



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 19AUE308 - SPECIAL VEHICLES

III YEAR /VI SEMESTER

Unit 2- Constructional Vehicles

Topic 9 : Vibratory Compactor



CONTENT



- Introduction
- Need for vibration compactor
- Components
- Construction & Working
- Advantages & Disadvantages
- Applications
- Manufacturing Companies



INTRODUCTION



- A road roller is a compactor type engineering vehicle, which is used to compact soil, gravel, concrete, or asphalt in the construction of roads and foundations.
- The rolling process ensures that foundations are compacted thoroughly so the materials are compact, and do not come loose.
- It is used in landfills and agriculture.





COMPONENTS

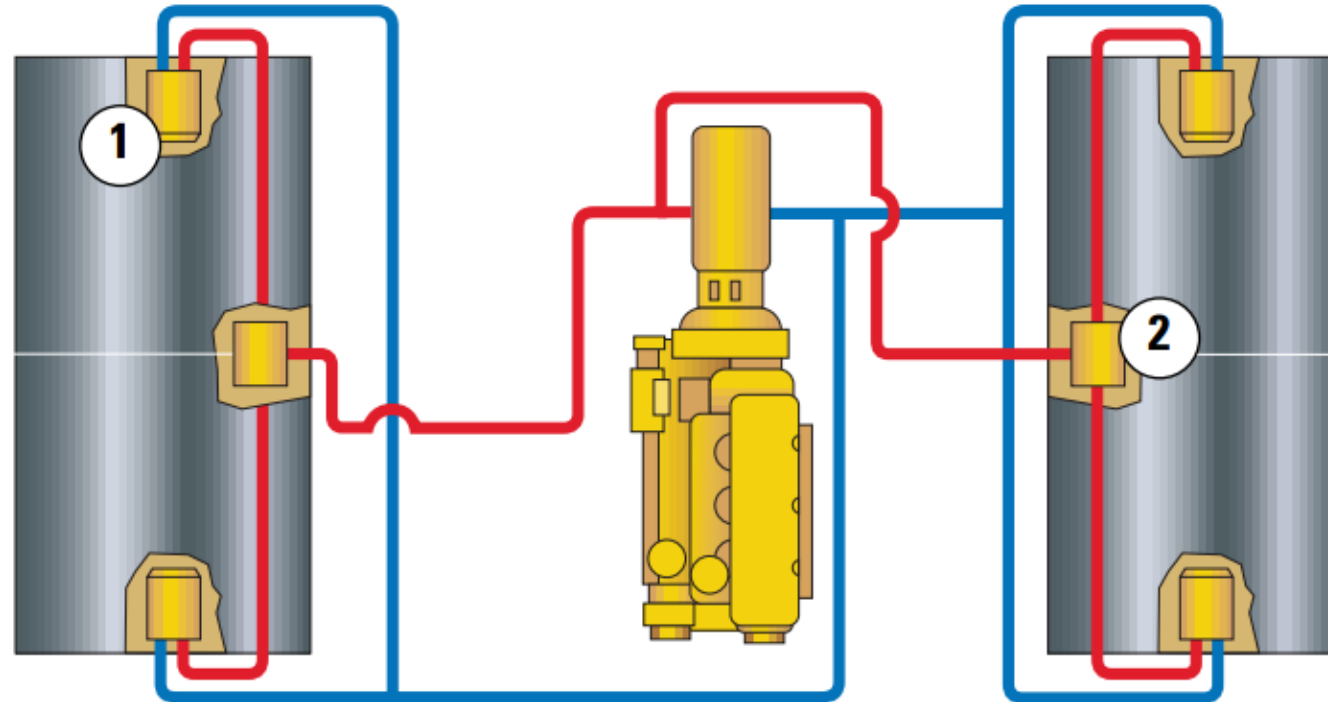


- Steering system
- Braking system
- Engine & transmission system
- Tandem drum
- Water spraying system (in advance model)





CONSTRUCTION





TYPES OF VIBRATION COMPACTORS





ADVANTAGES



- Reduces human effort.
- Reduces process time.





DISADVANTAGES



- Requires proper maintenance.
- High Capital Cost
- High operating Cost.





APPLICATION



- Used in compacting asphalt in roads
- Used to level the sand fill roads





MANUFACTURING COMPANIES



- Komatsu
- JCB
- Ammann
- Volvo



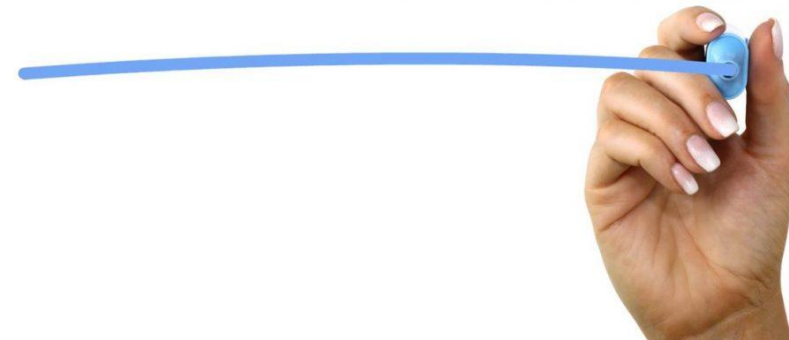
AMMANN

KOMATSU



1. Mention the components of a vibration compactor
2. What are the types of vibration compactor?
3. What is the cost of Vibration compactor?

ASSESSMENT





REFERENCE



- ❖ [https://en.wikipedia.org/w/index.php?search=Roller+Vibration+compact or&title=Special%3ASearch&go=Go&ns0=1](https://en.wikipedia.org/w/index.php?search=Roller+Vibration+compact+or&title=Special%3ASearch&go=Go&ns0=1)
- <https://www.youtube.com/watch?v=eZEzSD0Iwl0&t=180s>



THANK YOU !!!