

Dr. Robert Taylor

Topic: Electric Motorbike Frame Design Using Additive Manufacturing for Cost Reduction

Abstract:

Additive manufacturing has demonstrated it can improve performance and reduce cost for certain applications, but realization of these benefits requires careful application-specific design. This work aims to apply design for additive manufacturing and advanced optimization methods to benefit Thai motorbike manufacturing as it works to grow the market for cost-effective electric motorbikes. An analysis and optimization approach and preliminary design results are shown for a welded tube motorbike frame using 3D printed joints.