

## Quotation of distillation equipment of Shangqiu Aotewei Environmental Protection Equipment Co., LTD

### 1. Company profile

Our company is the first professional organization specializing in the recycling of waste materials in China, the scope of recyclable materials: solid waste (waste plastics, rubber, tires, medical waste) and waste oil.

Chairman and Chief Engineer Chen Ming, engaged in the field of oil refining for many years, has more than 30 years of relevant experience, and is the main engineer of our XY series equipment, the main features of XY series equipment are less investment, high return, easy operation, high oil yield, low fuel consumption.

At present, our company's technology and equipment has 19 national patents (patent number: 200720091524.1, etc.), CE certificate (No. CMHN1311293219) and international environmental quality system ISO 9001:2008, ISO 14001:2004 certificates.

According to different situations in different regions, our company has developed different processing capacity of equipment, including daily processing 3-5 tons, 8-10 tons (up to 50 tons) of cracking equipment and daily processing capacity of 3 tons, 5 tons, 8 tons (up to 300 tons) of waste oil, tires Oil, plastic oil distillation equipment.





## 2.Waste oil refining technology introduction:

Waste oil refers to the waste oil that is replaced from various machinery, vehicles and ships. Its production process is due to the use of lubricating oil in the process of external pollution to produce a large number of gum, oxide, thereby reducing or even losing its control of friction, reduce wear, cooling, sealing isolation, reduce vibration and other effects and have to be replaced. With the improvement of people's living standards, environmental awareness has gradually increased, and the requirements for the harmless treatment of waste machine oil have become more and more stringent. Semi-continuous distillation equipment is OTWay company on the basis of various studies, combined with the advantages of large-scale petrochemical refining equipment, based on the reality, from the actual national conditions, after years of scientific and technological research, design and launch of patented products with independent intellectual property rights. The production process of the patented product is completely closed, which not only eliminates environmental pollution, but also realizes the recycling of resources, and has excellent environmental benefits, social benefits and economic benefits.

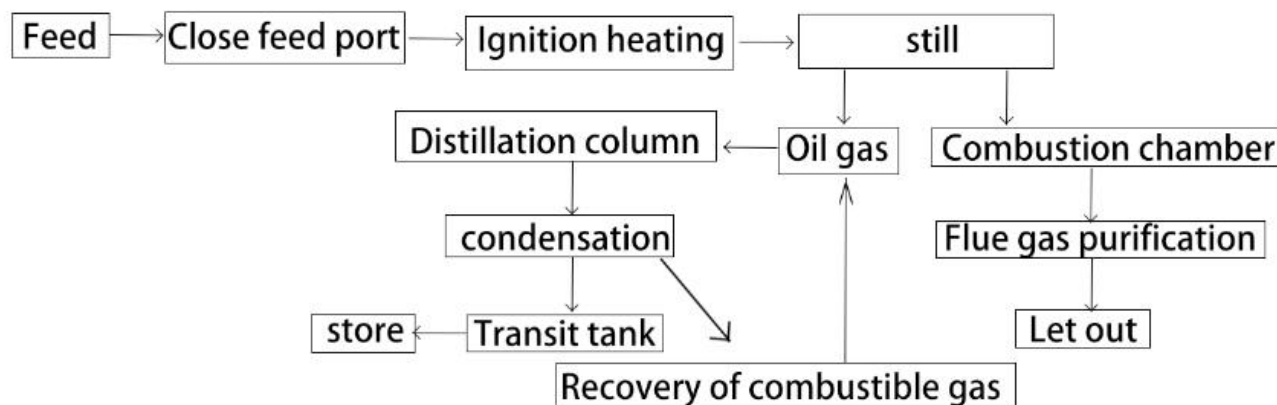
### 3.Process brief description

The crude oil that needs to be deeply processed is preheated through the oil pump, pumped into the reboiler, and heated by catalysis under normal pressure. The oil vapor is distilled out, and the oil and gas enter the condenser through the distillation tower. The liquefied part is condensed into the finished oil, and the non-liquefied part is sent to the heating system through the gas system to burn off.

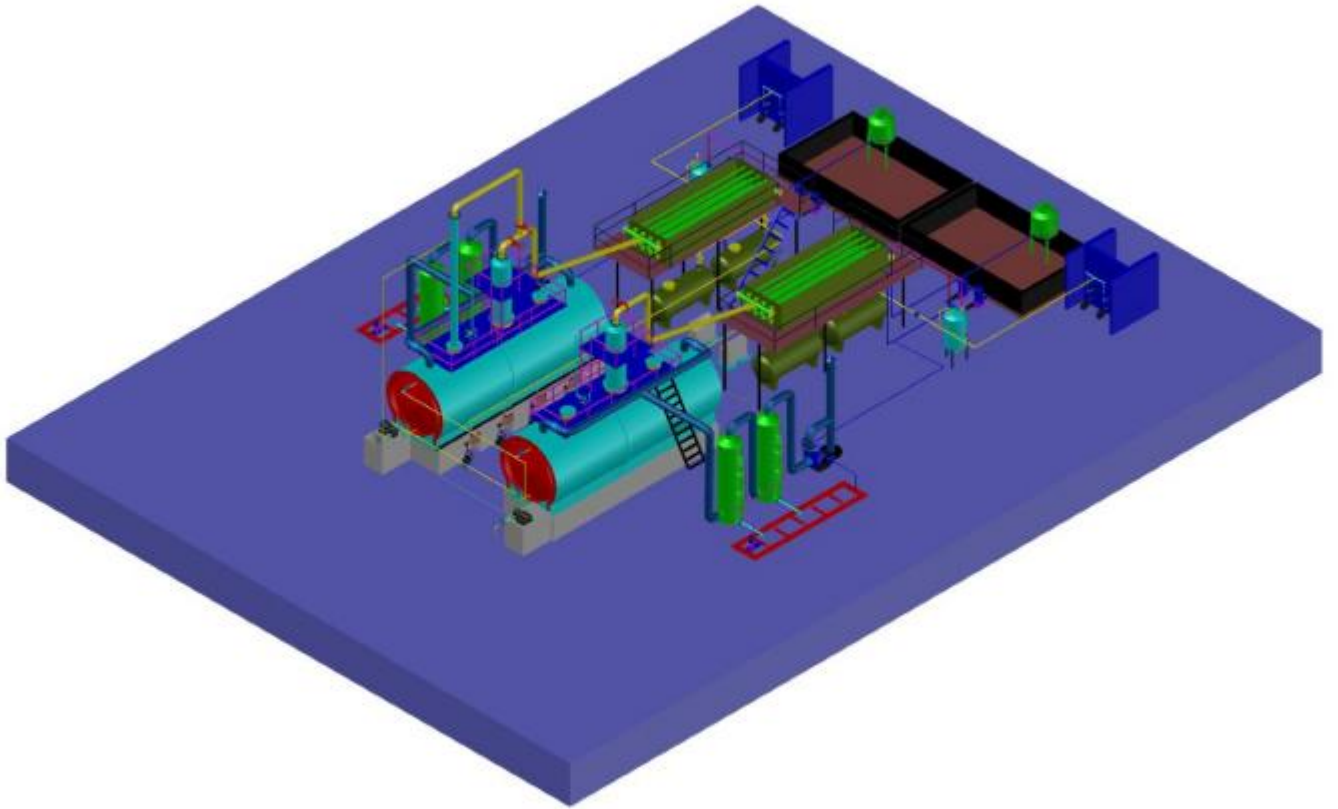
### 4.Distillation equipment characteristics:

- 1, semi-continuous production, one-time loading production 4-5 days, a greater degree of saving labor costs and production costs;
- 2, unique horizontal design, 100% conversion rate, good efficiency, considerable profits;
- 3, indirect heating, high safety performance.
- 4, good oil, good quality control.
- 5, safety: automatic submerged arc welding technology, ultrasonic non-destructive testing, manual and automatic safety devices;
- 6, national patent, unique insulation shell design: excellent insulation effect, good energy saving effect;
- 7, condenser cooling thoroughly, high oil yield, good oil quality, long service life, easy to clean;
- 8, national patent, original water film desulfurization dust removal: can effectively remove acid gas and dust, to meet the relevant national standards;
9. Control system With a high degree of automation, the operation of the entire production line can be fully displayed on the control table, which is more intuitive and comprehensive.

### 5.Equipment flow chart



## 6. Equipment layout



## 7. Oil index:

Oil index after distillation		
item	Non-standard diesel oil	Label diesel oil
Oxidation stability	2.2	≤2.5mg/100ml
Sulfur content (%)	0.3%	M/m≤0.2
10% residual carbon residue	0.33%	M/m≤0.3
Ash content (%)	0.16%	%m/m≤0.01
hydration (%)	vestige	/
Mechanical impurity	/	/
density (g/ml)	0.85	0.83-0.87
Freezing point(°C)	-10°C	0°C
Flash point(closed)(°C)	45°C	55°C
Kinematic viscosity	3.5	(20°C)mm <sup>2</sup> /s3.0-3.8
Combustion value(kcal)	9500	8500
chroma	1.2	≤3.5
Cetane number	40	45
acidity	/	Mgkoh/100ml≤7

