

A Preliminary Investigation of the Manufacture and Performance of a Tendor Steel Pan

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Abstract: *The steel pan is a musical instrument produced from a Steel Oil drum. It has been developed in Trinidad mainly by the trial and error experimentation of a small number of skilled tuners, but if the development is to continue the efforts of the tuners must be backed up by scientific research. This paper describes preliminary stages of a programme of research initiated in the Faculty of Engineering at The University of the West Indies, St Augustine Campus. The manufacturing process and the vibrations of the notes of a particular pan have so far been investigated. The pan is shown to consist of flat plate notes flexibly mounted in a stiff elliptical bow. Pitch is directly related to the dimensions of the notes but is also very dependent on the edge restraints of the notes. The partials of the notes are in general non-harmonic, but since the notes appear to vibrate predominantly in their fundamental modes it is possible that the tonal qualities of the pan are influenced to a greater extent by transmission of vibration to other parts of the pan.*

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