

ABSTRACT

FLANGE-MOUNTED TRANSDUCER

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A flange-mounted transducer, such as an ultrasonic transducer, is provided that comprises a horn and a driver coupled to the horn for generating an oscillatory energy supply to the horn. A support structure interface is positioned at a node of longitudinal oscillatory displacement of the transducer and a support structure spaced from the horn extends from the support structure interface in a direction substantially parallel to a longitudinal axis of the horn. A flange mounted to the support structure at a node of radial oscillatory displacement of the support structure allows the transducer to be mounted to a machine, such as an ultrasonic wire-bonding machine, at a mounting position so that minimal vibration is transmitted from the transducer to the mounting position.

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(Figure 1)