

HOT WATER COMPRESSIVE WASHER WITH ROTARY BASKET USER MANUAL



**WM850 – WM1000 – WM1250
TOP LOADING SERIES**



1. AIMS AND SCOPE OF THE USER MANUAL

The user's manual describes the machine and thus enabling the user to operate the machine better.

Generally, the manual contains the following information.

- Operating Information,
- Machines Description,
- Set Up of the Machine,
- Using the Machine,
- Machine Safety Rules,
- Maintenance and Repairing of the Machine.

All these pieces of information explain the ways in which the machine can be operated properly and efficiently. At the same time the manual helps with the prevention against dangers; reduces mending expenses and the damage time; it also helps increasing efficiency and makes the machine last longer.

2. RESPONSIBILITIES

Responsibilities of Product's Owner: The product's owner is responsible for applying of safety rules stated in this Instruction Manual or getting them applied by delegating his authorities and risks, which may arise due to not applying. The product's owner is also responsible for the periodical maintenance of the machine.

Responsibilities of the Manufacturers: The manufacturer is responsible for the risks due to manufacturing and assembling faults, even though all requirements stated in this manual have been fulfilled.

3. GENERAL DESCRIPTION

The parts which will be washed are placed on a basket that is placed on a stainless rotary platform with sliding system are washed in a closed cabinet with high pressured hot and detergent water. The washing process is done through water nozzles which are timed and compressive according to part structure, dirtiness rate; they clean the waste, oil, and chip on dirty surfaces in various angles. Machine has been designed for minimum consuming the water, detergent, electric, and time (work force) with cyclic and filtering water system.

USING AREAS:

- To wash motor blocks and parts
- To wash parts at bus, truck, automobile and work machines service stations
- At the workshops which manufacture machining parts and oiled part.
- At the firms which engine reconditioning and cylinder head repairing.

3.1. Specifications of the Basic Use of the Machine:

The machine is made with respect to appropriate standards and safety rules. However, when the machine is operated, the life of the operator, some components or the machine itself may be subjected to damage or danger.

- The machine must only be used for the aim it has been designed for.
- It should be used according to the instruction given in the user's manual.
- The machine should be operated by personnel who can be aware of the risks that are likely to occur.
- In case, any functional disorder happens on the machine particularly the one that might endanger the machine's safety, the machine must immediately be stopped, and the problem should then be solved.

Apart from the recommended materials, if other materials are to be worked on the machine, there should be a written confirmation from the manufacturer so that the new materials can be used.

If the machine is used in operations out of which it is made for, the manufacturer or its representatives will not be responsible for any damage that may occur.

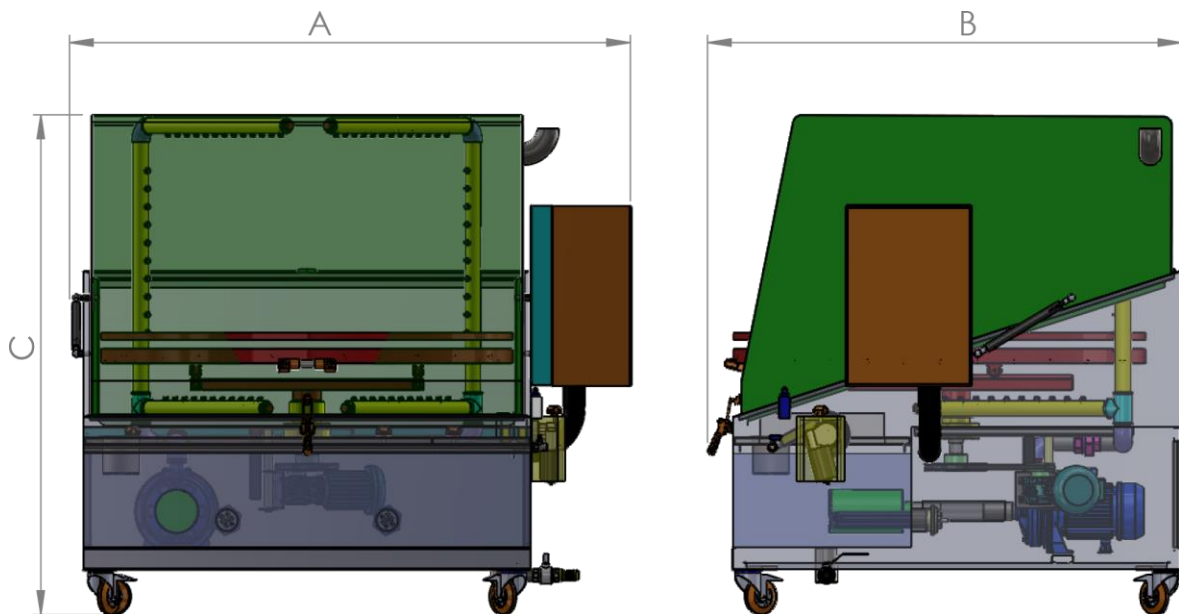
Risk due to wrong use of the machine is bearing by the user. Working of the machine within the designed limits is explained in the user's guide.

3.2. The Main Parts of the Machine:



The general view of machine

- A: Stand leg Trolley (available on some models)
- B: Rotating basket
- C: Water Installation Connections,
- D: Basket Stand
- E: Top Cover
- F: Control Panel
- G: Electrical Connection Board



DIMENSIONS

Model	A	B	C
WM850	1200	920	1120
WM1000	1370	1060	1140
WM1250	1570	1300	1450

4. TYPES

4.1. TOP LOADING SERIES



WM850 - WM1000



WM1250

4.2.1. TECHNICAL SPECIFICATION ACCORDING TO MODELS

SPECIFICATION/MODELS	WM850	WM1000	WM1250
Drive System	Electric Motor with Belt		
Basket Dimension (mm)	750	900	1150
Loading Height (mm)	350	450	600
Loading Weight (kg)	150	300	440
Tank Capacity (lt)	60	80	200
Pump Pressure (bar)	2,5	2,5	3
Pump (Piece x HP)	1 x 3	1 x 3	1 x 3
Heater (kW)	7,5	7,5	15
Timer	0-30		
Thermostat	0-120		
Loading Trolley	not available	optional	standard
Motor Driven Basket	standard	standard	standard
Oil Separator	not available	optional	standard
AISI430 Chrome Body	standard	standard	standard
AISI304 Chrome Body	optional	optional	optional
Liquid Level Control and Automatic Feeding System	optional	optional	optional
Power	380-400-415 V AC 50 Hz (3L+N+PE) / 220-240 V AC 50 Hz (L+N+PE)		

4.2.2. CONTROL PANELS



- A: Thermometer
- B: Resistance On /Off
- C: Pump On/Off
- D: Buzzer
- E: Timer
- F: Pre-Start Switch
- G: Basket Rotation On/Off
- H: Oil Separator
- J : Emergency Stop

4.2.3. WATER OUTLET - INLET



A

B

A: 3/4" Oil separator oil discharge (On some models)

B: 1" Water Outlet

4.2.4. STEAM OUT



4.2.5. LOCK SYSTEM



On some models (on loading trolley)

5. SAFETY & PRECAUTIONS

5.1. General Descriptions:

The machines produced by KSP, bear special importance on safety. They are made in such a way that an operator is provided with suitable working environment. Hazards that might occur during operation and the way to prevent them are explained; and on top of this prevention against diseases that may occur because of working conditions are also explained.

5.1.1. Personnel's Quality, Selection and Basic Responsibilities:

The person to operate the machine must be at the age accepted by the legislations. Taking care of the safety orders, the operator's responsibilities should be defined. Only educated and skilled persons should be allowed to operate the machines, and their personal responsibilities should be frankly explained. It should be confirmed that a person operating the machine is the authorized one. Apart from the operator, other persons must not interfere with the operation. A person with general and normal education must not be allowed to operate the machine. An experienced supervisor / worker must have educated the operator. The machine's electric system and works to be done on electrical with authorized electrician or by a person educated by an experienced electrician and he must do the work according to respective rules and orders. To create safety working environment an operator must have been educated about the machine and first aid. The workers must, however, read and understand the user's guide. The following technic members should be found at the place where the machine is operated. From these technic members, machine and electric technician do not have to be at the place always.

Daily Operator of the Machine:

Apart from general knowledge and experience, the daily operator must have read the user's guide and understood it well, especially the sections about operation, cleanliness, lubrication, maintenance, electric and safety. The operator of the machine; a technic member of the buyer company, by coming to **KSP** (or when a KSP technic member comes to the buyer company) general information about the machine and set up is given.

5.2. Safety Rules: General Safety Rules:

When using the machine, the user guide must be placed at a place where it can easily be reached.

The user's guide must be read by anyone who uses / operates the machine. In general, operation includes solving problems that occur at the work place, drainage of deposits, getting rid of used oil from the work area etc. In addition, the user's guide contains rules / information about obligatory rules / principles, accidents prevention; environmental protection rules, area where the machine can be used, systematic operation and machine's life. The operator must not climb on the machine when the latter is on, neither should be walk around the machine. The operator, when working, should be on the platform placed particularly for the purpose; and he should make sure that oil, water etc. do not drop on the platform. Machine should be stopped, and electric connections be disconnected when a routine maintenance is done.

Before starting any electrical repairing, emergency button should be pressed, and all electrical connections should be unplugged.

When the machine is in operation no component should be changed.

When the machine is in operation, no foreign materials (keys, screwdrivers etc.) should be inserted into covered parts of the machine.

No liquid (water, oil etc.) should be allowed to drop onto the electric – electronic sections.

Working environment should always be clean and dry. There must be civil defense equipment (fire extinguisher, first aid box etc.) at the working area.

When working the operators must use general work safety equipment (glass, gloves etc.).

A worker to do repairing and service / maintenance works should observe safety precautions carefully as he is doing dangerous activities.

A maintenance operator dealing basically with spare parts, he can easily be subjected to compacts and thus his hands / fingers can be cut; for this purpose, he must wear gloves.

A working overall must be designed in such a way that it will not be trapped into moving parts, in addition long hair of the operator should be cut short or be covered.

During operation no foreigner should be allowed to get at the vicinity of the machine and hinder the operation.

When working a work piece, undamaged, sharp edged pen (tool) should be used.

Apart from the work piece, no foreign materials (key etc.) should be found on the horizontal table. Components left on the table may jump off, during operation, and thus causing serious damages. When grease oil and other chemical substances are handled, safety rules should be adhered to.




When handling hot components be care of their scalding and burning effects.

In case of malfunction and breakdown, refer to maintenance and repair, as explained in the manual.

6.ELECTRICAL CONNECTION



- ⚠ Connect the cable of main installation
- ⚠ The cable used must be in the property of insulated H07RN-F and at least 5x4 mm²
- ⚠ 30 mA of residual current relay must be used in the installation
- ⚠ During any leakage of electrical current, residual current relay will switch off electrical energy, putting into action.
- ⚠ Electric installation must be grounded so that residual current relay is in safe.
- ⚠ Electric connections must not be done by wet hands.
- ⚠ Power distribution board is protected against water contact. However, it must not be contacted with pressurized water.
- ⚠ Cover of power distribution board must be continuously kept close.
- ⚠ The key for opening the cover of power distribution board must be kept in a safe place.

	Check the conformity of the electrical installation, which the machine will be connected to.
	Electrical connection of the machine must be made surely to the installation with the feature like this: grounded, 3 phases, AC 380-400 AC V 50 Hz
	There must exist maximum 30A of fuse on the installation

7. INSTALLING THE MACHINE

- ⚠ Machine must be run on a solid and flat ground.
- ⚠ Make the water connection in such a way that soulnessness is provided.









8. OPERATING

- ⚠ Make the electrical connection of air, water, and electricity.
- ⚠ Fill the machine with water. Keep the water inlet valve open continuously. When the storage tank is filled up, valve will cut the water flow, becoming a part of activity.
- ⚠ Switch on the main switch.
- ⚠ Set the temperature indicator to 60°C
- ⚠ Switch on the switches of resistance and switches of pre- starting of pump.
- ⚠ Pour the inner housing the mix of 5 kg of dry detergent and hot water.
- ⚠ Adjust the timing set to the duration you desire.
- ⚠ Fix the lock of basket.
- ⚠ Turn the switch of basket and basket itself in controlled way.
- ⚠ Load the piece and close the cover.
- ⚠ Switch on the switch of pump and basket.


















AFTER WASHING

- ⚠ Wait at least 5 minutes for vapor effects.
- ⚠ Open the cover carefully
- ⚠ Place the carriage into the basket.
- ⚠ Open the lock of basket.
- ⚠ Load the basket to the carriage.
- ⚠ Switch off the main switch, when it will not be used long time.

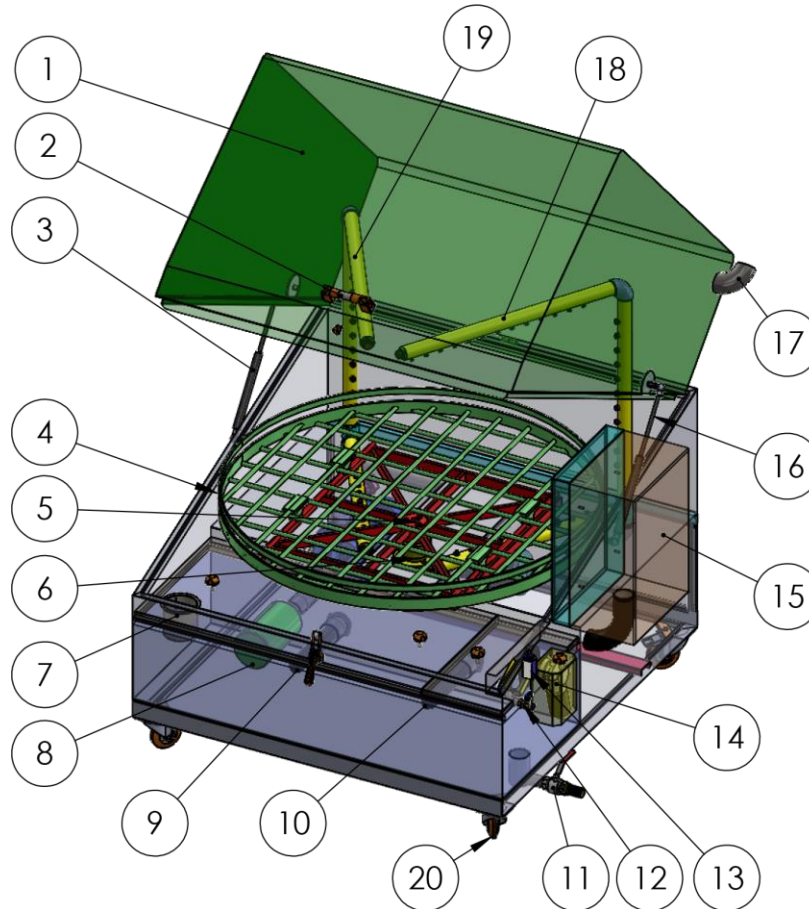
9. CARRYING AND ASSEMBLING THE MACHINE

	During carrying the machine, take necessary precautions against the risks of falling and being turned upside down. Use the suitable lifting tools.
	Place the machine on a flat and solid surface
	Do not place the machine near the burnable and explosive materials and do not keep the burnable and explosive material near the machine, while it is working.
	Let a fire extinguisher be near the machine absolutely and check whether or not periodical checks of the machine are done.
	Take necessary safety precautions, while using the machine.
	Operation of assembling the machine must be carried out by authorized and competent people
	Use minimum 20 mm 8 x 19 Seale Rope for lifting the machine. . Install the rope in such a way that machine will remain in hanged position, balancing the rope from both sides of the machine,
	Make the lifting operation by using the crane with the suitable capacity. Do not stand under the machine against the risk of falling of the machine, while carrying the machine.

8. SAFETY WARNINGS

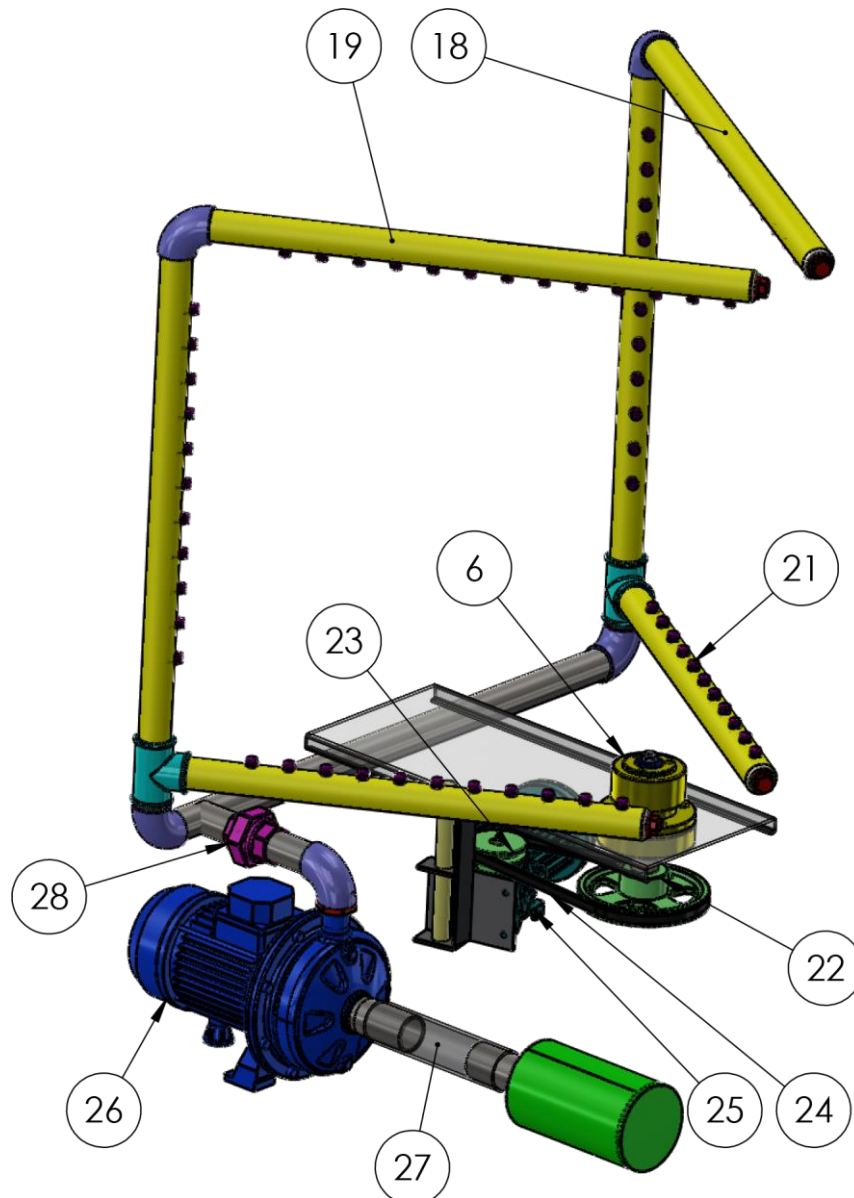
	While the machine is working, do not remove protecting housings. The rotating mechanisms may lead to injuries.
	Prevent the children and unauthorized people from tampering the machine. Pay attention that machine operator should be an adult and competent person.
	Press on the "emergency stop button in an unexpected situation Machine will stop in a short time.
	In cases that the machine will not be used for long time, cut the accumulator connection off and press on "the stop button".
	Create a sufficient safety space, while the machine is working. Take necessary precautions so that there is nobody except for the operator and the responsible in this safety area.
	When the machine gives a voiced warning, stop the motor and replace the motor belt
	The movable and rotating mechanism must be used by being taken into consideration the sufficient safety mechanism.
	Motor and its equipment work in the high temperature. Do not touch them with bare hands. While the motor is warm, do not intervene.
	Do not use the machine while you are tired and sleepy. While using the machine, do not take the substances giving sleepy and becoming inattentive such as drugs etc.
	During assembling and maintenance, comply with the work safety rules. Use work safety equipment.
	While the machine is in working position, provide the operator to be together with the machine.
	When you will not use the machine for long time, press emergency stop button.
	While the machine is working, when lightening remains insufficient, let a lightening be near the rotating mechanism in the intensity of 200 lux in such a way that any shadow not be around the machine.
	Take necessary actions against upside down of the machine due to likely occurring moment because of being forced the machine excessively.
	The attribute of the rope used must be in a feature specified in user manual or in higher quality
	The voice level of the machine may reach the levels to be able to harm your health. Use protective equipment.
	When they will be used as on-vehicle equipment, add the necessary equipment on the vehicle. In addition, take necessary action for static balance of the vehicle.

9. PART LIST



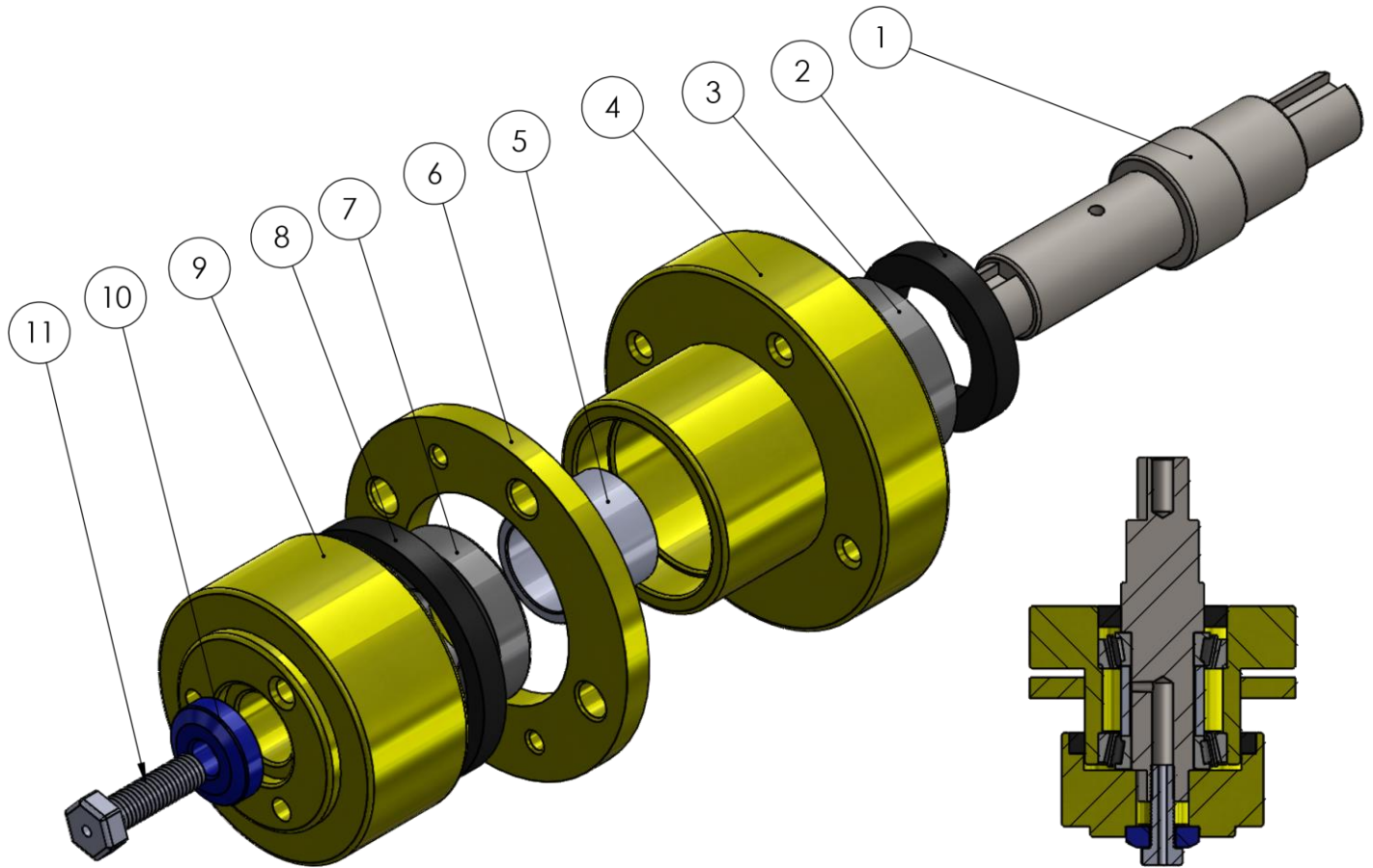
PART LIST - 1

PART NUMBER	DESCRIPTION	CODE
1	Top Cover	KSP-WM-XXXX-TC
2	Cover Handle	KSP-WM-XXXX-CH
3	Gas Spring with Lock	KSP-WM-XXXX-PL
4	Basket	KSP-WM-XXXX-B
5	Basket Carrier	KSP-WM-XXXX-BC
6	Hub Assembly	-
7	Filter	KSP-WM-XXXX-F
8	Pump Suction Filter	KSP-WM-XXXX-PF
9	Resistance-1	KSP-WM-XXXX-R
10	Resistance-2	KSP-WM-XXXX-R
11	Discharge Valve	KSP-WM-XXXX-DV
12	Oil Skimmer Discharge Valve	KSP-WM-XXXX-OV
13	Cover Switch	KSP-WM-XXXX-CW
14	Oil Skimmer	KSP-WM-XXXX-OS
15	Electric Control Panel	-
16	Gas Spring	KSP-WM-XXXX-P
17	2" Steam Exhaust	KSP-WM-XXXX-SE
18	Spray Line - 1	-
19	Spray Line - 2	-
20	Wheel	KSP-WM-XXXX-W
21	Wheel with Lock	KSP-WM-XXXX-WL



PART LIST - 2

PART NUMBER	DESCRIPTION	CODE
6	Hub Assembly	-
18	Spray Line - 1	-
19	Spray Line - 2	-
21	Nozzle	KSP-WM-XXXX-N
22	Big Pulley	KSP-WM-XXXX-BP
23	Little Pulley	KSP-WM-XXXX-LP
24	Belt Pulley	KSP-WM-XXXX-BELT
25	Motor Reducer	KSP-WM-XXXX-MR
26	Motor Pump	KSP-WM-XXXX-MP
27	Pump Suction Hose	KSP-WM-XXXX-PH
28	Conical Connection	KSP-WM-XXXX-CC



HUB PART LIST

PART NUMBER	DESCRIPTION	CODE
1	Shaft	KSP-WM-XXXX-HS
2	62/40/10 Nut-Ring	KSP-WM-XXXX-H62N
3	30206 Bearing	KSP-WM-XXXX-H206B
4	Hub Top Stable Body	KSP-WM-XXXX-HSB
5	Hub Middle Divider	KSP-WM-XXXX-HMD
6	Hub Bottom Stable Flange	KSP-WM-XXXX-HF
7	30206 Bearing	KSP-WM-XXXX-H206B
8	90/75/10 Nut-Ring	KSP-WM-XXXX-H90N
9	Hub Top Rotary Body	KSP-WM-XXXX-HRB
10	Washer	KSP-WM-XXXX-HW
11	Bolt	KSP-WM-XXXX-HB

CODES

CODE	DESCRIPTION
KSP	KSP MACHINE TOOL CO.
WM	Machine Serie Code
xxxx	Machine Size Code
yyyy	Part Code

Beware that for pump orders; You need to mention Brand and Serie of pump.

10. MAINTANENCE

- Make periodical maintenance, in order for the machine to run correctly and long lived.
- Before maintenance, the electrical connection of the machine must be switched off.

11. PERIODICAL MAINTENANCE

DAILY MAINTENANCE

While the water is cold, operate the oil skimmer for 5 minutes

WEEKLY MAINTENANCE

Oil the lubricators in the core of basket with grease so that it cannot be more pressure. Make up the oil of air conditioner in the air inlet connection and drain the water accumulated. Clean the water filters in the water storage tank.

WATER EMPTYING

Switch off the electrical connection of the machine.

Be sure that the machine is cold.

By opening the water drainage valve, drain the water.

MONTHLY MAINTENANCE

Remove and clean blind caps and sprinkling nozzles in sprinkling installation and reinstall

12. POSSIBLE FAILURES AND SOLUTIONS

Water leakage from mechanical seal

Possible causes

1. Water filters must be cleaned.
2. Weekly maintenance must be carried out in the inner water housing.

Machine does not make sufficient cleaning

Possible Causes

1. The amount of detergent is insufficient.
2. Sprinkling nozzles are plugged.
3. Temperature is low.
4. Timing set is short.
5. Water level is low.
6. Water inlet valve is closed.

Water is not heated up.

Possible causes

1. There is an accident with resistance
2. There is an accident with thermocouple
3. Resistance switch is off

Some functions are not operating

Possible Causes

Check the fuses on distribution switchboard
 Contact with the manufacturer.

13. CONSECRATING THE PRODUCT

Please, keep close the cover when you don't use the machine.

14. LIFETIME OF PRODUCT

The lifetime of product to run in safe is 5 years

ABOUT FIRM



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