

STARING SM 125

Instruction manual



>> Before you use the Mixer, please read the Instruction manual

Dear STARING Customer,

STARING SM 125 is a pan mixer of the most advanced design in the market and easily meeting all site requirements of today. The maximum performance and the simple, easy operation of the STARING SM125 are results of our recent development work within the mixer technology field.

In order to achieve safe handling of the STARING SM125, we ask you to read the following instruction manual carefully.

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>> 1. Technical Data

Mixer Type	SM 125
Mixer Weight.	140 kg
Gross Volume	125 l
Net Volume	approx ca. 70 L
Pan Diameter	735 mm
RPM.	35 (l/min)
No. of Mixer Arms.	3
Discharge Height	800 mm
Electric Moter Output	1,5/2,2/3,0 kW
Protection	IP 54
Voltage	400V
Power Consumption	3,7A/5,3A/7,2A

Electric Moter Output	1,5 kW
Protection	IP 54
Voltage	230V
Power Consumption	9,2A

Frequency	50 Hz
Noise Level at the Working Place (Mixing)	78 dB(A)
Noise Level at the Working Place (Idling)..	58 dB(A)
Mixer Noise Level (Mixing)	<68 dB(A)
Mixer Noise Level (Idling)..	<66 dB(A)

Identification:

The Manufacturer's type sign states the mixer type. No. in the first field. The second field consists of seven figures of which the first three figures state the machine No., the next two figures the building year and the last two figures the month of the building year. The third field states the net weight in kg of the mixer.



>> 2. Safety and Prevention of Accidents

Instruction Manual

All persons dealing with the use, installation, operation, maintenance and repair must have read and understood the Instruction Manual.

Persons Responsible

The operator of the mixer is responsible for the fact that only persons who are qualified and have been instructed in the operation of the machine operate, maintain or repair the mixer.

Purposeful Use

Mixers are machines for production of concrete, mortar and for processing of refractory materials. The mixer can handle solid materials without adding water or aggregates.

The mixer may only be used in accordance with the intended purpose and may not be used for mixing of inflammable or explosive materials. The mixer is not suitable for mixing of foodstuffs.

Power Supply

The mixer may not be connected to wall sockets. The connection requires being wired into the supply provided. Cabling with a cross section of (3 for single phase) 5 x 1,5 mm² and approved socket outlet and plug must be used.

If the cables are defective the mixer may not be operated. Defective cables can be a danger to life. Use only cables and plugs which are fault free.

Danger to Persons an Equipment

If the mixer is operated incorrectly and not in accordance with the intended purpose, damage to persons or equipment may result. **Therefor any incorrect use of the mixer is not allowed!**

>> 2. Safety and Prevention of Accidents

Safety Equipment

The mixer should only be operated using the safety equipment which is recommended. The mixer should only be operated with complete and undamaged safety equipment.

Maintenance and Repair Work

All work at power equipment should only be carried out by specialists observing the relevant safety requirements.

The machine should be checked daily by the operator for correct operation.

This is especially important for:

movable parts

screw joints

safety equipment

protection equipment

cables, plugs and switches

excessive soiling

In connection with maintenance and repair work the power supply must be disconnected and arrangement made so that it is not possible to engage the mixer again.

Declaration of Conformity

The mixer is in conformity with the provisions in the Council Directive of 14. June 1989 on mutual approximation of the laws of the Member States on the safety of machines (89/392/EEC as amended by Directives 91/368/EEC, 93/44/EEC) with special reference to Annex 1 of the Directive on essential safety and health requirements in relation to the construction and manufacture of machines. The mixer is also produced in accordance with following harmonized standard : EN 292-1, 292-2, 294, 349 and 418

>> 3. Special Safety Equipment

The mixer will be delivered with either a securely fastened or electrical secured safety cover and with safety screen under the discharge port.

Furthermore, we have for safety reasons installed a thermal relay. The thermal relay protects the electric motor when overheating occurs. The mixer is protected against automatic restarting and the thermal relay needs to be reset before the mixer can be used again.

The rated power is stated on the electric motor machine sign.

>> 4. Transport

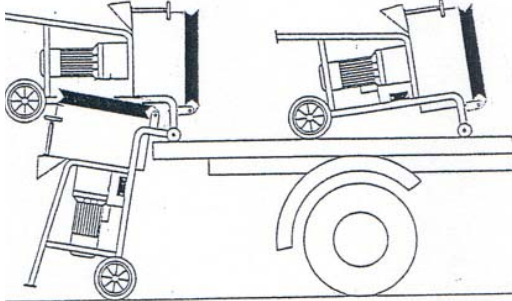


Fig. 1

When the mixer is transported by means of secured hoists, it must be properly fastened by means of suitable fastening devices so that the transport will be safe.

Fig. 1.

By towage the mixer, please note that max. Permitted speed is 30 km/hour.

Note

Pay attention that there is enough lifting capacity in the hoist being used.

Risk

Incorrect lifting of loads as well as damaged chains and ropes may cause serious accidents.

>> 5. Gear

Before Dispatch all gears will be tested for a short period, but to achieve the highest efficiency of a gear requires the operation for many hours under full load.

From the beginning the gears can operate under full load, however, it will be advantageous, wherever possible.

To let the gear run in under slowly increasing load, so that a full load is not reached until after 20-40 hours of operation.

>> 6. Starting Procedure

Before starting the mixer

– please pay attention to following :

1. Check cable for power supply.
Replace if there is any sign of leakage or damaging.
2. Be sure that the mixing pan is empty – if not, please emptying the pan.
3. Control that all mixing arms and paddles is properly tighten.
4. Place the mixer horizontal.

>> 7. Using the Mixer

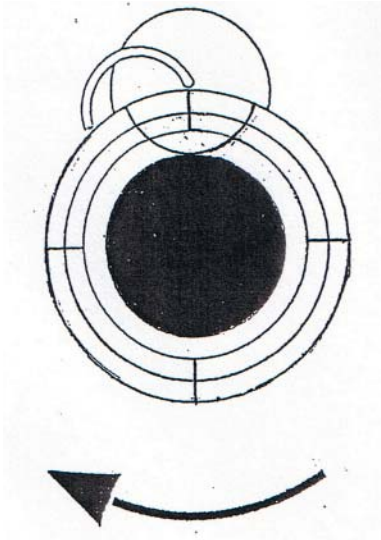


Fig. 2

The mixer is started on the switch as follows:

Green pushbutton = Start

Red pushbutton = Stop

After the engagement the direction of rotation should always be checked.

The mixer blades must rotate clockwise.

Fig. 2.

Where wrong rotation occurs this requires adjustment of two of the three phases. This work must be carried out by a qualified electrician.

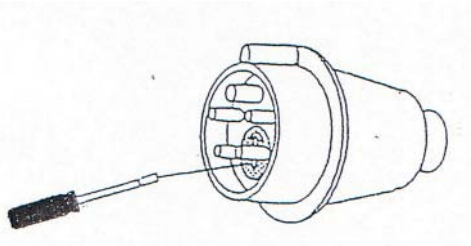


Fig. 3

If the machine is equipped with a directional plug the direction of rotation can be changed by turning the terminals with a screwdriver.

Fig. 3.

Whenever the mixer has been moved to another place, the direction of rotation should be checked.

Filling and discharge of the mixer should only take place when the mixer is running so, hat damage to the mixer is avoided.

>> 8. Adjustment of Mixer Blades

For an optimum adjustment of the mixer blades please follow the instructions below:

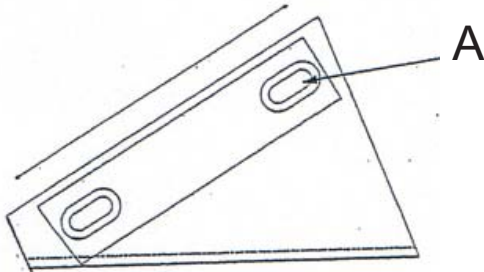


Fig. 4

1. Disconnect the mixer from the power supply and ensure that it is not possible to engage it again.

2. Loosen the screws in the safety cover and remove the cover.

Fig. 4

3. Remove the centre cover A

Fig. 5

4. Tighten the screws.

5. Lift the mixing head from the mixing pan

6. Loosen the lock-nut A on bolt B. Fig. 5

7. Turn bolt B clockwise. One rotation lowers the mixing head by approximately 2mm. Install the mixing head and check the distance between the mixer blade and the bottom.

This distance should be approximately 2 mm.

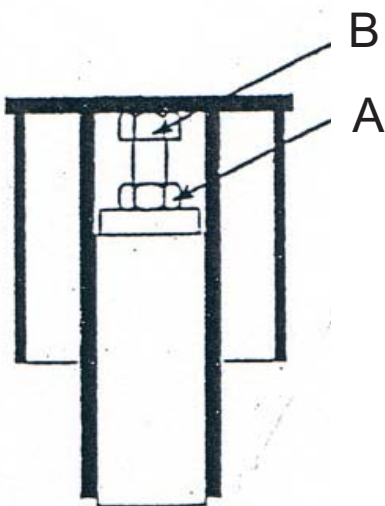


Fig. 5

>> 9. Optimum Mixing

The optimum mixing (mixing time) is achieved by filling water directly through the centre cover of the mixer.

In this way the water will be equally distributed in the mixer pan during the mixing.

For the cleaning and maintenance of the mixer please follow the instructions and recommendations below:

>> 10. Cleaning and Maintenance of the Mixer

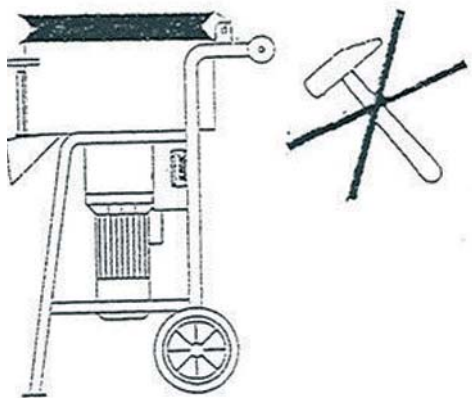


Fig. 6

Cleaning Recommendation;

1. Adding of gravel will improve the cleaning effect.
2. Let the mixture run for a few minutes.
3. Empty the mixer.

Disconnect the mixer from the power supply and ensure that it is not possible to engage it again.

4. Clean with water.

Never direct the jet of water directly at the plug or control panel.

The gearbox of the mixer requires no maintenance.

If the mixer pan is damaged it will be difficult to clean it.

Fig. 6

>> 11. Spare Parts

Only approved STARING spare parts should be used for the mixer. The warranty will be void if spurious spare parts are used.

>> 12. Spare Part List

No.	Name	Spare Part No.	Quantity
1	Mixer pan, complete	01205000	1
2	Cover	01202000	1
3	Transportwheel 16 x 4"	01257000	2
4	Suspension Rod	01258000	1
5	Mixer Head Complete	01201000	1
6	Mixer Paddle, External	01201510	1
6	Mixer Paddle, Centre / Internal	01201520	2
6	Mixer Paddle Rubber, External	01201610	1
6	Mixer Paddle Rubber, Centre/Internal	01201620	2
8	Loading Wheel	00857010	2
9	Rubber Sleeve	9865	1
10	Main Shaft	01209010	1
11	Worm Gear MB2401	01203010	1
11	Worm Gear JPM 30 40:1	01253011	1
12	Electric motor, 1,5 kW-1x230V	9012	1
12	Electric motor, 1,5 kW-3x400V	9014	1
12	Electric motor, 2,2 kW-3x400V	9013	1
12	Electric motor, 3,0 kW-3x400V	9054	1
13	Motor Protection, 1,5 kW – 1x230 V	01254020	1
13	Motor Protection, 1,5 kW – 3x400 V	9141	1
13	Motor Protection, 2,2 kW – 3x400 V	9142	1
13	Motor Protection, 1,5 kW – 3x400 V	01204010	1

>> 13. Guarantee

1. There will be a guarantee of 12 months from date of delivery.
2. The guarantee cover all operational failures due to material or fabrication defects.
3. The manufacturer can choose freely to remedy the damage by compensation, replacement or repair.
4. The costs of dispatch are on the account of the buyer.
5. Replaced parts belong to Staring Maskinfabrik A/S.
6. The manufacturer will undertake no responsibility with regard to consequential damages and possible loss of production.
7. In order for the guarantee to be complied with the defect must be reported immediately after it has occurred.

THE GUARANTEE DOES NOT COVER

1. Damages due to incorrect connection.
2. Repair executed by others.
3. Damage as a result of wrong operation, negligent treatment or transportation damages.
4. Natural wear and tear.
5. Only use approved Staring spare parts.

Where a complaint is forthcoming Staring Maskinfabrik A/S should be informed in writing together with all relevant information regarding the machine. Additionally, an, defective symptoms or cause must be informed.

>> 14. EC Declaration of Conformity

Manufacturer

Company Name: Staring Maskinfabrik A/S
Address: Starengvej 9-11
9700 Brønderslev
Danmark
Tel: +45 9882 1622

hereby declare that;

Machine: STARING
Type: STARING SM 125
Serial no.:

- is in conformity with:

- the COUNCIL DIRECTIVE of 14 June 1989 on mutual approximation of the laws of the Member States on the safety of machines (89/392/EEC as amended by directives 91/368/EEC, 93/44/EEC and 93/68/EEC) with special reference to Annex 1 of the Directive on essential safety and health requirements in relation to the construction and manufacture of machines.

Company: _____

Name: _____

Position: _____

Date

Signature

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