

## **On a novel mechanical press for precision cutting**

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### **Summary**

The objective of this paper is to propose a novel mechanical press with six-links, and to verify its feasibility in precision cutting. First, the system is presented and its advantages are discussed. Then, the kinematic analysis of the system is obtained by examining the geometry of the design. Furthermore, the optimization approach for the design is presented. Finally, a design example is given to verify the feasibility of the design by conducting computer simulation. All the above analysis and design are illustrated by using a 6-bar linkage. The results shown that the developed system is feasible and of high potential to be applied to a press for precision cutting.

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This manuscript is for a potential contribution to the session on “Modelings, simulations, and processes on materials forming”.

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