parts of a foreign make that are included in delivery, e.g., electrical accessories, automatics, etc. are subject to the same guarantee as is given to Højgaards from a subcontractor.

## 9. Product Liability

- 9.1. The seller is responsible for product liability in accordance with applicable Danish law.
- 9.2. The seller is only liable for property damage if it is proved that the damage is due to gross negligence, or negligence on the part of the seller, or others for whom the seller or another is responsible.
- 9.3. The seller's liability covers only direct property damage and, thus, no loss of earnings, operating losses, or other direct losses.
- 9.4. If any third-party claims are made against one of the parties for product liability, under that provision, the party concerned must immediately notify the other party in writing.
- 9.5. To the extent that the buyer or the person to whom the buyer transfers the sold product, has taken out insurance cover, the seller's liability is limited to cover only insofar as said insurance cover is not adequate.

## 10. Severability

- 10.1 If - for whatever reason - any part of these terms was to be deemed invalid, the validity of the others will not be affected.



## 5.1 Spare parts

