

COMPARISON OF 4-WAY NO_x ADSORBER CATALYST PERFORMANCE ON FIBROUS AND CONVENTIONAL SUBSTRATES

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ABSTRACT

Performance of a 4-way NO_x adsorber is dependent on a number of non-operating factors. These include catalyst composition, monolith cell size, monolith aspect ratio, substrate thermal properties, substrate material, and substrate wall morphology. The relative significance of these factors was scouted by

comparing a standard cordierite monolith to a fibrous monolith. Flexibility in the choice of catalyst loading and differences in heat distribution were found to play a significant role in determining NO_x performance of these devices.