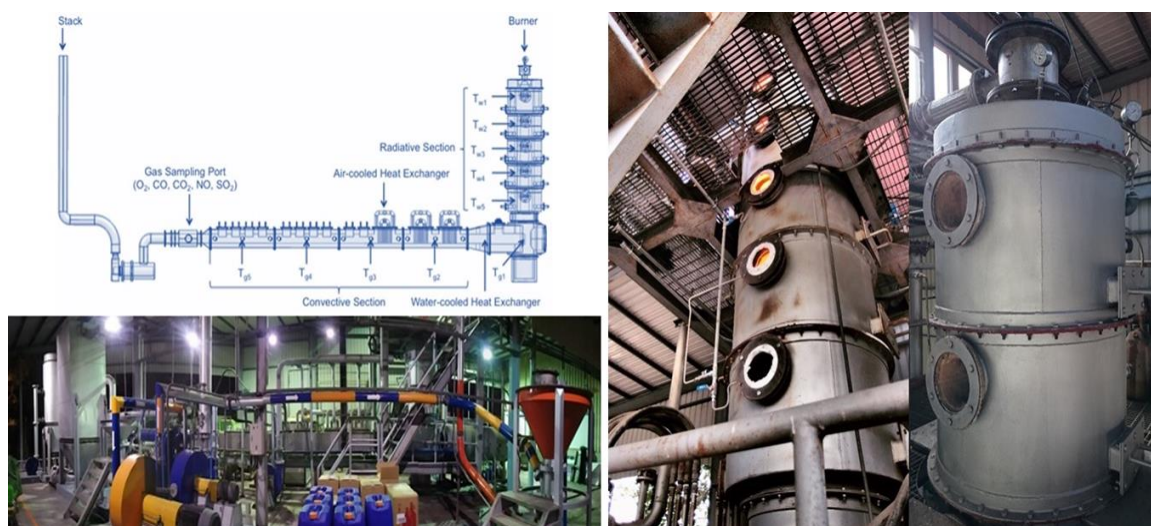


## 【280 kW<sub>th</sub> 垂直燃燒爐】

280 kW<sub>th</sub> 垂直燃燒爐系統為國內學研界首座百 kW 級燃燒試驗爐，可針對重油、柴油、生質油、乳化燃油以及固態生質物(如粉煤或生質粉料)等多元燃料，或各式燃料的混合進行燃燒試驗，屬準工業級多元燃料燃燒示範爐，多年來已協助研究單位與產業界進行多項燃燒試驗與技術交流。本系統同時結合煙氣再循環技術建立起純/富氧燃燒系統。此系統執行三期八年的 NEP 能源國家型計畫，已發展出多元燃料混燒、純/富氧燃燒、爐渣固碳等核心技術，其中純氧燃燒其煙道氣的二氧化碳濃度最高可達 94%，與國際間最頂尖研究機構實驗爐相當。

## 【280 kW<sub>th</sub> Oil/Pulverized Coal Furnace】

The 280 kW<sub>th</sub> oil/pulverized coal furnace is the domestic first combustion test furnace of hundred kW grade in Academia, which can be used for flexi-fuels such as heavy fuel oil, diesel oil, biomass oil, emulsified fuel oil and solid biomass (such as pulverized coal or biomass powder), or various blended fuels. It is a quasi-industrial flexi-fuel combustion furnace. So far, it has assisted the research institute and the industry to perform a number of combustion tests. This system also combines the flue gas recirculation technology to establish an oxy-fuel/oxy-enriched combustion system. This system implements eight-year National Energy Program. It has developed core technologies such as flexi-fuel co-combustion, oxy-fuel/oxy-enriched combustion, and slag carbon fixation. Among these technologies, the concentration of carbon dioxide in the flue gas of oxy-coal combustion can reach up to 94%, equivalent to the record of the world's top research institutions.



280 kW<sub>th</sub> 垂直燃燒爐 (280 kW<sub>th</sub> Oil/Pulverized Coal Furnace)