

On-Board SCR trial using high speed auxiliary engine

JAPAN

Auxiliary Engine

- Test Ship : 95,000DWT bulk carrier
- Test Engine : "6EY18AL"
(Power output of 550kW, Rated speed of 900min⁻¹)
- Fuel Oil : Heavy Fuel Oil
(and Marine Diesel Oil : SCR test only)



Layout of on-board SCR system (Auxiliary engine)

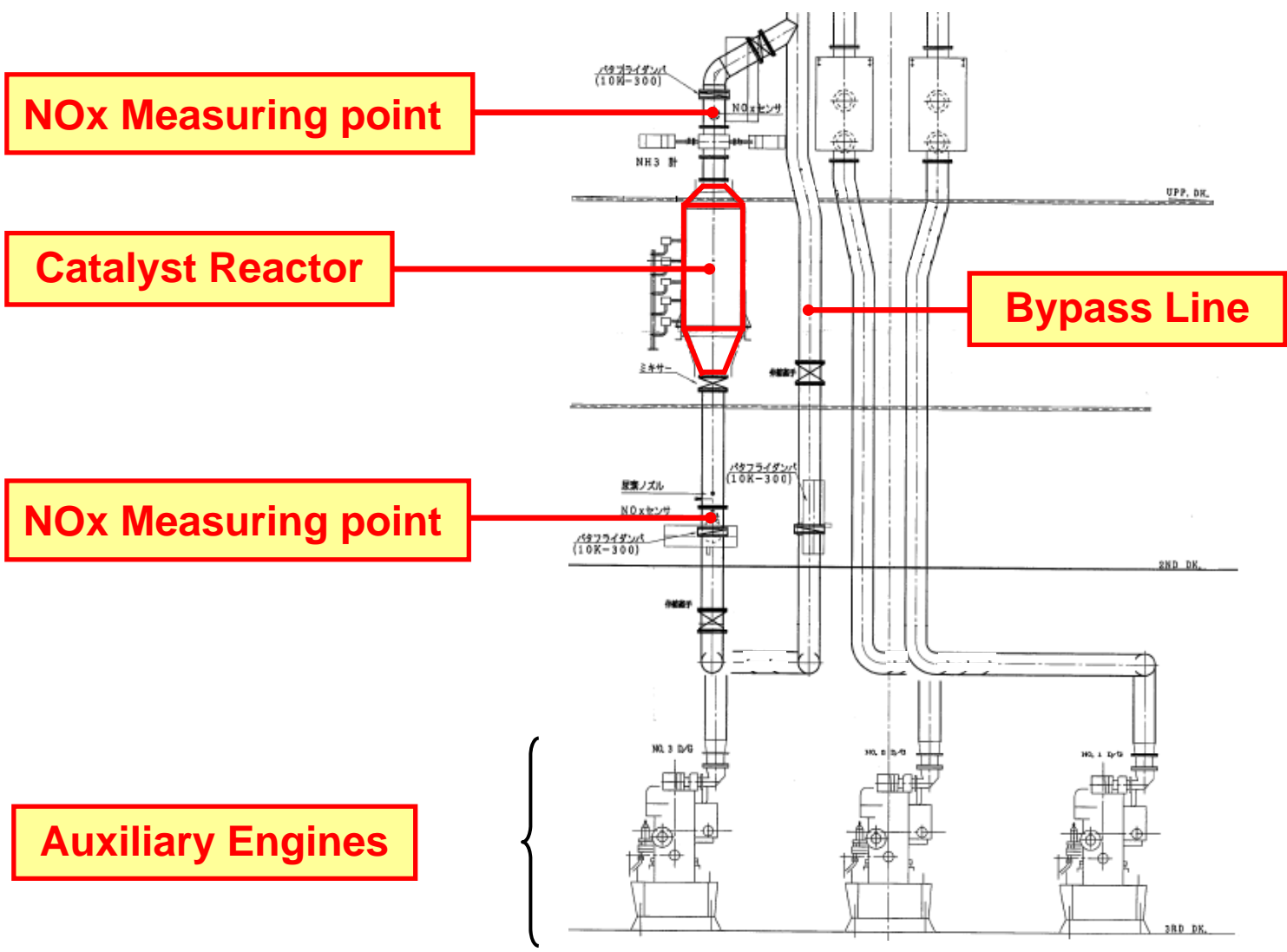
Catalyst Reactor



(Auxiliary engine)



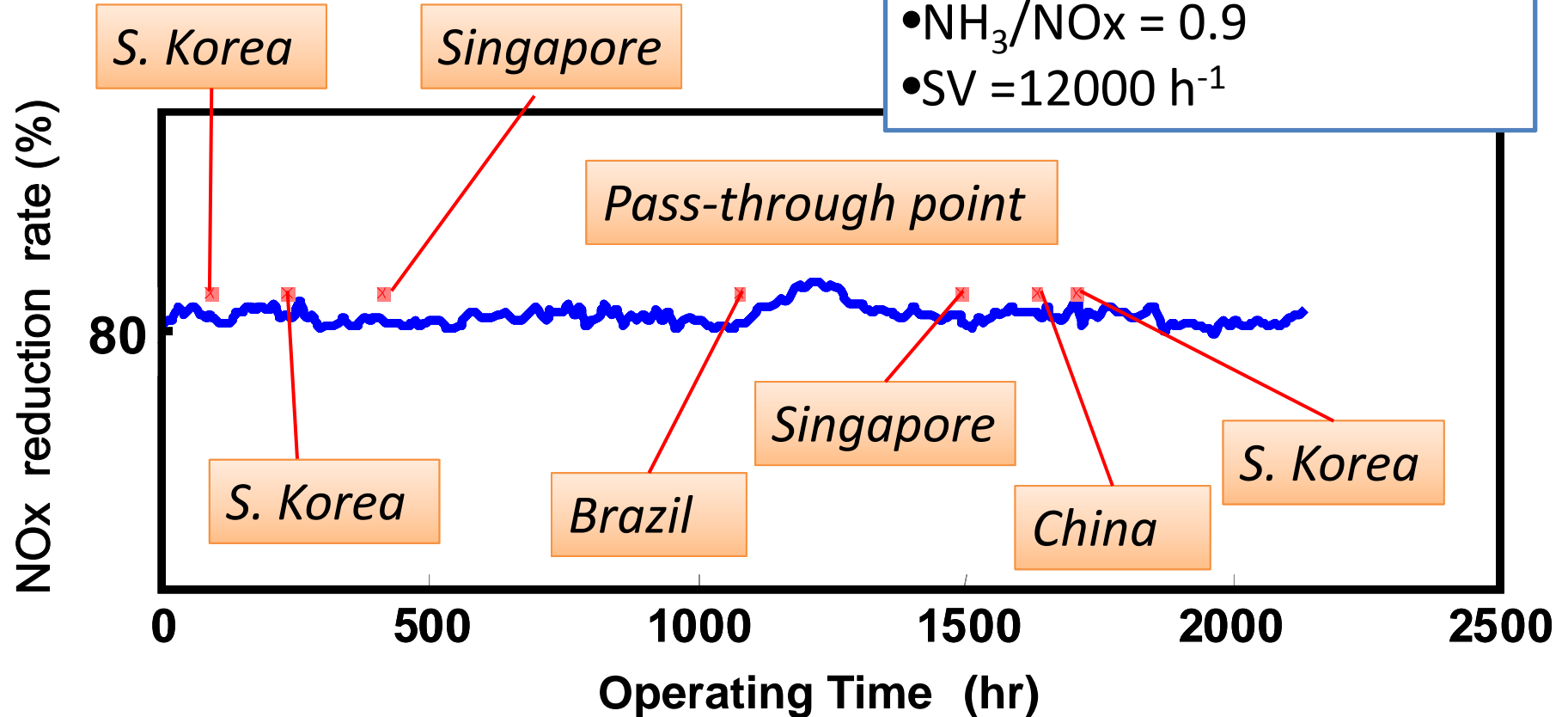
Layout of Catalyst and NOx Measuring point (Auxiliary engine)



History of operation on-board SCR test (Auxiliary engine)

Fuel oil : Heavy Fuel Oil

- Ammonia Slip ≤ 10 ppm
- $\text{NH}_3/\text{NO}_x = 0.9$
- $\text{SV} = 12000 \text{ h}^{-1}$



• At the operating to SCR system of 2000 hour, no decline of denitration performance was observed.