

## supercritical CO<sub>2</sub> extraction equipment

The principle of supercritical carbon dioxide extraction is that supercritical carbon dioxide can dissolve some special natural products.



High extraction efficiency



Simple Process



304 Stainless Steel

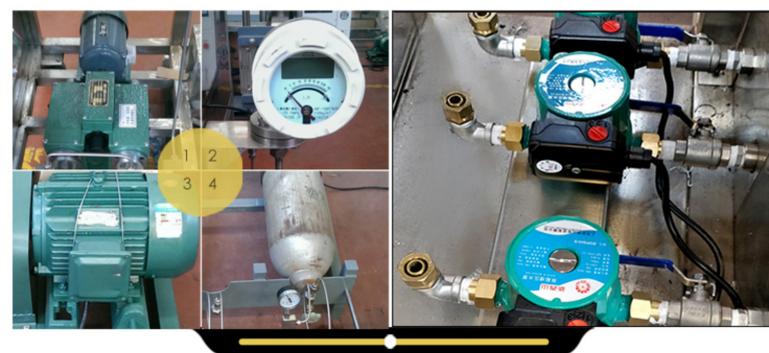


Environmental protection



### Feature

- 1.CO<sub>2</sub> is inexpensive, not combustible, not explosive, germicidal, free of bacteria, selective and mobile.
- 2.Heat sensitive materials are gently treated.
- 3.Products and residues are solvent-free.



- 4.The solvating power can be changed (conditions, or the use of modifiers)
- 5.An excellent flavour profile can be achieved for oils
- 6.Pure extracts are produced with few process steps
- 7.Fragrances and aromas remain unchanged
- 8.Selective extraction and fractionated separation is possible
- 9.CO<sub>2</sub> is recycled within the plant, is physiologically harmless and does not cause environmental problems like some conventional solvents



ZZKD-10L



ZZKD-25L

### PRODUCT DISPLAY



KD-SFT-10L



KD-SFT-5L



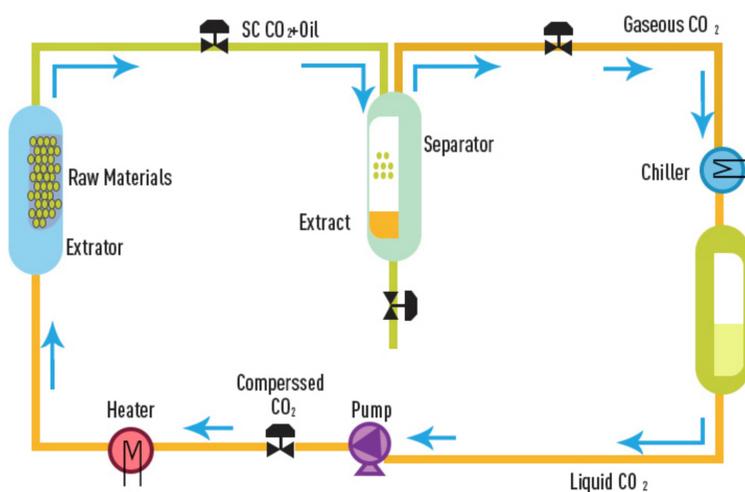
KD-SFT-25L



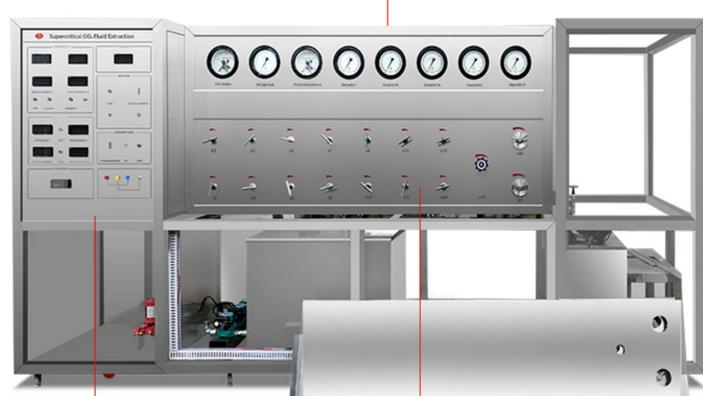
KD-SFT-50L

## PROCESS INTRODUCTION

- More than 30 years manufacture experience;
- ASME and CE requirement for high standard requirement;
- Professional design, manufacture, and assemble team to guarantee good quality;
- Special customization service.



Gauges



Control Method

The control panel

- Gases in fluid condition (above the critical pressure and the critical temperature) dissolve larger quantities of substances than the partial pressure of the substance in the solvent normally permits
- CO<sub>2</sub> is an APOLAR solvent, which results in a high solubility for non polar and low polar substances up to a molecular weight of 250g/mol Solubility decreases with increasing polarity
- Highly polar substances are insoluble The raw material is exposed to the fluid and soluble substances are transferred into it
- Separation is achieved by change of parameters (pressure and temperature)



### Details

Provide you with experiment solution  
asy-to-use and convenient to operation  
Perfect security



#### Control Method

- Convenient and reliable operation control method, can choose instrument semi-automatic, PLC automatic control of two modes.

#### Safety Protection

- Automatic pressure relief of overpressure, when the pressure temperature exceeds the protection pressure, the alarm light will give an alarm to ensure the safe operation of the equipment

#### Product Material

- All stainless steel containers, pipe valves, sanitary grade SS304 or SS316; Special requirements of the non-standard customized design and production to meet your special needs

