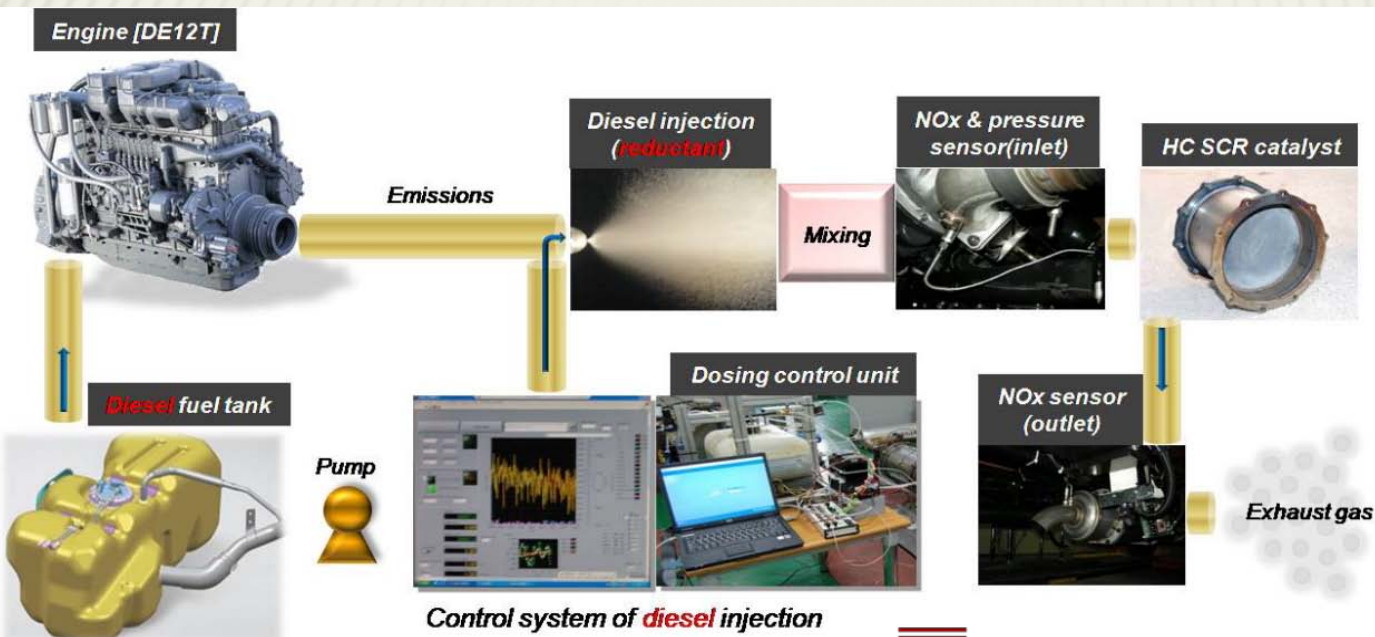


# Development of HC-SCR system using Diesel Fuel as a Reductant



- In order to remove NO<sub>x</sub> from diesel vehicle emission, urea-SCR is generally used.
- In this studies, diesel fuel itself was used as a NO to remove NO<sub>x</sub>.
- This system is thought to have more advantages in managing reductant, recharging, and preventing second pollutants by ammonia slip.

**Bench test**



**Dynamo test**



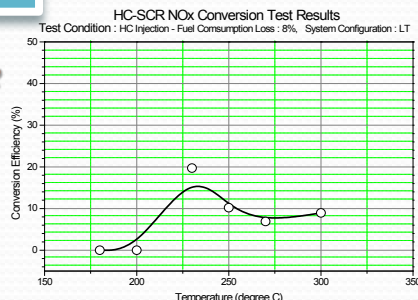
**Vehicle test**



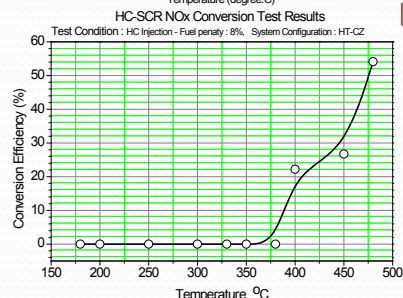
# DeNOx test with SCR catalyst

## Dynamo test

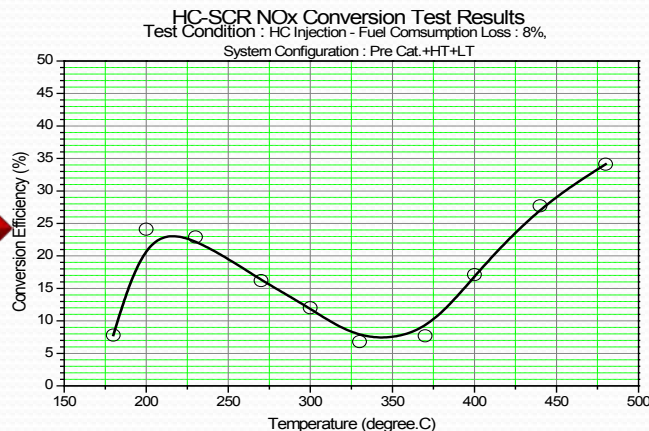
### LT SCR



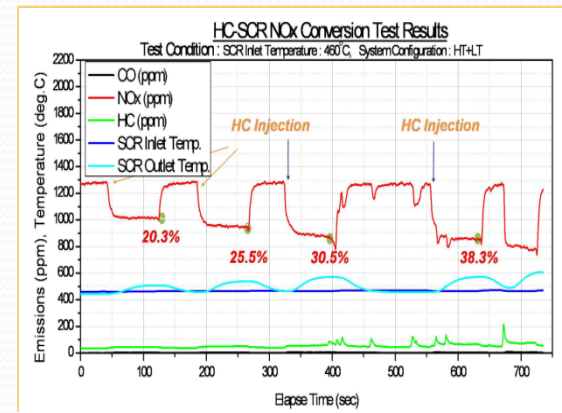
### HT SCR



### Pre cat. + HT SCR + LT SCR



### FC 5%, DeNOx efficiency 40%

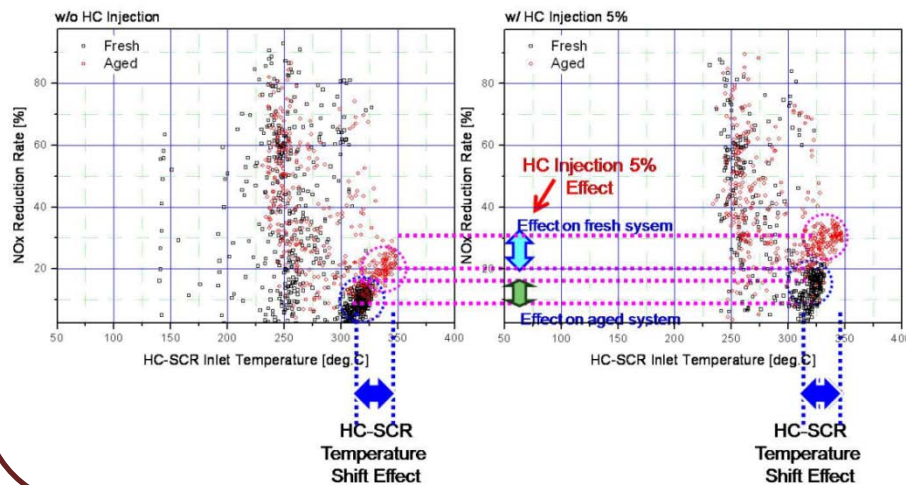


“Optimized catalyst arrangement”

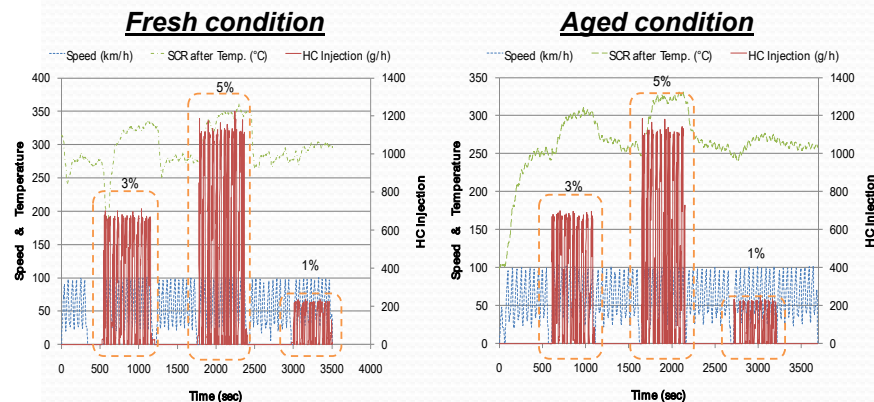
“ND-13 mode”

## Vehicle test

### Results of vehicle test (20km→100km)



### FC ratio vs. NOx concentration



“23% NOx conversion at FC 5%”