MANSOURA UNIVERSITY
Faculty of Engineering
Dept. of Production Eng & M/Cs des

4rd year Production Eng.



Non- Traditional Forming Processes Code NO. (5414) Final Exam 17/10/2009 Time: 3 hours

Please, Answer the Following Questions:-

- Q1-a) What are types of Presses frame?
 - -b) Explain, the essential components of a hydropneumatic die cushion.
 - -c) What are effects of deviation from the sine law?

Q2-a) - What are Coils and Field Shapers?

- -b) What are the different methods can be used to produce the part as shown in Fig.1 ? And choice the optimal method taking into account of : low cost, high productivity, and more accuracy.
- Q3-a) Make a carefully comparison between all different methods of Rubber-Pad Forming.
 - -b) What are Die Systems and Materials using of Explosive Forming?

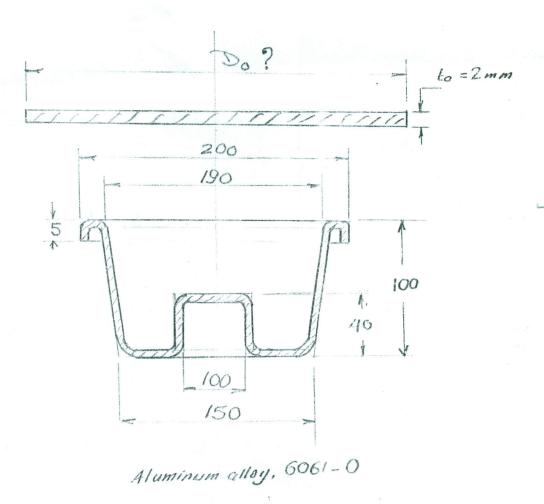


Fig.1