

**Research and development of  
SCR technology  
using high speed main engine**

JAPAN

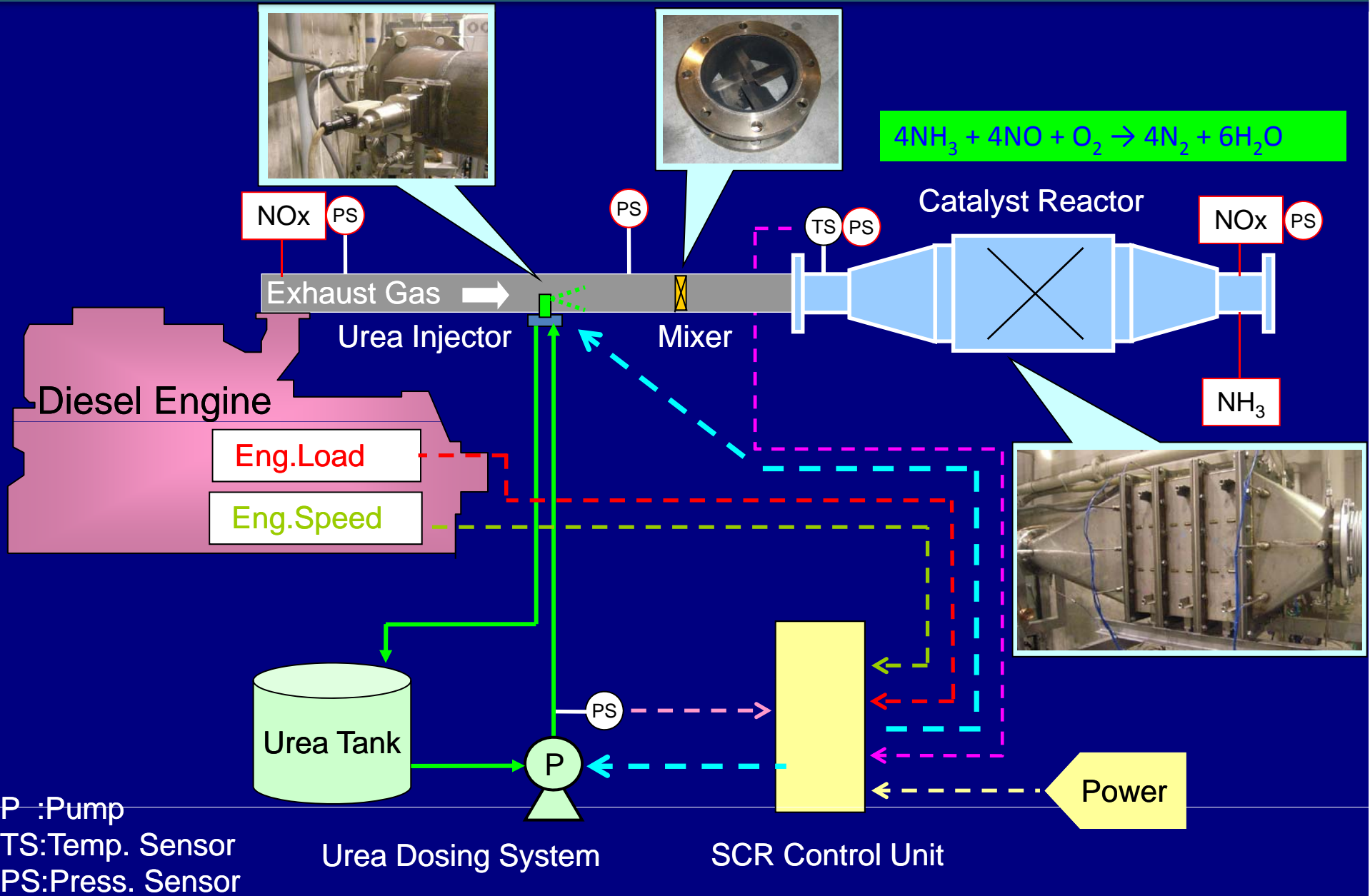
## Objective & Outline

- Laboratory test of exhaust gas denitration with high-speed rotation main engine was conducted. In this test, Urea was used as reductant.

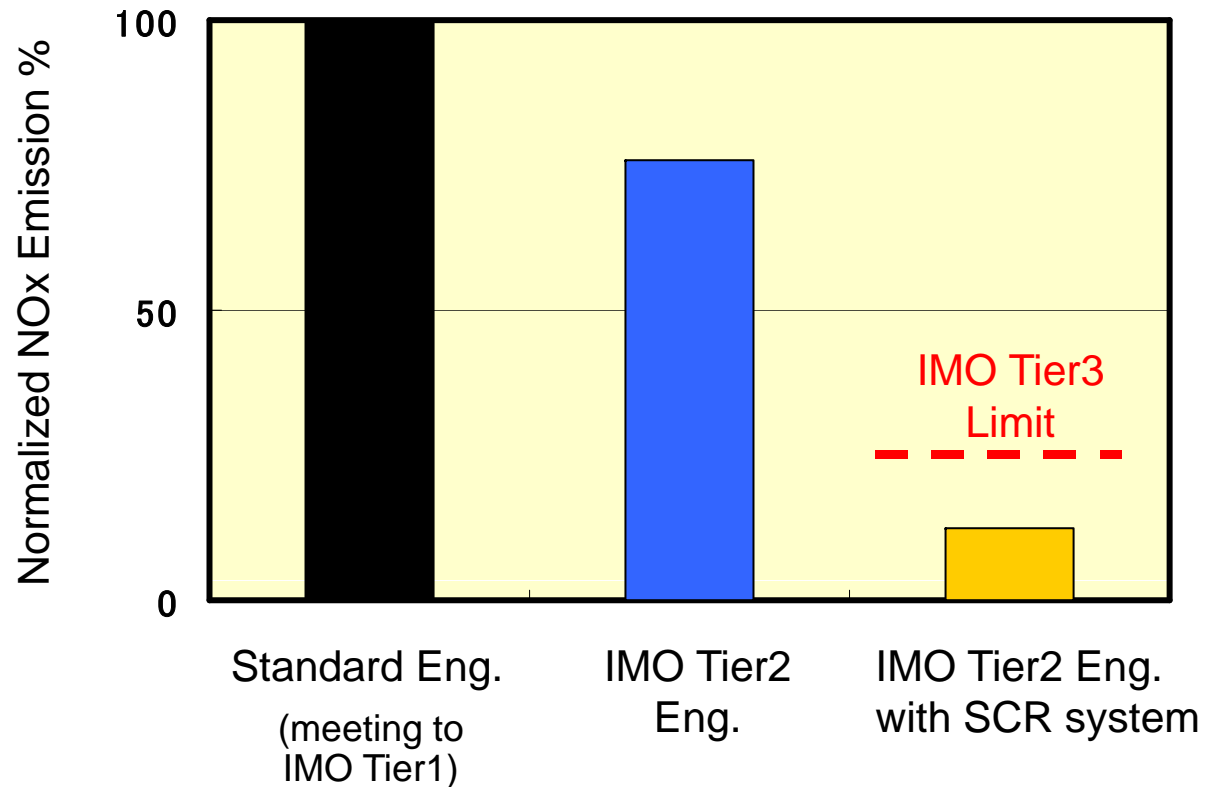
Participant of this project:

- Yanmar Co., Ltd.

# Test Rig of SCR System (Main Engine)

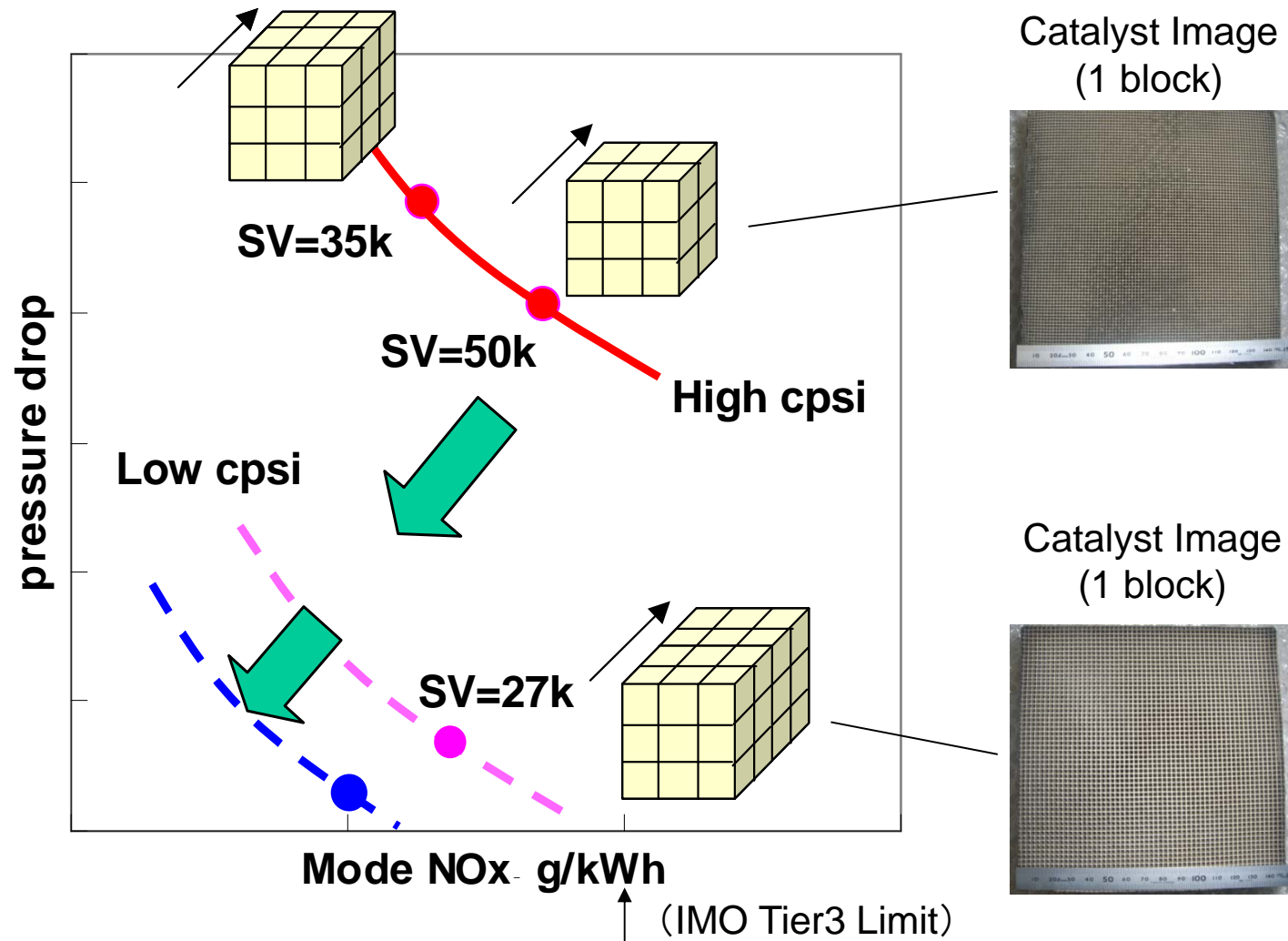


# SCR Performance (Main Engine)



- SCR was fitted with a Tier II compliant engine. As a result of this laboratory test, 80% denitration rate required by Tier III was achieved.

# Evaluation of SV (Main Engine)



- SV number was set at 50000(1/h) in this laboratory test. In this test condition, SV number of 27000 is considered to achieve both denitration rate required by Tier III and mitigation of clogging of the catalyst.