

승용디젤차량의 연소음 개발

Approach for developing combustion noise of diesel passenger car

정인수† · 진재민* · 이동철* · 강구태*

InSoo Jung, JaeMin Jin, DongChul Lee and KooTae Kang

가, 1~4

1.

가 Trade-off
가
가
EMS (Engine
Management System)
of Experiments) 가
DOE (Design

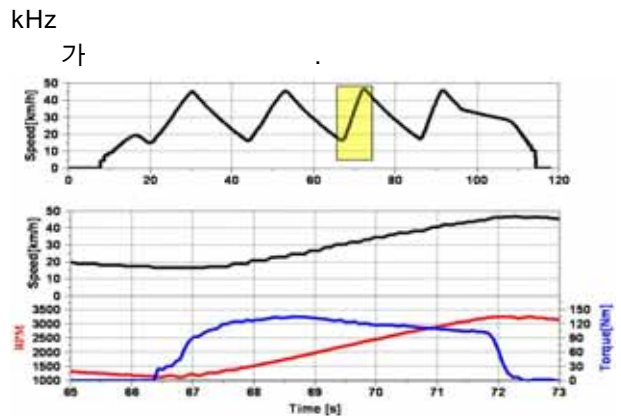


Fig.1 Driving mode of combustion noise

2.

2.1

(1)

2.2 () DOE

(1) DOE

Fig.1

가 Trade-off

(2)

가

DOE

가
가 Fig.3

Fig.1

Fig.2

가 NEDC (New European
Driving Cycle)

가

1~4 kHz

4 DOE

(2) DOE

DOE

EMS

†

E-mail : isjung@hyundai.com
Tel : (031) 368-6217

, NOx, Smoke

Fig.4
(x) (y)

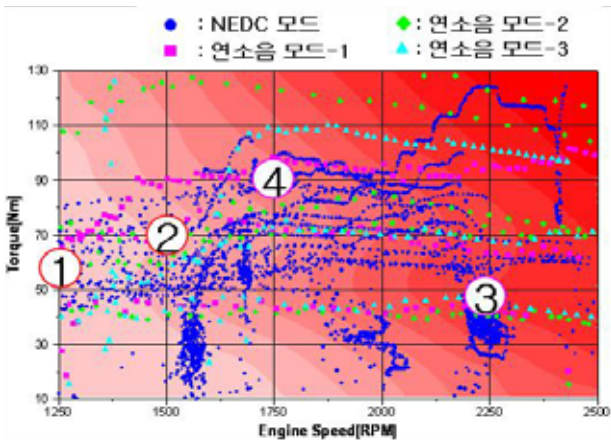


Fig.3 Test points for DOE

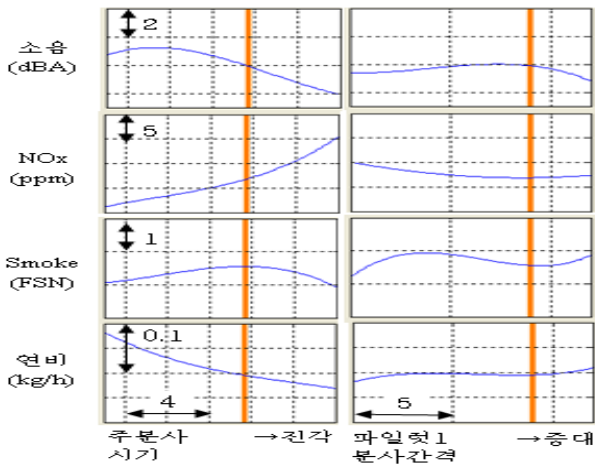


Fig.4 Test result of DOE

2.3 가 가

(1) 가 가 DOE

가 Fig.5 가 가

(2) 가 Fig.1

1~4 kHz 1~3.5 dBA, Fig.6

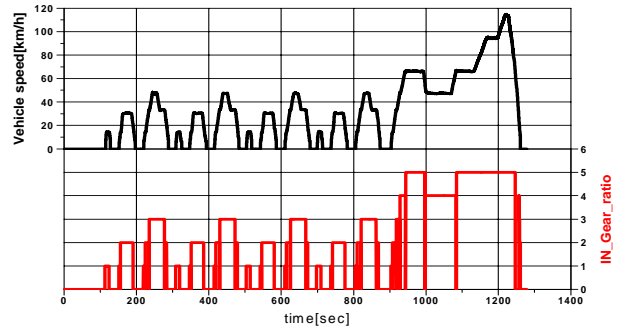


Fig.5 NEDC mode for Emission evaluation

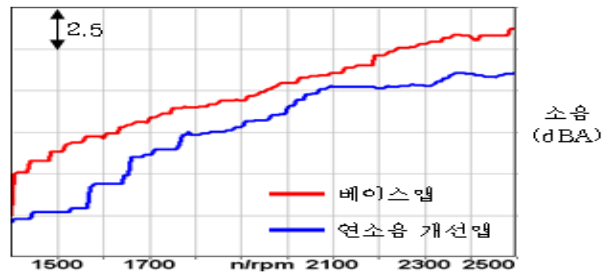


Fig.6 Engine noise level of 1~4 kHz

2.4

Fig.7 가

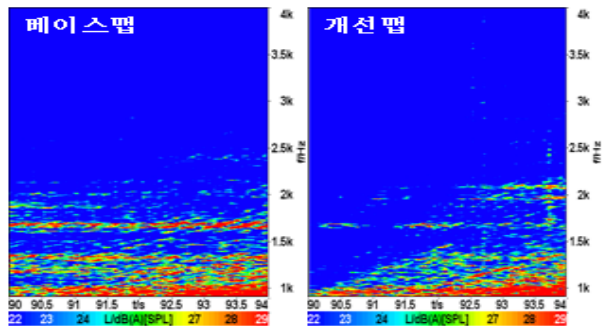


Fig.7 Interior noise

3.

DOE 가

가 가