



## SCR catalyst and pilot plant Development



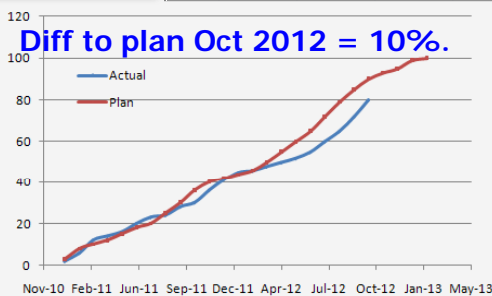
### Problem/Reason :

- In the present, Mab Ta Put area is more concerned about environmental constraints. Consequently, the new technology must be used to reduce NOx emission.

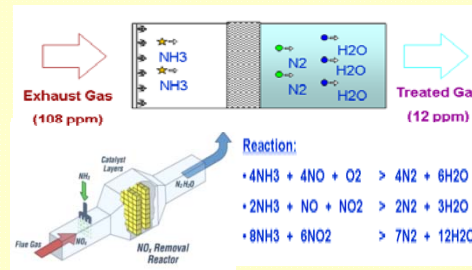
### Target:

- Obtain the new catalyst in PTT receipt with operating more than 3000 hr without any effects.
- Construct the pilot plant to test PTT catalyst inside GSP#6 with exhaust gas from 3506F01 .

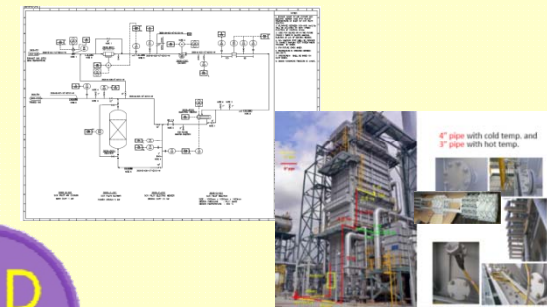
### Progress:



### Design SCR DeNOx reaction and process



### Design process and System Configuration



### Pilot plant TOR and procurement

Sl. No.	Item Description	Quantity	Unit	Remarks
1	SCR Catalyst	1000	kg	
2	SCR Reactor	1	unit	
3	SCR System	1	unit	
4	SCR Control System	1	unit	
5	SCR Safety System	1	unit	
6	SCR Maintenance System	1	unit	
7	SCR Training System	1	unit	
8	SCR Documentation System	1	unit	
9	SCR Spare Parts	1	unit	
10	SCR Installation	1	unit	

SCR Pilot Plant TOR and procurement

The SCR Pilot Plant is designed to test the SCR catalyst and reactor. The plant is located at the Rayong Gas Separation Plant. The plant is designed to handle 1000 kg of catalyst and 1 unit of reactor. The plant is designed to handle 1 unit of system, 1 unit of control system, 1 unit of safety system, 1 unit of maintenance system, 1 unit of training system, 1 unit of documentation system, 1 unit of spare parts, and 1 unit of installation.

### Hazop and Detail engineering

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9	SCR Spare Parts	1	unit	
10	SCR Installation	1	unit	

Do process P&ID and process datasheet

### Result

Base on the design data, this project can save the catalyst cost = 100 -120 MB per 3 years

### Next Plan

Issue ITB for EPC contractor selection

