



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.



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Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 19AUE308 - SPECIAL VEHICLES

III YEAR /VI SEMESTER

Unit 3- Agricultural Vehicles

Topic : Tractors and Tractors with Front end Loader



Content



- Introduction
- Components of Tractors
- Classifications of Tractors
- Types of Tractors
- Tractors with Front End Loader



Introduction



- Tractor is a self propelled power unit having wheels or tracks for operating agricultural implements and machines including trailers.
- The word tractor is derived from two words traction and motor. Tractor is a machine which is used for traction purpose.
- Tractor can be used for different job by attaching implements, tools, as single unit. The tractor is farmer's movable power house.





Components



- I.C Engine
- Clutch
- Transmission gears
- Differential unit
- Final drive
- Rear wheels
- Front wheels
- Steering mechanism
- Hydraulic control and hitch system
- Brakes
- Power take-off unit
- Tractor pulley
- Control panel
- Draw bar





Classifications of Tractors



➤ Based on Structural Design

- Wheel tractor
- Crawler tractor
- Walking type tractor

➤ Based on Purposes

- General purpose tractor
- Row crop tractor
- Special purpose tractor





Based on Structural Design





Based on Purposes





Tractor with Front End Loader





Need for Front End Loader

- It is impossible to move all agro products and wastes with man power
- For serving this purpose, the front end loader is used
- The use of front loader reduces the time and man power





Application of Tractor with Front End Loader



- Front loaders are commonly used to transport the agriculture product from one place to another
- It also used to transport the loosen sand in the field
- For removing and transporting the agricultural wastes.





1. Mention the components of Tractors?
2. What is meant by Walking Tractor?
3. Is it possible to dig the land with front loader attachment?

ASSESSMENT





REFERENCE



- <https://en.wikipedia.org/wiki/Tractor>
- https://www.youtube.com/watch?v=UzrVv_1yfaI



THANK YOU !!!