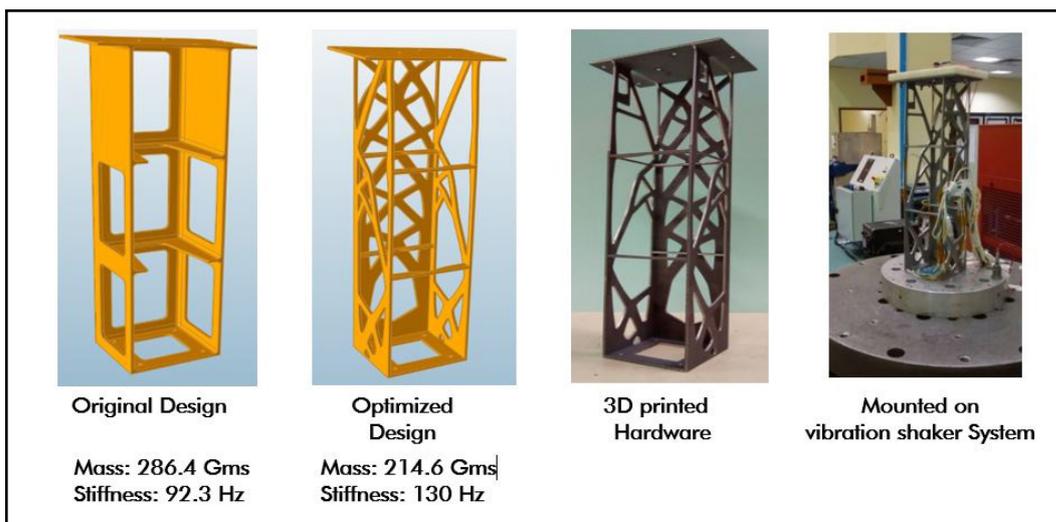


Optimization, Realization and Testing of Structural brackets

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed a technique of Optimization, Realization and Testing of structural brackets. The primary objective is to realize a stiffer and lighter version of CASS bracket. The existing design is optimized through topology optimization keeping the functional requirements same and maximizing the stiffness and strength. The output design is realized through 3D printing after verification of design. The design is qualified through static and vibration tests. The details and results of such a bracket are presented in images and table.



Salient Features

- ✦ Redesign utilizing potential of 3D Printing.
- ✦ Design for Additive Manufacturing (DFAM).
- ✦ Better Strength and Stiffness with Minimum Mass.

Major Specifications

- ✦ Material: AlSi10Mg, Ti6Al4V.
- ✦ Minimum thickness: 1 mm.

Technology Transfer

URSC/ISRO offers to provide consultation on Optimization, Realization and Testing of various structural brackets developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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