

- Year/Month : 2018
- Client/Owner : 산업통상자원부/에너지기술평가원
- Engineer : ILSHINAUTOCLAVE
- Location : DAEJEON, REPUBLIC OF KOREA

### TITLE

신재생에너지핵심기술개발사업  
- 하수슬러지 무건조 탈산소 액화기술

### PROCESS

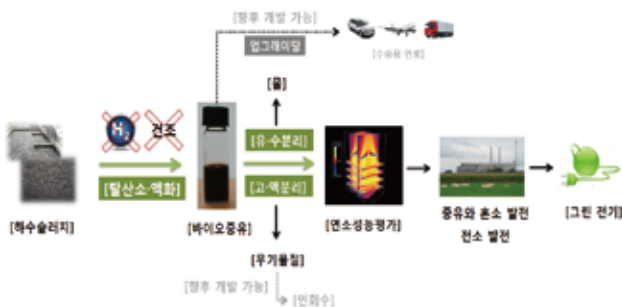
Extraction Condition	300 kg/cm <sup>2</sup> at 450 °C
Total Output	350 kg/day
Production Time	300 ml/min

### MAJOR APPLIANCES

Extractor	3.8 ℓ x 8 units (총 30.4ℓ)
Max. Working Pressure	350 kg/cm <sup>2</sup>
Reactor Heater	SUS 304 인발 Pipe(60*90) 8개
Separator	
1st	15 ℓ x 1 units
2nd	15 ℓ x 1 units
HP Pump	3 HP x 1 unit
Max. Working Pressure	350 kg/cm <sup>2</sup>
Max Flow Rate	300 ml/min
Pre-Heater	380V, 3ph, 8kwx 8 unit
Condenser	Shell & Tube Type x 2 unit
Liquid/Gas Separator	30ℓ x 1 unit (한국가스안전공사 검사필)

### 과제개요

#### 하수슬러지의 탈산소·액화 개요 (StL, Sludge-to-Liquid)



### FEATURE

- 하수슬러지내 바이오중유 추출
- 저급원유 고품유압
- 초임계유체 반응공정 개발