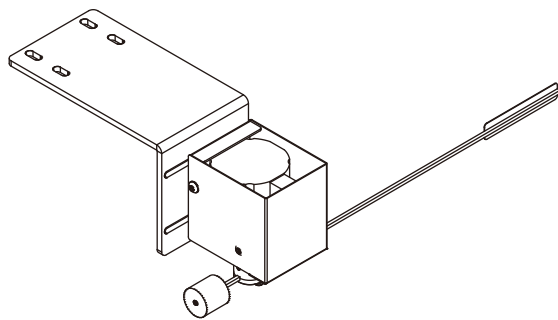
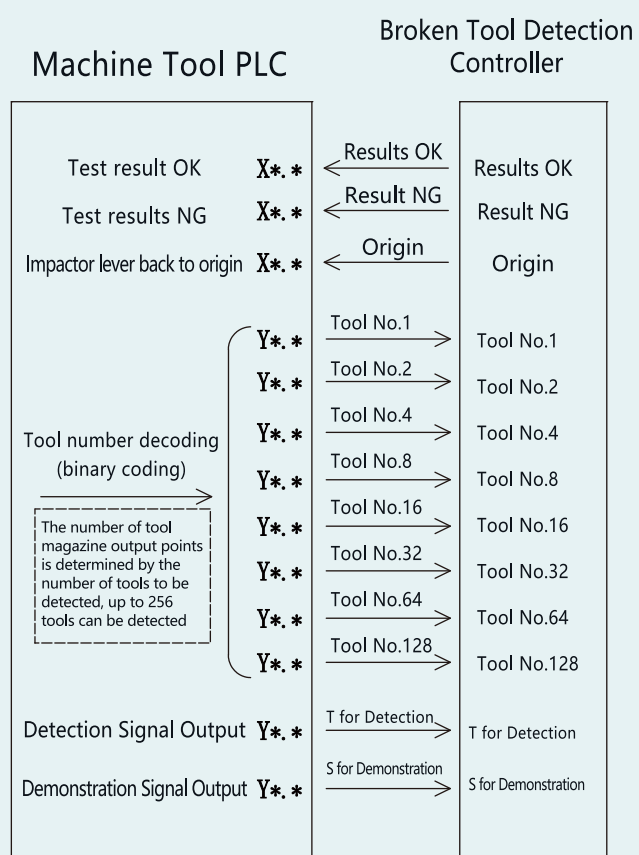


## OVERALL EFFECT DIAGRAM



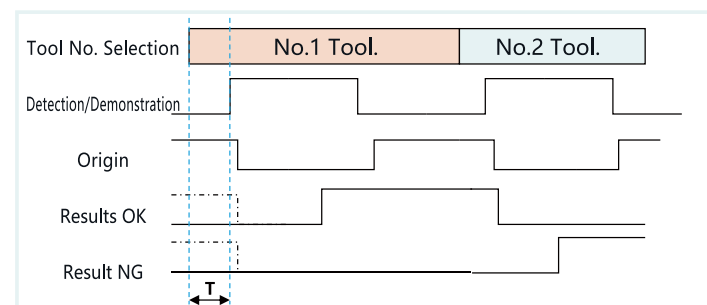
## MACHINE INTERFACE SCHEMATIC



## MAIN TECHNICAL PARAMETERS

Serial Number	Item	Standard
1	Rated Power	220W
2	Controller Power Supply	24V DC±10%
3	Driver Power Supply	220V AC
4	Input & Output Levels	24V effective
5	Ambient Temperature for Operation	-10°C~+60°C
6	Protection Level	Detection device IP67
7	Detection Rod Length	400mm
8	Detection Angle	5°~150°
9	Detection times/life	10 million times
10	Single Detection Time	0.3-2 sec
11	Detection Accuracy	Adjustable up to 1mm
12	Detecting the strength of touching the tool	Adjustable
13	Detection of the direction of rotation of the rod	Adjustable
14	Knife number and alarm number	viewable
15	Zero-back mode	Manual/automatic
16	Pre-bit function	have
17	Display interface	Function selection
18	Mounting Holder	Adjustable Position
19	Net product weight	5.2kg

## DETECTION/DEMONSTRATION TIMING CHART



## DEMONSTRATION INSTRUCTIONS

Detect No. 1 tool, output result OK, detect No. 2 tool, output result NG.

The demonstration/detection signal needs to lag the tool number selection signal by at least time T50ms.

The output of the demonstration/detection signal needs to be greater than 50ms.

The CNC can check the status of OK or NG after the home position is in place.

## PRODUCTS INTRODUCTION

Cutting workpiece will produce high temperature vapor, the water vapor on the surface of the workpiece will isolate the cutting fluid from adhering, resulting in less than 20% of the cooling effect of the workpiece or tool, the only way to achieve the most efficient cooling effect is to pressurize the cutting fluid to more than 30 bar, so that the cutting fluid can directly contact the workpiece and tool.





### Advantages of Use

- 1. Reduce tool wear during cutting and machining, saving tool costs.
- 2. Improvement of iron filings generated by cutting, which is conducive to the introduction of automation.
- 3. The high-pressure center water discharge function effectively improves the drilling depth and cutting speed of the machine. It greatly improves the stability of cutting size during machine tool machining and increases the qualified rate of workpiece at the same time. Increase the feeding speed and cutting speed, increase the eating force, tap more productivity in production.
- 4. Fine filtration of the cartridge optimizes the cutting water quality and avoids the blockage of the circulating pipeline.
- 5. Reduce the risk of tool breakage, significantly reduce the local high temperature during machining, and extend tool life.

## USE

High pressure center outlet water system is used for machine tools, industrial cleaning equipment and other working conditions, can be applied to different temperature, flow, pressure range, filtration accuracy of 25μm, pressure of 20, 30, 50, 70bar.

### Same workpiece high pressure center water system (high pressure) VS low pressure cooling (traditional)

	High pressure center outlet system	Conventional low pressure cooling
Outlet mode		
material	Stainless steel	Stainless steel
Tool life (average)	3000pca needs a new drill bit	80pca requires a new drill bit
Shutdown time for tool change	The knife is changed once every 4 days, and the knife is changed within 1 hour a week	Eight knife changes in 24 hours and nine hours of downtime a week
Chip breaking condition	Chip breaking condition is good	There is often rolling debris
Chip breaking condition		

## FILTERING MODE



Vortex separator

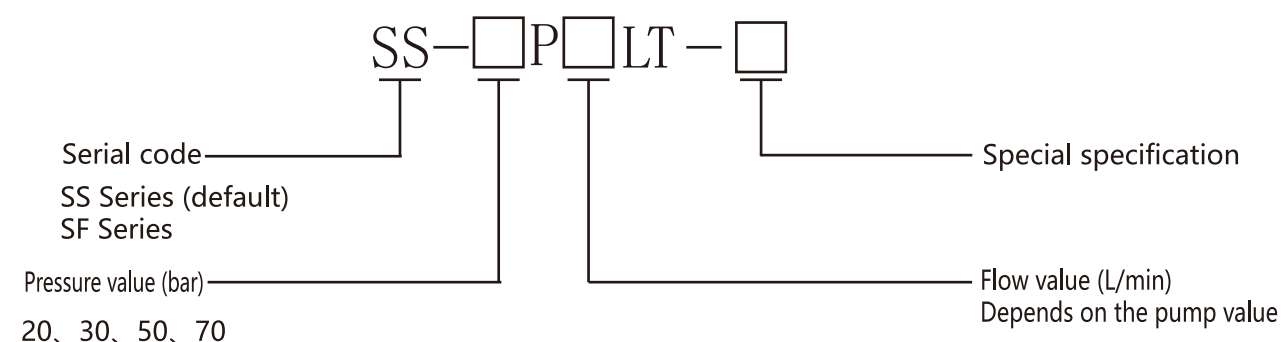
The turbine separator works mainly on the principle of centrifugal force. When the mixed liquid such as oily sewage enters the turbine separator, under the centrifugal force generated by the high-speed rotating turbine, the dense liquid is thrown to the outside of the separator, while the less dense liquid is gathered to the center. Through the reasonable setting of the outlet channel, the oil and water can be respectively drawn out, so as to achieve the purpose of separation.



Bag filtration

Bag filter is a common filter equipment, mainly used to remove solid particles in gases or liquids. It can be used as either a dust collector or a liquid filter. (The bag filter needs to be changed regularly after a period of time).

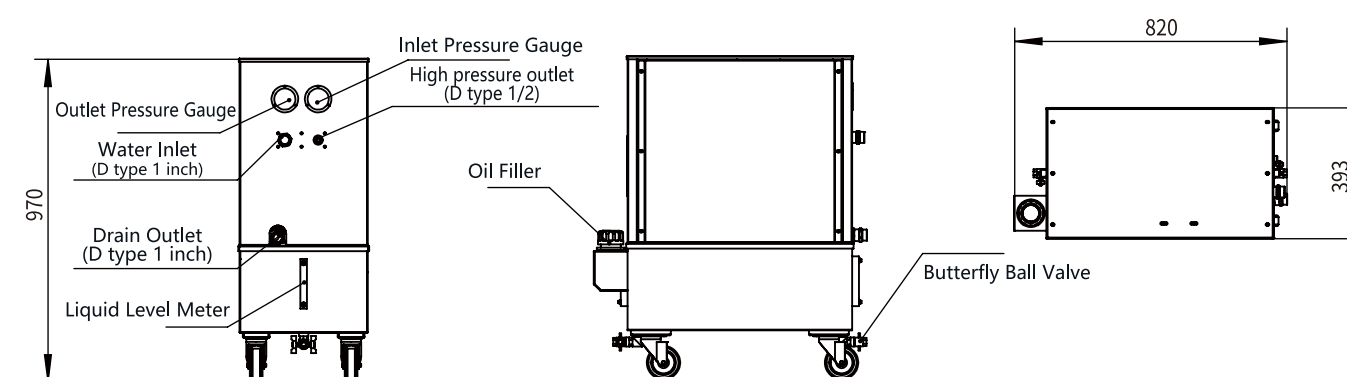
## TYPE DESCRIPTION



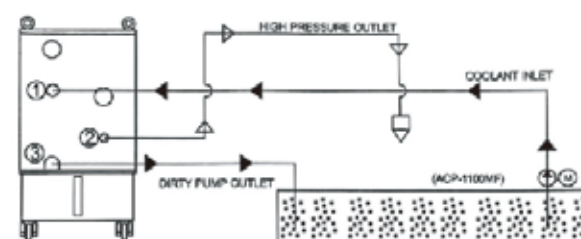
## SELECTION METHOD

Product type	SF-MSHC-30P20LT	SF-MSHC-30P50LT	SS-20P50LT-BD	SS-30P50LT-BD	SS-50P30LT-BD	SS-70P30LT-BD
Outlet pressure (kg)	30	30	20	30	50	70
Discharge flow (L/min)	20	50	50	50	30	30
Rated power (kw)	1.5	2.25	2.2	4	7.5	7.5
Power frequency	220/380V 50Hz					
Filtration method (25μm)	Vortex separator	Vortex separator	Bag filtration	Bag filtration	Bag filtration	Bag filtration
Pump type	gear pump	gear pump	centrifugal pump	centrifugal pump	screw pump	screw pump
Pump brand	Yalon	Dongguan capacity	Wison	Wison	Yellow pump	Yellow pump
Overall dimensions (mm)	820×385×950	820×385×950	700×550×1200	700×550×1200	794×547×1094	794×547×1094
Overall dimensions (mm)	60kg	60kg	50kg	60kg	72kg	72kg
Volume (L)	60	60	180	180	140	140

## SF SERIES



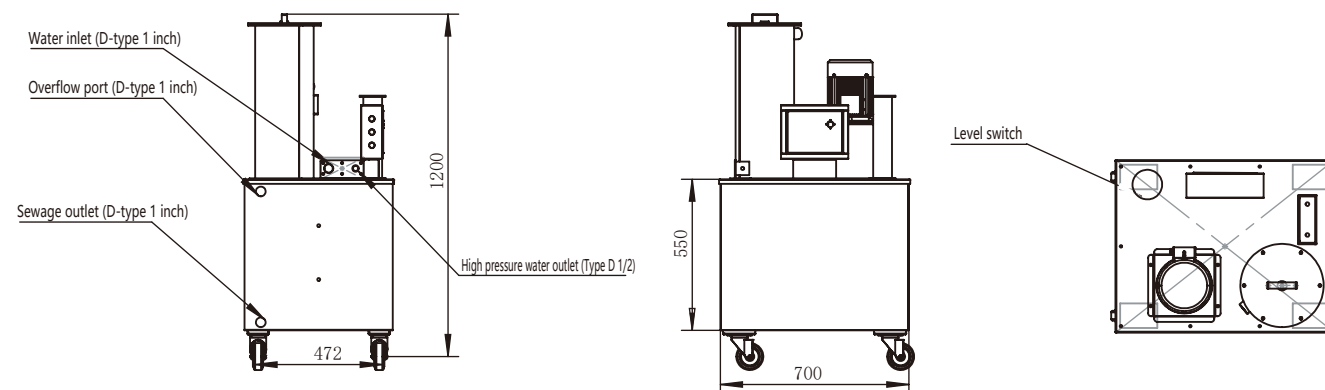
## PRODUCT DESCRIPTION



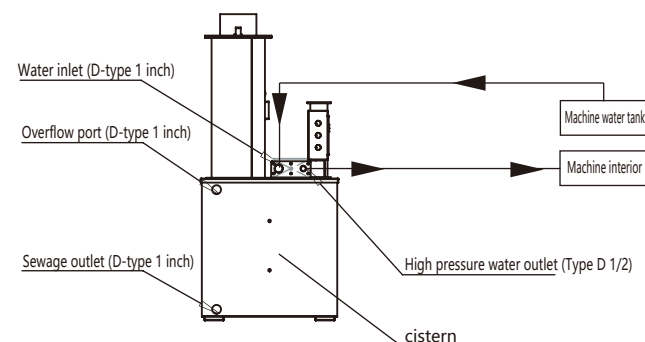
Mark description:

- 1. Water inlet interface (D-type 1 inch) : The line interface from the machine tank lifting pump to the water inlet of the high-pressure center outlet system.
- 2. High pressure water outlet interface (Type D 1/2) : The line interface from the high pressure center water outlet system to the machine tool entrance.
- 3. Sewage outlet interface (interface D type 1 inch) : The line interface of the filtered sewage from the sewage tank to the machine tank.

#### SS SERIES



#### PRODUCT DESCRIPTION



Mark specification:

- ◆ 1. Machine tool water tank lift pump - High pressure central outlet water tank intake - filter bucket (D type 1 inch)- central outlet water tank (complete filtration).
- ◆ 2. Central water tank - High pressure pump (Type D 1/2 outlet) - inside the machine.
- ◆ 3. The overflow port can be replaced with a 1-inch bamboo joint or D-type 1-inch interface according to different requirements.

#### AUTOMATION SOLUTIONS

The company has a number of experienced mechanical, electrical, process, commissioning engineers, mainly engaged in automation design, automation upgrading and transformation, to provide users with overall solutions, turnkey projects.



Hydraulic Cylinder Automation Cases



Automotive Half Shaft Automation Cases



Ball Iron Head Automatic Line Cases

#### INDUSTRY-SPECIFIC MACHINE SOLUTIONS

For the auto parts industry, construction machinery, agricultural vehicles, forging, medical equipment, hydraulic industry and other mechanical parts design, manufacturing special equipment to improve processing efficiency and reduce labor intensity, the company has mature solutions in the milling and punching machine, differential special machine, worm special machine, front axis special machine and other industries.



#### SUPPLY AND MAINTENANCE OF CNC PARTS

Shandong Rizhao SHANSEN CNC Equipment Co., Ltd. is mainly engaged in domestic and foreign CNC system parts sales, parts maintenance, and undertake CNC machine tool repair, transformation and other related services.



Fanuc system parts, Siemens system parts, Mitsubishi system parts, DASEN system parts sales and repair