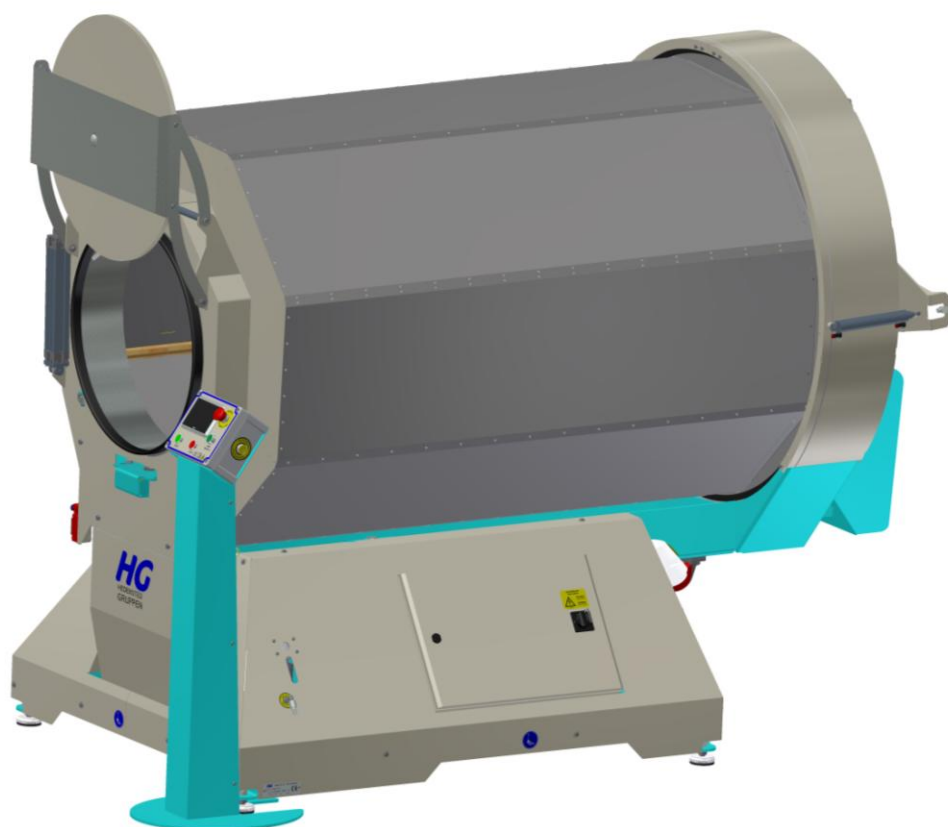


# USER MANUAL



## HG Skin drum 16



IMPROVING YOUR FUR BUSINESS

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## **Introduction.**

HG skin drum 16 can be used for tumbling of mink skins on all fur farms.

HG skin drum 16 is made by the concept that it should be a simple and user-friendly product that still meets the requirements on safety and working environment.

## 1. Safety.

### Read the manual.

Machine operators must read the manual carefully and be trained up in the machine's functions before using it. If the operator is unaware of certain details, there is a risk of injury when operating the machine.

If any of the warning labels are about to fall off, frayed or worn so the symbol is not understandable, the sticker must be replaced.

### WARNING! High voltage.



Before electrical cabinet is opened, the power supply must be turned off and locked against accidental connection, wait 10min after power is turned off to work in Electrical cabinet, as some power is stored in the inverters. The cabinet may only be opened by authorized personnel.

### WARNING! Clamping hazard.



Do not come into contact with the machine's moving parts, this applies to both fingers and clothing, as this may cause injuries.

### 1.1 General use

- The machine may only be used industrially for mink to tumble the skins from mink.
- Operators must be at least 18 years old and have normal feasibility and physique.

## **1.2 Training.**

- The operator must have read the instructions in this manual thoroughly and acquired knowledge of how the machine is used correctly before the machine is used for the first time, if necessary. in consultation with an experienced instructor.
- The Instructor needs to have attention on:
  1. The need for being careful and focused when operating the machine.
  2. The Operators overview in the area around the machine.
- The operator is responsible for accidents and dangerous situations that can appear compared to people in the area.

### **Most accidents causes by:**

1. A lack of concentration.
2. The operator's knowledge of the machine is inadequate.

## **1.3 Location, space requirements, etc..**

- The machine must be installed indoors on a firm, level surface.
  - When working with the machine, there must be a flicker-free and glare free illumination of at least 300lx.
  - The area around the machine must be kept tidy to prevent tripping hazards.
  - Cables, tubes and hoses to the machine must be placed so they do not pose a risk, such as outside walkways, overhead or in dedicated cable trays on the floor.

## **1.4 Preparation.**

- When operating the machine, make sure not to have loose clothing or long hanging hair that could get caught in the machine. Or grab the rotating parts. Also, you should wear non-slip shoes, so you do not run the risk of slipping.
- Keep grease, oil and other machine's maintenance in containers approved for the purpose and out of reach of children and unauthorized persons.

## **1.5 Maintenance.**

The machine should be daily examined for visual defects and whether the moving parts jammed due to, sawdust or other foreign bodies.

Upon visual inspection check the following.

- That there are no leaks in air systems (hoses, etc.)
- All bolts, nuts, etc. are properly tightened
- The chains are not defective, properly tightened and lubricated.

## 1.6 Disposal of the machine.

For disposal, please contact your local product dealer, so the machine can be dismantled and disposed of in the most environmentally appropriate way.

## 2. Transportation and towing.

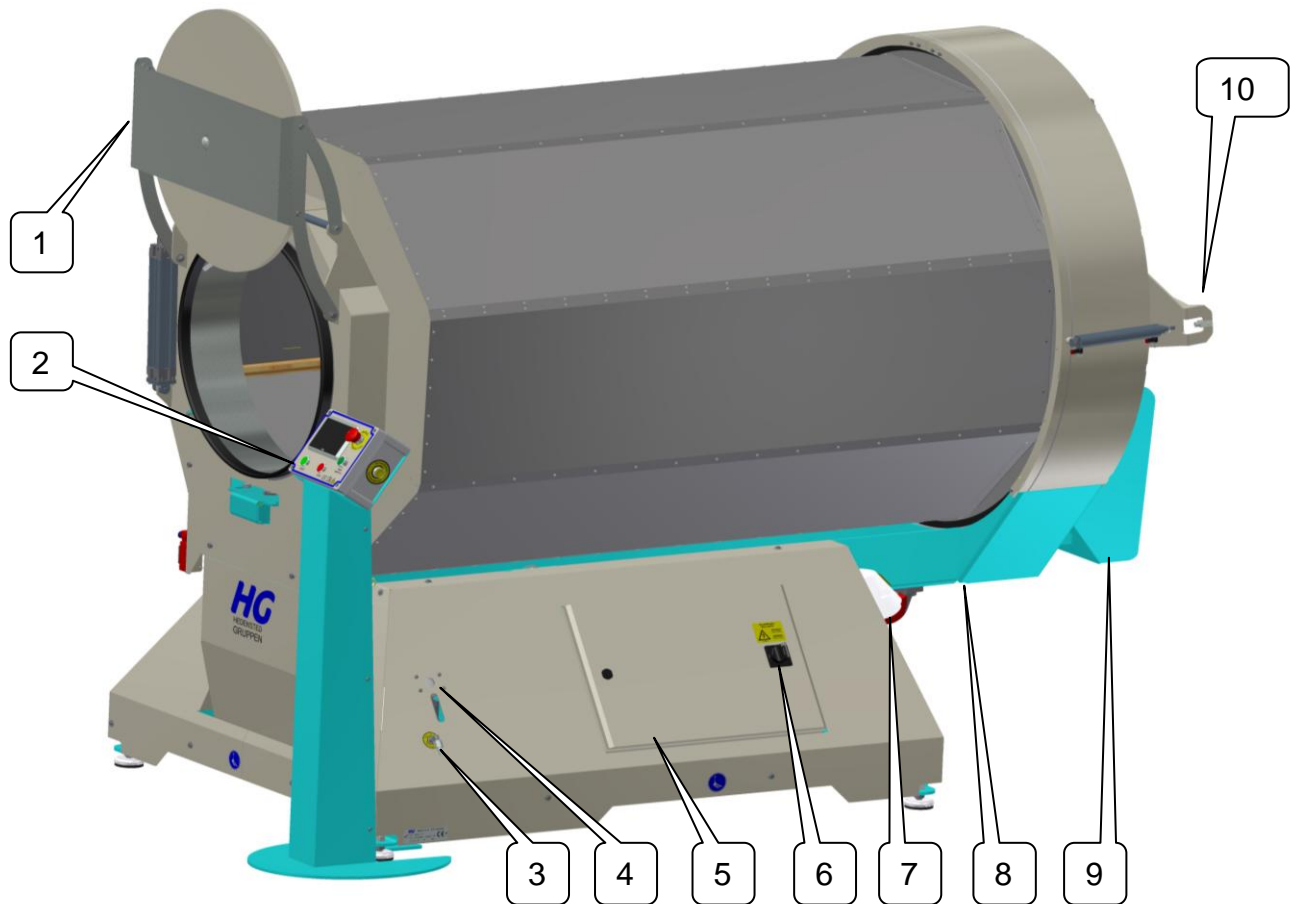
Use a pallet lifter or truck to transport/Lift the machine, it is possible to lift in end of and side the machine where there is at sticker with a pallet lifter. If the machine must be secured for transport, are loaded strapped across the frame where the drum frame rest, which are marked accordingly, never pull straps over the safety wires or the drum itself.

It is not possible to lift the machine by crane

**Warning:** Do not attempt to move or lift the machine with equipment that is not designed for the task.



### 3. Machine units and functions.



1. Entry Door
2. Control panel.
3. Air connection.
4. Pressure gauge.
5. Electrical cabinet.
6. Main switch.
7. CEE plug for sawdust spiral.
8. Funnel opening for sawdust.
9. Funnel for skin.
10. Back door.

### 3.1 Entry Door.

When the door is open it is possible to fill skins and sawdust into the drum, and the cycle can then start closing and opening speed can be adjusted by help of the throttle valve located on the cylinder next to the door.

- Top throttle valve controls how quick the door opens.
- Bottom throttle valve controls how quick the door closes.



### 3.2 Control Panel.

The control panel controls all the functions of the drum, such as: Start, stop, pause, timers, and etc. see the functions of the buttons under sections 5.

### 3.3 Air connection.

Here you can connect the air supply, the machine must be supplied with a minimum of 7 bar air pressure.

Regularly check that the fine filter is clean

Maximum inlet pressure is **9,5 Bar**

The valves can be damaged if operating with Higher pressure.





### **3.4 Pressure gauge.**

Here you can see the pressure that is put into the drum valves and cylinders,

### **3.5 Electrical cabinet.**

El cabinet can be opened using the plastic wrench supplied with the machine.

**WARNING.** Before El cabinet is opened, the power connection must be interrupted and locked against accidental connection, wait at least 10 minutes after power is off to work in El cabinet, as there can be stored power in the inverters. The cabinet must not be opened by unauthorized personnel, since this can set endanger hen's person life. The motor protection for the motors is located in the electrical cabinet. If a red button is turned in, the engine is cut off. Press the black button if the motor protection has tripped.

### **3.6 Main switch.**

The main switch must be turned to ON before the machine can be used.

**Warning:** The main switch must be turned to OFF and locked before starting maintenance work.

### **3.7 CEE plug for sawdust spiral.**

This plug is designed for the sawdust snail, it runs on a timer that can be set on the panel, it is also possible to connect to a conveyor belt to move the skins that fall out of the machine if desired.

### **3.8 Funnel opening for sawdust.**

When the cleaning cycle starts the sawdust falls out of this opening.

### **3.9 Funnel for skin.**

When the drum is emptying, the skins fall out of the exit door and down this funnel.

### **3.10 Back door.**

When the cleaning cycle is finished the rear door opens and the clean furs falls out through the opening.

## **4. Setup and connection.**

Hedensted Gruppen recommends that one of the company trained installers set up the machine for optimum flow and process conditions

#### **4.1 Setup.**

The machine must be installed indoors on a level and solid floor.

The ceiling height must be at least 230cm.

Operating sites must be in accordance with EN 12465-1: 2002 should be illuminated with min. 300 lx.

#### **4.2 Air and electricity supply.**

##### **Electricity:**

The machine must be connected 3x400 volts with zero (N) and earth (PE) with a 16A connection. The connection cord must have a CEE plug or isolator for safe disconnection in case of maintenance or repair.

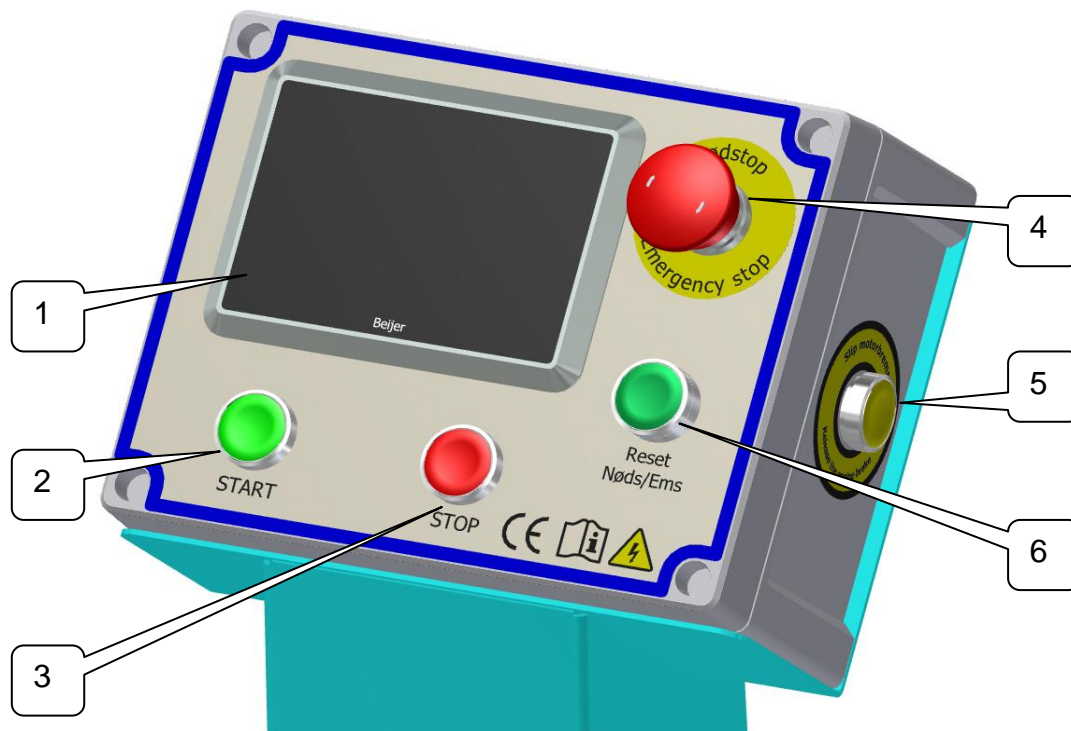
##### **Air supply:**

The machine requires compressor pressure of minimum 7 bars. The machine's air connection / fine filter may MAX be tuned up 9,5bars pressure otherwise the machine valves will be destroyed. The air is connected with a quick release coupling type Cejn 320. In order to avoid breakdown, it is important that the air hoses don't contain water, dirt, rust, or any other foreign objects.

##### **Warning:**

Air hoses and electric cables must be put away or striped up, and not run across the floor, as this may result in tripping hazard.

## 5. Console features.



1. On the display the timers can be setup, and the other functions like the doors can be activated manually.
2. The START button activates the cycle, and can also be used to skip to the next step in the cycle. If the drum is in pause, use the start button also to resume the cycle.
3. STOP can be used to set the machine on pause in the middle of the cycle, and if the button is held down for 5 seconds, the cycle stops and the drum resets to starting position.
4. EMERGENCY STOP must be used in situations where a person is in danger of being hurt, or is injured by the machine. When the button is activated the engine brake immediately locks the machine, and it stops in the position it's in.
5. RELEASE MOTOR BRAKE is held down if the emergency stop is activated to release the brake in the motor so that the drum can rotate freely, I case something or body is trapped in some of the drum rotating parts.
6. RESET NØDS / EMS should light up green for the machine to be ready, if it is not illuminated, press the button, if it still doesn't lights up, check the Emergency stop wires and button if they are triggered.

## 6. Display functions.

### 6.1 Main menu.



1. Pres the HG logo to access the contact details for HG.
2. Opens the operation menu, where you can see how far the drum is in the cycle.
3. Opens settings where you can set the timers i the various stages of the cycle.
4. Opens manual, where you can manually activate the functions of the mashine, but not while the cycle is in progress.
5. Select the desired language.

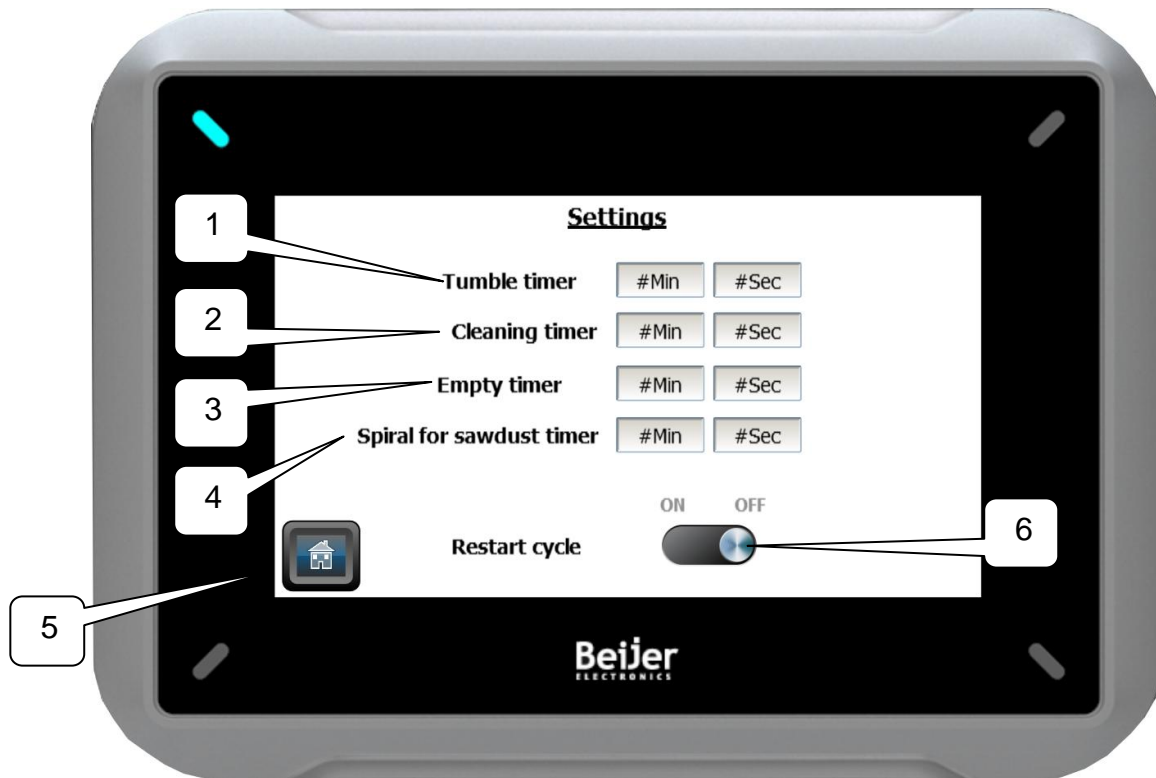
## 6.2 Operating.



When the timer is active is the dial is green.

1. Shows the remaining tumble time.
2. Shows the remaining cleaning time.
3. Shows the remaining emptying out time.
4. Return to main menu.
5. Total remaining time of the cycle.

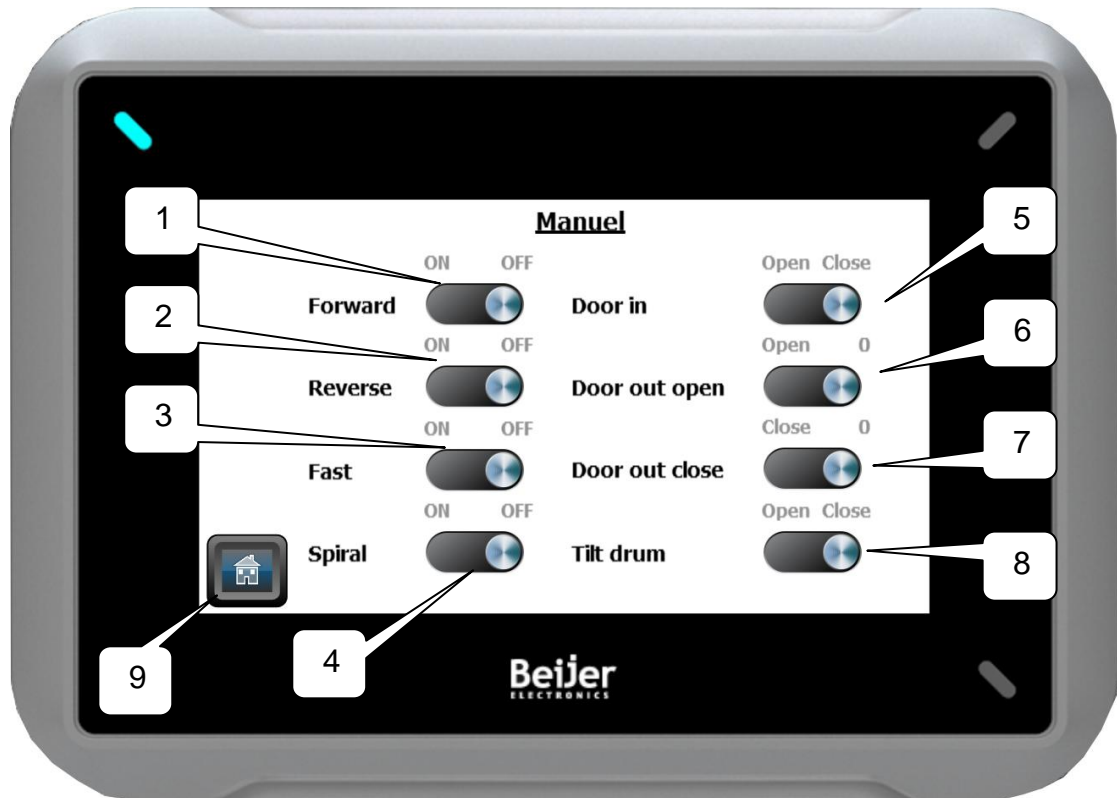
### 6.3 Settings.



The timer is adjusted by pressing the box in front of the text, a small keyboard appears when you select the desired time and finish by pressing return.

1. Timer for tumbler.
2. Timer for cleaning.
3. Timer for emptying out.
4. Timer for sawdust coil, or conveyor.
5. Back to main menu.
6. If the switch is set to ON, the cycle restarts as soon empty timer runs out.

## 6.4 Manuel.



If the drum is in the cycle, all buttons will be invisible besides button to sawdust coil.

1. Turn on / off drum revolutions forward.
2. Turn on / off drum revolutions reverse.
3. Speed up the chosen direction of rotation.
4. Turn on / off the spiral for sawdust/ belt.
5. Open/close entry door.
6. Open or pressure less for the exit gate.
7. Close or pressure less for the exit gate.
8. Tilt drum.
9. Back to the main menu.

## **7. Maintenance.**

**Warning:** The main switch must be turned off and locked before starting maintenance work.

### **Normal cleaning**

After finishing work checked machine for foreign objects that can get stuck in the machine. Use air gun to remove wool and dirt on machine parts. blown the engines' cooling fins free from dirt. Use vacuum cleaner to remove dust and wool on the floor around the machine. Regularly check the blower / motor surfaces of dust and other impurities. If the dust layer is more than 0.5 mm thick it must be removed.

OBS. Filter mask, goggles and ear protection must be used when blown with compressed air.

### **Lubrication of the bearings and chain.**

The machine's bearings are lubricated with grease. There are three bearings on each machine that need to be lubricated, two where the drum tilts and 1 on the entrance gate. The chain is at the entrance gate, on a big sprocket.

### **The chain.**

There is one chain on the machine, be aware that the chain is tensioned correctly, it must be able to move 10-20mm by pulling it lightly with one hand.

### **Consumables.**

We recommend Q8 Rembrandt for lubricating bearings EP 2. HG item no. **476570**

To lubricate the chain is use HG item no. **476590**

### **Protection covers and devices.**

It is not allowed to remove protection covers, unless the machine requires repair or service. This should only be done by an experienced person.

### **Storage.**

When you are finished using the machine blow it clean and wipe it down. Grease the bearings and chain, so it doesn't corrode.



## 8. FAQ.

Error	Possible cause	Solution
Machine will not start.	Emergency pulled no power on.	Check all emergency stop, also wire, check the power connection.
The doors will not open	There is not enough air to the machine. The valves stuck / defective.	Check the air connection and the pressure up machine requires at least 7 bar. Activate the valve manually, and change the valve.
Door will not close / drum does not tip.	The valves stuck / defective.	Manually activate the valve / Change valve.

## 9. Technical data.

### Dimensions and weight:

Width: 121cm

Length: 250cm

Height: 190cm

weight: 750kg

### Electricity:

Voltage: 3x400v+N+PE

Fuse: 16 A AC/DC

Connection: 16A CEE

PLC control: 230Vac + 24 Vdc

### Air pressure.

Air pressure: Min 7 bar, Max 9,5 bar

Connection: Cejn 320 quick coupling.

### Warranty.

It comes with 12 months warranty on HG Skins drum 16

Defective parts are replaced if the error is attributable to manufacturing defects, errors attributable to freight are not covered by this warranty.

In the case of the misuse of HG skin drum 16, there is no warranty either on the machine or damaged skin.

## 10. EU Declaration.

Hedensted Gruppen A/S  
Vejlevej 15  
DK-8722 Hendested  
Tel. (+45) 75 89 12 44  
Fx (+45)75 89 11 80  
www.hedensted-gruppen.com

### Hereby declare that:

HG Skin drum 16  
HG product nr. 190069

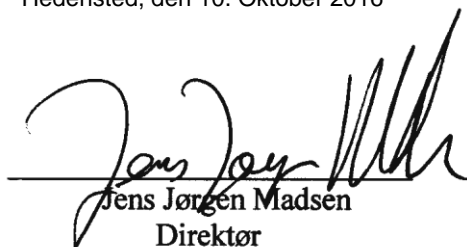
### In accordance to:

- The Machinery directive 2006/42/EF
- Low Voltage directive 73/23/EØF
- ROHS- directive 2011/65/EU

### Using the following harmonized standards:

- DS/EN 12100-1:2005
- DS/EN 13857:2008
- DS/EN 60439-3

Hedensted, den 10. Oktober 2016



Jens Jørgen Madsen  
Direktør