

ADVANCED MANUFACTURING PROCESS

PMA

LIST OF ASSIGNMENT TITLES

1. Water jet, abrasive jet machining and hybrid machining system.
2. Mechanism of material removal in USM
 - a) The Electro-discharge Machining (EDM) process is widely used in the toolmaking industry. In this context discuss the advantages and the disadvantages of the die sinking EDM process.
 - b) With the aid of an annotated sketch illustrate a typical EDM single voltage pulse, indicating voltage levels and timescales. Explain why a characteristic pulse has this profile.
 - c) (Explain the principles and features of the "orbital technique" as applied to the EDM process.
3. Life cycle assessment and sustainable manufacturing.

GUIDE LINE

1. Introduction and concept.
2. Explain the detail of process/method/system/equipment.
3. Related figures/diagram.
4. Application in industry.
5. Advantages and limitation of the process/method/equipment/system.
6. References.
7. Student may add other related point to make a better report.