

# DeNOx Catalyst

HITACHI POWER SYSTEMS AMERICA, LTD.

## Simple Cycle Applications



With today's emissions requirements you need a catalyst and catalyst supplier that can exceed your needs for NOx removal.

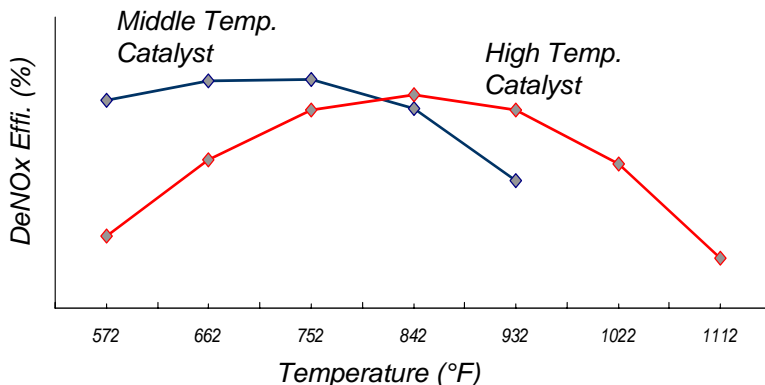
**Hitachi** has researched, developed and supplied flue gas NOx removal catalyst to over 500 thermal power plants throughout the world. Our vast experience and knowledge makes us the most ideal solutions partner.

Hitachi's simple cycle catalyst is utilized for temperatures ranging from 880 to 1050°F. Our titanium based and proprietary additives formulation is a proven technology to minimize ammonia oxidation and improve catalyst activity at higher demanding temperatures and is manufactured in our ISO 9001 Akitsu facility dedicated solely to the production and continued research of catalyst.

Hitachi's cross undulated catalyst was an evolution from our patented parallel plate technology which allows us to achieve greater activity and thus offer reduced catalyst volumes for clean gas fired applications.

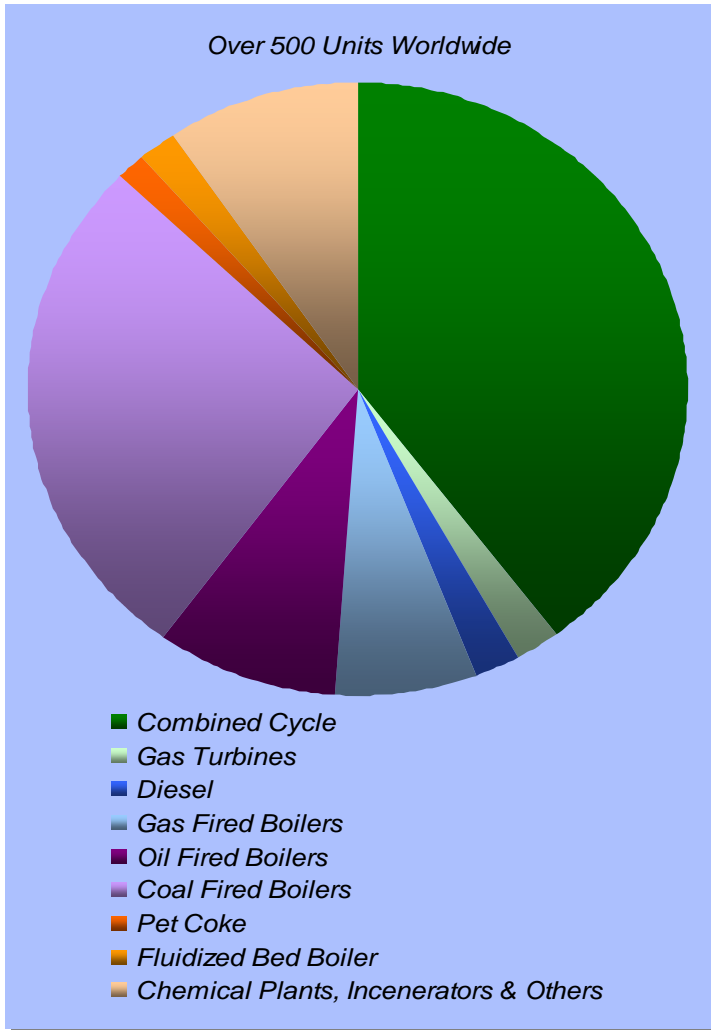
Hitachi's success and innovation is everything you would expect from the original developer and supplier of DeNOx catalyst.

DeNOx Reduction Reaction	$4\text{NO} + 4\text{NH}_3 + \text{O}_2 \rightarrow 4\text{N}_2 + 6\text{H}_2\text{O}$ (1)
NH <sub>3</sub> Oxidation Reactions	$4\text{NH}_3 + 5\text{O}_2 \rightarrow 4\text{NO} + 6\text{H}_2\text{O}$ (2)
	$4\text{NH}_3 + 3\text{O}_2 \rightarrow 2\text{N}_2 + 6\text{H}_2\text{O}$ (3)



# HITACHI POWER SYSTEMS AMERICA, LTD.

## Experience



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## Catalyst Products and Services

- DeNOx Catalyst for Coal and Oil
- DeNOx Catalyst for Natural Gas
- Regeneration/Rejuvenation

[www.hitachi.us/hpsa](http://www.hitachi.us/hpsa)

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