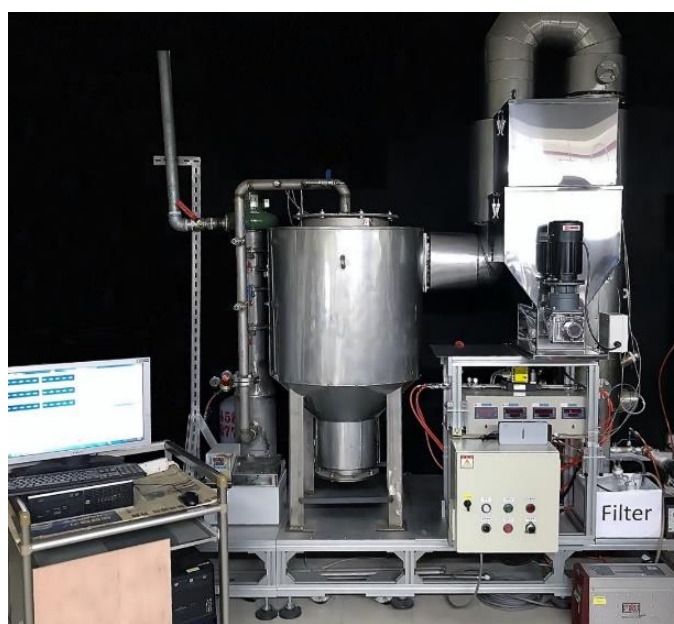


## 【10 kW<sub>th</sub> 鼓泡式流化床】

10 kW<sub>th</sub> 鼓泡式流化床系統，其原理是流體向上流過堆積在容器中的固體顆粒層而使得固體顆粒隨著流體運動，由於流體的作用使固體顆粒具有部分類似流體的性質。將固體燃料破碎至一定大小後，進行流體化床燃燒具有許多優點：顆粒混合均勻、溫度分佈均勻、燃料適用性高、燃料前處理成本較低等。此設備已完成完善的流化床燃燒操作程序，有助於大型 200 kW<sub>th</sub> 鼓泡式流化床系統的進一步優化。實驗成果也提供做為數值模擬的驗證。本套系統亦提供研究單位/產業界進行樣品測燒，試驗成本較低且試驗等待期較短，提供有此需求之廠商做為產品測試驗證平台。

## 【10 kW<sub>th</sub> Bubbling Fluidized Bed Reactor】

The principle of the bubbling fluidized bed reactor is that the fluid flows upward through the layer of solid particles so that the solid particles move with the fluid. Therefore, the solid particles have a fluid-like property due to the action of the fluid. The fluidized bed combustion has many advantages: uniform mixing, uniform temperature distribution, high fuel applicability, and low feedstock pretreatment cost. This 10kW<sub>th</sub> reactor has established a complete operation procedure, which is conducive to further optimization of a large 200 kW<sub>th</sub> bubbling fluidized bed system. The experimental results can be used for verification of numerical prediction. The facility can also be used for the burning tests of different feedstock. It is a product test and verification platform provided for related manufacturers.



10 kW<sub>th</sub> 鼓泡式流化床 (10 kW<sub>th</sub> Bubbling Fluidized Bed Reactor)