

L.E. College – Morbi
Mechanical Engineering Department
Automation in Manufacturing

Assignment 1

CO1

Prepare case study report on automation implementation strategy/ USA principle applied by any industry and make presentation of the same.

VISION: To deliver quality engineering education for Mechanical Engineers with Professional competency, Human values and Acceptability in the society.

MISSION:

- To nurture engineers with basic and advance mechanical engineering concepts
- To impart Techno-Managerial skill in students to meet global engineering challenges
- To create ethical engineers who can contribute for sustainable development of society

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Assignment 2

CO2

1. Name three of the four conditions under which automated production lines are appropriate.
2. What is an automated production line?
3. What is a pallet fixture, as the term is used in the context of an automated production line?
4. What is a dial-indexing machine?
5. Why are continuous work transport systems uncommon on automated production lines?

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Assignment 3

CO3

Identify microcontroller used in any machine and prepare 1-2 pages report of specifications.
(Refer experiment 3 for parameter list)

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Assignment 4

CO4

List principles of design for automated manufacturing.

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Assignment 5

CO5

- 1) Name three production situations in which FMS technology can be applied.
- 2) What is a flexible manufacturing system?
- 3) What are the three capabilities that a manufacturing system must possess in order to be flexible?
- 4) Name the four tests of flexibility that a manufacturing system must satisfy in order to be classified as flexible.
- 5) Name the seven functions performed by human resources in an FMS.

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L.E. College – Morbi
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Assignment for bright students

Design a small automated system.

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