



## Tongrui BZ Oil Decolorization Purification plant



### Superiority:

This machine utilizes a physiochemical reaction to eliminate the acidic component, the suspended particles and the sedimentation material etc. from the oil, it mainly used to decolor from the waste transformer oil, hydraulic oil, turbine oil and refrigerant oil, switch oil to limpid clean oil( the color is light yellow)

### Configuration:

Please refer the above pictures (picture 1: capacity is 9000Liters per hour, picture 2: capacity 3000Liters per hour), there are several filters in the machine, which are filled with Silica Gel. It is separated three groups, which is parallel connection, and each group include 3 or 4 filters, which is series connection, so you can open 3 groups filters together to regenerate the oil one pass to get the white oil. Moreover, you can close one of groups for cleaning it or changing the chemical, but the other two groups can work continuously.

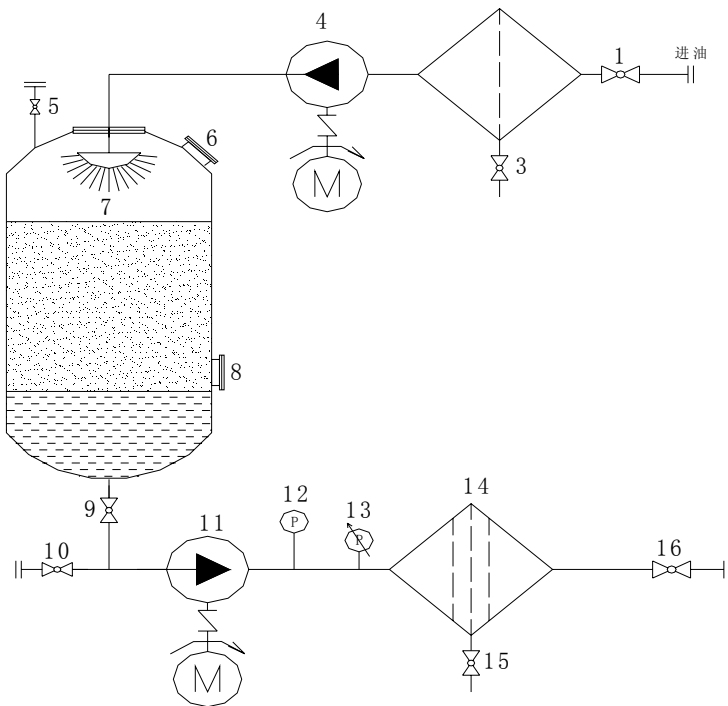
Note: ref. picture 2, it's easy to fill in and drain out the chemical, it's no need to open each filter for putting in and taking out the chemical like picture 1, picture 2 machine is easy to operate, the function and effect is same.

**We suggest you choose the machine like picture 2**

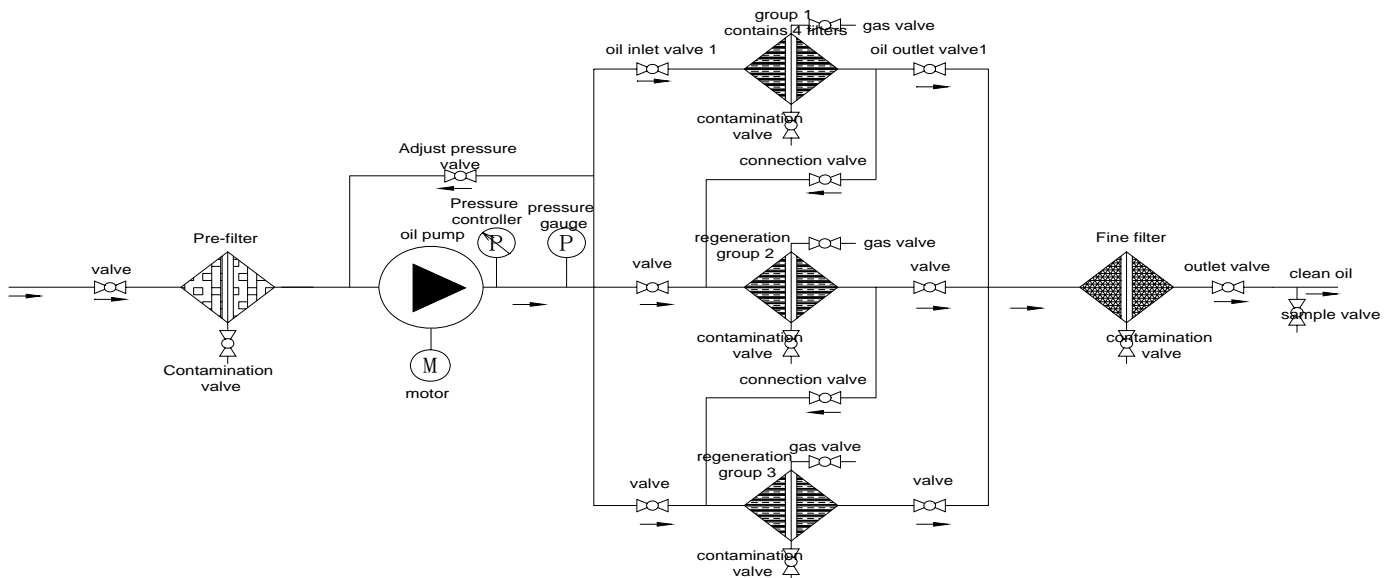
## Specification of Chemical:

chemical name	Coarse Granule Silica Gel
surface area	300-400m <sup>2</sup> /g
aperture	80-100 Å
Pore volume	0.75-1.0ml/g
Color	White
Price	US\$1,100/Ton
Percentage	2%-5%

## Flow Chart:



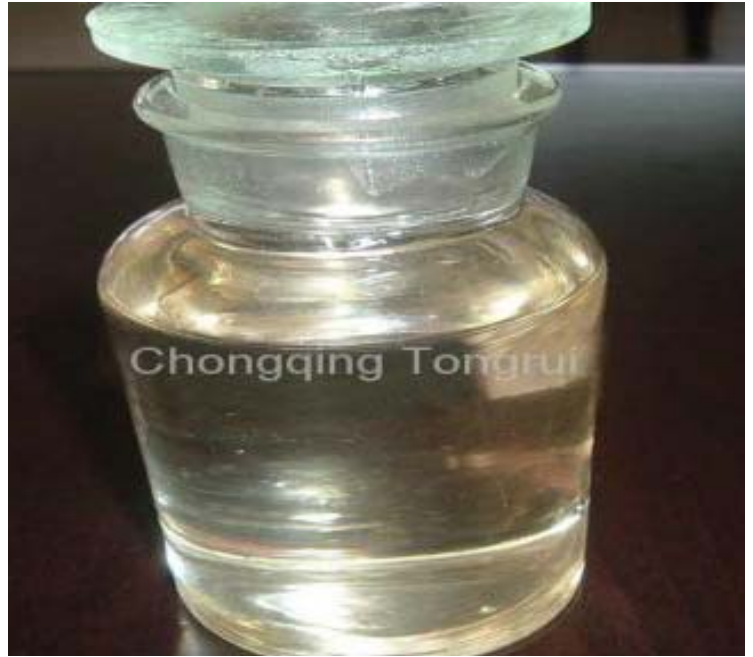
- 1、oil inlet valve 2、pre-filter 3、  
 15.contamination drain valve 4、oil inlet  
 pump 5、gas valve 6、chemical feeder  
 7、decolorization tank 8、chemical drain  
 valve 9、isolation valve 10、spare oil inlet  
 valve 11、oil out valve 12、pressure gauge  
 13、pressure controller 14、fine filter  
 16、oil out valve



## **Technical Features:**

1. It adopts a particular purification chemical (Silica Gel) to decolor the transformer oil and refrigerant oil, and the color of oil can be treated from No.6-10 to No.1-2.

2. This machine can operate online under the situation of transformer stays running in normal manner without cutting power or changing oil.



3. After treating, the oil can reach the new oil standard, which not only retains the active elements, but also improves the insulation of device and enhances the ability of anti-oxygen. Besides, the cost will be reduced by 90% compared with traditional way of oil-change. (Suggest: you can use the vacuum Transformer Oil Purification device remove water and impurities before use BZ.)

4. High precision stainless steel strainer is used, which is anti-corrosive, thermostable and has a good mechanical strength.

## **Guarantees & documentation**

TONGRUI warranty the plant supplied under this specification against defects in material and workmanship under normal use and service for a period of twelve (12) months after the start up of the system. TONGRUI's obligation under this warranty is limited to repairing or furnishing, without change within warranty period.

## Specification:

Index name	Unit	BZ-I	BZ-II	BZ-III
Capacity	Liter/hour	3,000L/H	6,000L/H	9000L/H
Length	Meter	1.3	1.4	1.6
Width	Meter	0.9	1.05	1.2
Height	Meter	1.65	1.65	1.85
Weight	Kg	450	600	800
Diameter of inlet&outlet pipe	Mm	DN32	DN40	DN40
Electric Motor	KW	1.5	2.2	2.5
Capacity of oil pump	M3/h	YCB-3.3m3/h	YCB-6.0m3/h	YCB-10m3/h
Speed of oil pump	RPM	960r/min	1420r/m	970r/m
Type of oil pump		Circular Teeth Gear Pump		
Work pressure	MPa	≤0.4		
Breakdown voltage after processing	KV	≥75		
Flash point	℃	≥135		
Water-solubility acid	PH	≥5.4		
Dielectric loss factor	tgδ (90℃) %	≤0.005		
Impurities	Micron	≤5(no free carbon)		
Acid	MgKOH/g	≤0.03		
Power supply		380V/3phase/50Hz		