

5.3 Lean production and quality management (HL)

Checklist

What you should know

By the end of this subtopic, you should be able to:

- define the following terms: (AO1)
 - lean production
 - waste
 - efficiency
 - continuous improvement (kaizen)
 - o just-in-time (JIT)
 - o cradle-to-cradle design/manufacturing
 - o quality circle
 - benchmarking
 - total quality management (TQM)
 - Gantt chart
 - critical path analysis
- describe the following features of lean production: (AO1)
 - o less waste
 - greater efficiency
- explain the following features of lean production: (AO2)
 - o continuous improvement (kaizen)
 - just-in-time (JIT)
- explain the features of cradle-to-cradle design and manufacturing (AO2)
- distinguish between quality control and quality assurance (AO2)
- explain the following methods of managing quality: (AO2)
 - o quality circle
 - benchmarking
 - total quality management (TQM)
- discuss the impact of lean production and total quality management (TQM) on an organisation (AO3)
- explain the importance of national and international quality standards (AO2)
- apply a Gantt chart in a given context (AO2) (HL)

 prepare and analyse a critical path (network) diagram in a given context (AO4, AO2) (HL)