and precision of the system the control algorithm may be improved.

VI. CONCLUSION

In this research we presented design, the kinematics and dynamic analysis of a parallel robotic mechanism for a micro machining bed. We used MATLAB Simmechanics for the dynamic analysis of parallel system. The model is simulated in order to verify the objective of the proposed mechanism. Simulations show promising results. The computed modeling error depicts the high accuracy of the developed model. It is concluded that the verified model of the proposed mechanism may be used for bed control and design purposes for micromachining. In future the mechanism will be developed yo verify the results in real time.

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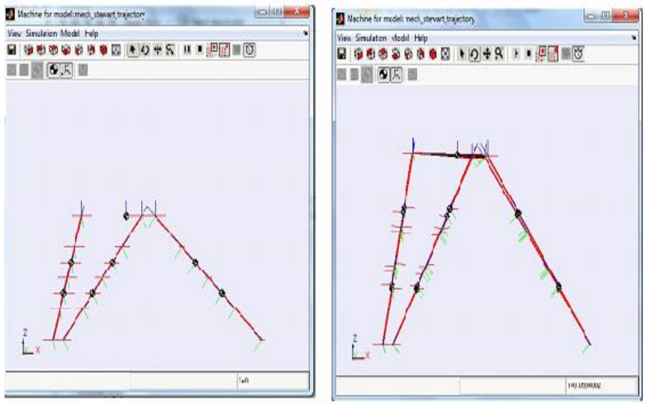

Figure 7a: Motion of upper platform according to reference trajectory

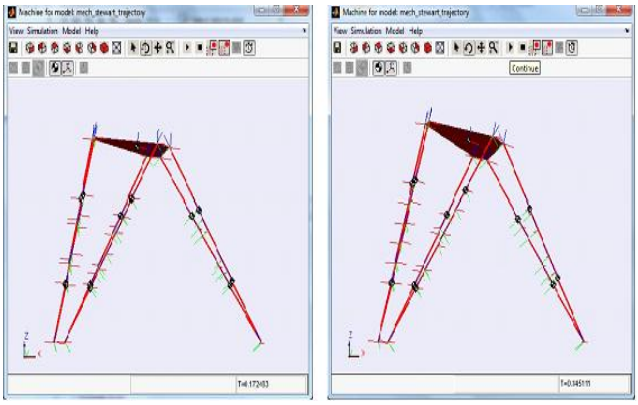

Figure 7b: Motion of upper platform according to reference trajectory

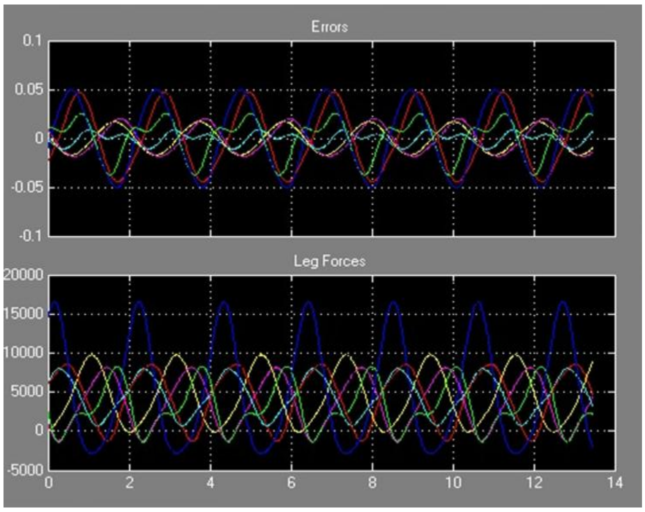

Fig.8 Showing errors and position of body with leg forces

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