


FOREWORD

In order to prevent machines from mechanical vibrations, the following methods are usually considered: giving dampings by using dampers or shock absorbers, applying vibration absorbers or vibration isolative mountings and changing their natural frequencies to avoid resonance with external disturbances where there is no means to apply the former methods. In the case of protecting buildings and mechanical structures from oscillations caused by earthquake, it appears difficult to apply those methods except altering their natural frequencies, because of their very low dampings, heavy masses, non-linear vibrational characteristics and their random disturbances. Nevertheless, the efforts to give dampings or to apply absorbers must be done in order to remove damages by earthquake, and the researches to apply these methods will be a direction of study on the earthquake resistant mechanical structures.



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