

De-NOx Catalyst Regeneration Service

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SCR Catalyst Regeneration

SCR system is widely used to remove NOx in Power plants, Steel Plants, Petrochemical Plants, and Incinerators more effectively. However, the costs of replacing catalyst in every 3~5 years and its wastes became a huge burden.

KC Cottrell successfully adopts advanced Ex-situ type SCR Catalyst Regeneration technology for the first time in Korea and achieved over 90% more efficient system with lower costs.

With the technology of SCR Catalyst Regeneration, KC Cottrell would be able to reduce the price of SCR operation cost and soil contamination by recycling the catalyst. The reduction of the costs and pollution will contribute Client's environment-friendly business operation.

SCR Catalyst Regeneration technology will also be able to contribute green-technology production and environment friendly industry

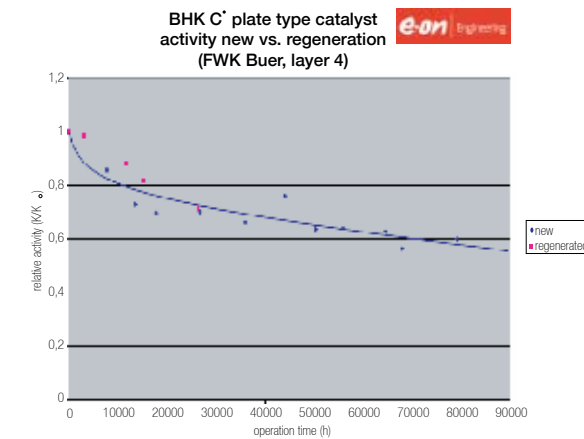
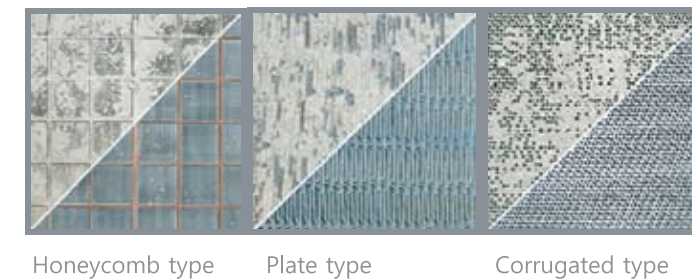
1 Process



1. **Pre-washing** Alkali washing step, reduces adhesive power of the pollution material
2. **Bubbling** Air bubbling unit, handling deactivation material
3. **Ultrasonic** Ultrasonic step, reduces catalyst poison and pollution material in micro-pore
4. **Washing** Reduce pollution material by acid washing and neutralization reaction
5. **Coating** Recover activity by impregnation of active material
6. **Drying** Recover intensity and remove moisture assimilated in the catalyst

2 Advantages

- Lower costs with longer lifetime
- Recover over 90% of activity
- Enable regeneration all existing catalyst types
- Complete removal of catalyst poison and pollution material by ultrasonic cleaning
- Prevent site contamination by using our own factory
- Secure a larger scale of the equipment
- Reduce the costs of landfill of used catalyst & spent catalyst



3 Flow Chart

500MW Power Plant standard

Customer inquiry		
Receipt of sample catalyst		
Examine catalyst activity and status	1. Examine sample catalyst activity	4-7 days
	2. Site inspection of SCR and Catalyst	1 day
	3. Decide regenerability of catalyst	
Separate internal part and catalyst module movement		5-7 days
Transportation	Factory	1 day
Catalyst Regeneration	max 40m ³ /day	2-3 weeks
Transportation	Plant site	1 day