

Oil Water Separator Model SUN-01 Operation Manual

Honesty Deserves Sincerity

Behavior Before Work

Luoyang Xincheng Precision Machinery Co., Ltd

ADD: No.256, Tanggong East Road, Luoyang, China

ZIP CODE: 471002

TEL:+86-0379-63512276 FAX: +86-0379-69960770

EMAIL: tapremover@lyxc.com

Website: www.brokentapremover.com

www.lyxcsfx.com



LUOYANG XINCHENG PRECISION MACHINERY CO., LTD.





Preface

Cutting fluid is the essential necessity of work-pieces processing when using machine tool. The cutting fluid mixing with impurities and oil slick would directly affect processing quality, cutting tools life and occupational health. In the process of machining, the cutting fluid will be mixed with a lot of other oiliness. The oil floating on the surface of cutting fluid can greatly proceed the proliferation of microorganisms, speed up the deterioration of cutting fluid and shorten the service life of cutting fluid. Microbial propagation in the emulsion is alarming. When the emulsion bacterial contents are above 106 / ML, the emulsion would go bad, thus contaminate environment, affect the health of workers. Removing the floating oil from cutting fluid in time can keep emulsion clean and also minimize the breeding of bacteria.

SUN-01 oil water separator independently researched and developed by our company is applicable to various types of machining centers, CNC machines etc. The product can separate floating oil from cutting fluid, thus greatly extend the service life of cutting fluid. Meanwhile, the service life span of cutting tools could be prolonged, so as to ensure machining accuracy, guarantee work environment and staff health.

1. Technical Parameter

Model Item	SUN-01
Input Voltage	AC 110/220V 50/60Hz
Input Power	20W
Pump Motor Speed	0-90rpm
	Step-less Adjustable
Working Time Setting	16 groups periods / day
Timing Range	1min-168h
Oil Tank Capacity	4L
Operating Temperature	0℃45℃
Machine Size	550*300*355(545)mm
Net Weight	13.2Kg

Customer Service

With company spirit High Quality, Excellent Service, Striving for Development and company concept "Quality Product, Competitive Price, Considerate Service", we promise you responsibly and publicly:

1. Warranty Terms

- 1. The warranty period is one year and within this time frame, if there are any technical problems, we would repair them for free including the new parts that needed for repair;
- 2. The warranty period for wearing parts like water pump are not under warranty;
- 3. The purchasing date is the invoice date (If the customer didn't have invoice, refers to the purchasing date).
- 4. If the machine models is no longer produced, we only do functional repairing. Please kindly read the operation manual before using.

2. Warranty Void Cases

- 1. The faults caused by improper use;
- 2. The damage caused by improper storage or natural disasters;
- 3. Without the consent of our company, the customers disassemble, repair and modify the product.

3. After-sales Service Promise

Service Purpose: Serve customer, satisfy customer, perfect technology. Service Goal: Win customers' satisfaction by service and quality.

Note: The company reserves the right to final explanation on customer service.

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Enter into Programming as Below:

Step	Key	Programming
		Setting the 1 st group "ON" time
1	Press P	(1 ON displayed)
		Setting hours and minutes
2	Press H+/M+	(Turn on time for the 1st group)
3	Press D+	Setting the week day
		Setting the 1 st group "OFF" time
4	Press P	(1 OFF displayed)
		Setting hours and minutes
5	Press H+/M+	(Turn off time for the 1st group)
6	Press D+	Setting the week day
		Setting multiple groups periods on/off
7	Repeat step 2-6	time
8	Press "Clock"	Save settings

If you don't require 16 groups periods settings, press " " to exit.

Failure Query

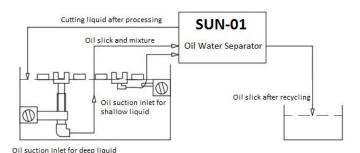
- 3.1 After setting the timer switch, If the machine does not operate according to the settings, please confirm "D+" displayed on the panel is correct;
- 3.2 If the machine is still running automatically in a wrong time after setting the on-off time correctly, please make sure that all the unneeded settings have been deleted (notes: it represents elimination when the on-off time displays " -- : -- ");
- 3.3 If the two steps above are all correct, and the machine is still not working properly, please confirm the mode is switched to "AUTO" position, or press "C" to reset timing again.

Attention:

Machine operating temperature is 0° C-45°C;

Cover the protecting cover in time after setting the parameter.

2. Operating Principle



- 1. Floating oil, cutting fluid and impurities are absorbed by the oil suction device and deliver to oil-water separator, and the scraper separates floating oil by oil-water proportion separation principle. The processed clean cutting fluid will be redelivered into the cutting fluid tank;
- 2. The oil suction device using the principle of internal and external liquid surface buoyancy difference, has fixed type and floating type which adapt to different depths of cutting fluid tank. And the suction inlet always follows the oil level changes, greatly improving the absorption rate of surface oil.

3. Advantages

- 1. Independently design the floating oil suction inlet which is used to position floating oil layer. There are two kinds of oil suction inlets for shallow liquid and deep liquid respectively, suitable for the absorption of oil slick of different depths cutting fluids.
- 2. Small size, light weight, easy to operate, can be used in fluid tanks of various machine tools .
- 3. Auto control, could set clock within 24 hours to realize the unattended operation in the auto model.
- 4. 16 periods for Oil absorption can be set according to the year, the month and the day, precise to minutes.
- 5. Power of AC220V/110V, directly use when plugged.
- 6. DC motor low consumption, stable and reliable operation, the machine can even realize maintenance-free.
- 7. Pure physical separation, three-stages filtration to realize thorough separation, no secondary pollution.
- 8. Built-in liquid level sensor, alarm when oil is full.
- 9. Oil scraper speed is step-less.

4. Structure

1. Control Panel 2. Outlet 3. Overflow 4. Mixture Inlet



5、Oil Outlet



- 1 Oil Scraper Speed Adjusting Switch
- 2. Oil level alarm

- 3、Power Switch
- 4. Digital Timer Switch
- 5. Power interface

Enclosed: Instruction for Digital Timer Switch



Symbols Displayed on Screen Instruction

- 1.1 Symbol of week is displayed on the top of the screen;
- 1.2 The timing frequency are displayed on the left of the screen;



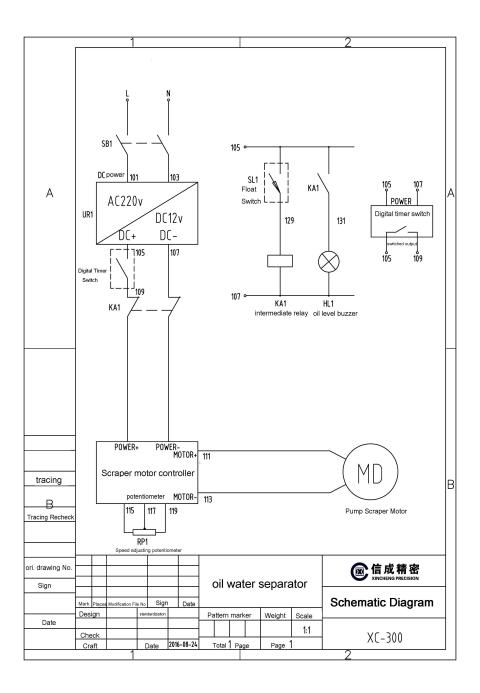
Step	English
1	P
2	D+
3	H+
4	M+
5	0
6	С
7	MANUAL

- 1.3 Hour, minute, second are displayed in the middle of the screen
- 1.4 The function keys displayed at the bottom of the screen are open, auto, and close.

Operating Instruction

1. Time Setting

Press " 'B' key, meanwhile respectively press the key D+,H+,M+, precisely set the time to the current time



5. Installation

- 1. Carry Notes
- 1.1 Keep box up when carry, avoid bump after unpacking;
- 1.2 Oil Suction inlets components belongs to fragile parts, avoid bump or excessive force when installing;
- 1.3 Please install the oil and water separator in a stable and safe ground, avoid the machine bump and short-circuit.
- 2. Installation Procedure
- 2.1 Expand the folding bracket and fix it with M4 screws;
- 2.2 Place machine stably and reliably without shake or tilt;
- 2.3 Place the oil suction device into cutting fluid tank, and connect the outlet pipe of oil suction device to the mixture inlet of machine;
- 2.4 Connect outlet and overflow of the machine with two pipes; The other end of the pipe needs to be put into the cutting fluid tank;
- 2.5 Plug the power cord connector into the power interface.



6. Instructions

- 1. Assemble machine in accordance with the "Installation Procedure", plug the power cord into socket;
- 2. Press No.3 marked "power switch" on the control panel; Power on the machine;
- 3. Set the start, run, stop time of the machine with No.4 "Digital Timer Switch":
- 4. The machine starts working, observe if the oil suction inlet absorbs the fluid normally:
- 5. Adjusting outer ring nut of oil suction inlet and the supporting floater to keep the oil suction inlet floating in a suitable position, so as to absorb the floating oil effectively;
- 6. Adjusting No.1 marked "Oil Scraper Speed Adjusting Switch" to control the speed of motor, the machine works;
- 8. No. 2 "oil level alarm" on the control panel buzzer starts, the machine stops running. Promptly drain out waste oil through "oil outlet" of the machine;
- 9. After draining out waste oil, No. 2 "oil level alarm" on the control panel buzzer stops; The machine will automatically work as per time set by No.4 "Digital Timer Switch".

7. Attention

- 1. It is forbidden to operate the machine buttons on the control panel with hands carrying water or oil;
- 2. It is recommended to add some cutting fluid through mixture inlet to the pump when it is first be used. Eliminating pump air can increase the water absorption capacity of the pump;
- 3. Adjust the outer ring nut of oil suction inlet, keep moderate buoyancy of oil suction inlet, so that collect the oil slick better;
- 4. For a new machine running, it is normal that the oil outlet does not drain oil. It will drain oil normally when oil layer in the tank reaches a certain thickness;
- 5. It's necessary to change the piston O-ring of water pump every 2-3 months and clean the oil suction inlet and oil pipe to avoid the tank damaging and pipe blocking;
- 6. Power off the machine and keep the oil tank empty when not using for a long time;
- 7.Non-professional workers do not open the machine to repair, so as to avoid accidents;
- 8. This machine is suitable for filtering the normal running oil on the surface of the cutting fluid. It is recommended to change long-term uncleaned cutting fluid first, then use the oil-water separator.

8. Failures and Solutions

Failures	Failure Reasons and Solutions
After turning on ,all the action can not start	 Check and make sure that the power cord is properly connected; Check and make sure that the power switch is turned on; Contact our company for troubleshooting.
The machine does not operate when the setting time expires.	 Check and make sure that the power cord is properly connected; Check and make sure that the power switch is turned on; The time is incorrectly set; Digital Timer Switch failure; Contact our company for troubleshooting.
Cutting fluid overflow	Pipe blockage, need to be cleaned timely; Contact our company for troubleshooting.
oil absorption blockage of oil suction inlet	1.Adjust the outer nut of oil suction inlet, keep the oil suction inlet floating in the surface of cutting fluid; 2.Check the cutting fluid level, avoid too high or too low; 3.Contact our company for troubleshooting.
Buzzer still work after draining the oil, and the device does not work	 The oil outlet is blocked and the oil is not drained; liquid level sensor failure; Contact our company for troubleshooting.
The inlet pipe does not enter the fluid	 The oil suction inlet position is higher than the liquid level; Pump and Pipe blockage, need to be cleaned timely; Leakage of the water pump, replace the o-ring on the piston; Oil suction device malfunction, need to be replaced; Contact our company for troubleshooting.