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**Product Name :**  
Fluidized Catalytic Cracker Unit

**Product Code :**  
LBNY-0005-1060007



#### **Description :**

The Fluidized Catalytic Cracker Unit Trainer is a reduced scale plant that mimics bed fluidization, catalyst circulation and regeneration. Working fluids are air, CO<sub>2</sub> and water. CO<sub>2</sub> is used as a tracer compound to show the separation of flow in the reactor and regeneration sections. Fluidized Catalytic Cracker Units are common unit operations in oil refineries. Visualization of the catalyst material uses small diameter spherical glass beads and a coloured desiccant to mimic the catalyst bed. Catalyst degradation is mimicked by a colour change of the desiccant beads in the reactor and is reversed during regeneration. The entire trainer is controlled from a DCS computer interface with purpose designed software and control configuration. This gives the student the opportunity to gain operating experience focusing on both the process and on control strategy. The process has instrumentation to provide for reactant flow rate control, product gas analysis, catalyst level control, temperature indication and control and differential pressure indication.

#### **Technical Specification :**

Much of the process is fabricated of industrial glass, with custom fabricated SS sections  
Analysis of CO<sub>2</sub> in product stream  
Thermocouple temperature measurement  
Continuous up flow reactor  
Stainless steel vessel flanges and custom fittings  
Flow measurement of reactant streams  
Glass disengaging vessels  
Glass piping.



**Laboratory Instrument India**