

【200 kWth 鼓泡式流化床】

200 kWth 鼓泡式流化床反應爐利用微負壓可進行各式固態燃料或都市廢棄物之空氣、富氧與純氧燃燒/氣化實驗，並搭配氣體分析儀進行氣體成分分析。此系統與 280 kWth 多元燃料燃燒示範平台共用後處理設備，在有限的場域內節省建置成本與提高設備使用效益。同時整合機電設備，利用 PLC 可程式控制器，建立圖控式人機操作介面，具備系統切換操作控制、數據即時監測與紀錄功能。200 kWth 鼓泡式流化床反應爐系統具備完善的實驗設施，可進行多元燃料富氧燃燒減排技術示範，驗證多元燃料流化床富氧燃燒減碳技術於工業尺度之效能，以利技術產業化。

【10 kWth Dual Fluidized Bed Gasifier】

The 200 kWth bubbling fluidized bed reactor can be operated under negative gauge pressure to conduct air/oxygen-enriched/oxy-fuel combustion or gasification experiments of various solid fuels or municipal wastes. It is connected with a gas analyzer to analyze gas composition. This system shares the post-processing equipment with the 280 kWth flexi-fuel combustion demonstration platform. It can save construction costs and improve equipment efficiency. At the same time, the integration of electromechanical equipment and the use of PLC programmable controller are used to establish a graphical control interface, which has the functions of system switching operation, real-time data monitoring and recording. The 200 kWth bubbling fluidized bed reactor system has complete experimental facilities, which can conduct demonstration of flexi-fuel oxy-combustion and verify the effectiveness of flexi-fuel oxy-combustion for carbon reduction at the industrial scale.



200 kWth 鼓泡式流化床鍋爐 (200 kWth Bubbling Fluidized Bed Reactor)