

국내 유통 첨가제의 배출가스 및 연비특성

*김 성우, 이 민호, 인 정민, 김 재권, 정 충섭

Characteristics of Emission and Fuel Economy of Fuel Additives in the Domestic Market

*Sungwoo Kim, Minho Lee, Jeongmin Lee, JaiGueon Kim, Choongsung Jung

In the past, drivers bought a fuel additives to treat a combustion chambers or injector nozzles for carbon or gum deposit at market. But, nowadays, as raised cost of fuel for a vehicle the consumers also start focusing on a function of fuel additives that increases fuel economy of one. Some fuel additive manufacturers and agents advertise that their goods make a car it's initial state. This paper shows data for 3 years that were acquired during test for registration of an additive in domestic. The data were sorted according to kind of vehicle, kind of fuel, test mode, CO, HC, NOx, PM, total emission, fuel economy and accumulated mileage. And than by using simple linear regression analysis changes according to accumulated mileage was displayed. Normal distribution and histogram of rate of increase and decrease were displayed. the analyzed data indicated that a fuel additive maintain and make a car the first state of one but can't make a car be batter than initial the one.

Key words : Fuel Additive(연료첨가제), Emission(배기가스), Fuel Consumption Efficiency(연료소비효율), CO(일산화탄소), HC(탄화수소), NOx(질소산화물), Mileage(주행거리)

E-mail : *ksw0020@kpetro.or.kr

Energypus를 이용한 고효율 멀티에어컨디셔너의 에너지절감 효과 분석

*서 정식, 김 옥중, 우 정태, 최 연성, 전 중욱

A Study on analyze of energy saving rate by retrofitting multi air-conditioner from conventional type to high efficient type using Energypus

*Jeongsik Seo, Ook Joong Kim, Juntae Woo, Younsung Choi, Jongok Jeon

The objective of this study is to analyze the energy saving rate by retrofitting multi air conditioner from conventional type to high efficient type using Energypus 4.0 which was developed for simulating a building energy by D.O.E. Generally, Multi air conditioner system was installed for both the cooling and the heating in a building. However, it was difficult to estimate the energy saving rate in the case of retrofitting multi air conditioner from conventional type to high efficient type. In the present study, annual energy consumptions of them were evaluated for same building and climate condition.

Key words : Multi Air-conditioner(멀티 에어컨디셔너), Energy saving rate(에너지 절감율), Energypus(에너지플러스), EER(에너지 효율비), high efficiency(고효율)

E-mail : jsseo@kraac.or.kr