

ABSTRACT**ROTOR BALANCING**

A procedure is provided for defining a balancing strategy to reduce mass eccentricity imbalances produced by a first rotor module which in use is attached to one or more further rotor modules to form a spool. The procedure includes the steps of: providing a computer model which predicts the vibration amplitude at a given axial position along the spool when the spool is rotated at a given rotational speed; using the model to predict respective vibration amplitudes at the given axial position for different axial positions of a unit unbalance applied to the spool; plotting the predicted vibration amplitudes as data points on a graph of vibration amplitude against axial position of the applied unit unbalance; using the graph to identify axial positions which are more or less likely to contribute to flexing of the spool at the given rotational speed when mass is added or removed from the first rotor module to reduce imbalances at the axial positions; and defining a balancing strategy based on the identification.

No Suitable Fig.