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A Study on Modelling and Analysis of 6-DOF Industrial Robot using ADAMS

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Abstract

In this paper, the modeling of an industrial robot is presented. The simulation of an industrial robot is carried out using the ADAMS multibody system. The computer-aided design model of an industrial robot is imported into ADAMS. The imported model in ADAMS is prepared for the simulation by adding markers or frames to the rigid bodies of an industrial robot. The relationship between the rigid bodies is established by applying constraints in ADAMS. The STEP function from the function builder is used to move the rigid bodies of an industrial robot. The STEP function is an expression that uses the initial and final conditions to create a smooth motion. The joint limits of an industrial robot are specified in the

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