

Equipment Design for Lunar Lander Landing-Impact Test

Authors : Xiaohuan Li, Wangmin Yi, Xinghui Wu

Abstract : In order to verify the performance of lunar lander structure, landing-impact test is urgently needed. Moreover, the test equipment is necessary for the test. The functions and the key points of the equipment is presented to satisfy the requirements of the test and the design scheme is proposed. The composition, the major function and the critical parts' design of the equipment are introduced. By the load test of releasing device and single-beam hoist, and the compatibility test of landing-impact testing system, the rationality and reliability of the equipment is proved.

Keywords : landing-impact test, lunar lander, releasing device, test equipment

Conference Title : ICAMAME 2014 : International Conference on Aerospace, Mechanical, Automotive and Materials Engineering

Conference Location : Venice, Italy

Conference Dates : November 13-14, 2014