inter.noise 2000

The 29th International Congress and Exhibition on Noise Control Engineering 27-30 August 2000, Nice, FRANCE

I-INCE Classification: 0.0

NOISE SOURCE EVALUATION TESTING ON MTS SERIES 320 ROAD SIMULATOR

E. Frenz*, S. Dumbacher*, R. Allemang*, M. Mergeay**

- * University Of Cincinnati, UC-SDRL ML0072 584D Rhodes Hall PO Box 210072, OH 45221-0072, Cincinnati, United States Of America
- ** MTS Systems Corporation Noise and Vibration Division, Ambachtenlaan 54, B-3001, Leuven, Belgium

 ${\it Tel.:} + 1\ 513\ 556\ 2720\ /\ {\it Fax:} + 1\ 513\ 556\ 3390\ /\ {\it Email:}$ frenzer@email.uc.edu

Keywords:

ROAD, SIMULATOR, NOISE, SOURCE

ABSTRACT

The MTS Series 320 Road Simulator, well known for durability testing, are more and more used for general acoustic evaluations, e.g. squeak and rattle evaluations,... during the development process of today's cars. This calls for specific noise characteristics of the testing devise. The purpose of this study was to perform a detailed noise source evaluation of the Road Simulator.

A number of acoustic tests were conducted. First the baseline noise characteristics, followed by the location and quantification of the noise sources. In the next part of this paper the evaluation of use of enclosures in isolating the noise sources was studied.

Finally, recommendations are formulated and implemented, resulting in strongly improved noise characteristics.

Note: for more information about this work, please contact the authors.