

Report title: Selecting new manufacturing processes

Please note that you have to submit a report on selecting new manufacturing processes. Report can be done as a **group of 3 students**. Report must be at least 1000 words.

Report marks will be given on the basis of report contents and the discussion (question answers) during the lecture. **If any two reports are found to be similar/same will be given zero.**

Submission deadline: Week 14th

Question to be addressed in the report: Find and discuss at **two** cases/products which show the examples of existing machining processes in any engineering applications being replaced by advanced machining processes and resulted in enhancing the value/quality of the product [1]. Please note that you must include the figures of the selected product or component where machining processes are applied [2]. Also, note that example elaborated just the replacement of a manual operation with CNC operations will not be accepted.

Keys points that must be focused in the selected cases should include but are not limited to

1. What were the reasons that advocated the replacement process?
2. On what basis the advanced machining processes were selected?
3. What benefits were achieved after replacing the old processes?

Sources of report: Journal articles, Books, Internet, Companies websites, etc. A clear well formatted list of references must be provided at the end of the report in **IEEE format**, see example below.

References

[1] Machining technology, 2015, available online <<http://www.//>>, accesses at 23/11/2017

[2] Anwar S, Ahmed H, 2017 "Title of publication", Journal name, vol, page number.