

Weekly Report – [Gearbox, Brake, Coupling] Group no.10

Team Leader: Nehang Jitendra Joshi
Week Number: [Week 1, 21 to 26 July 2025]

1. Summary of Progress This Week

• [Short bullet or paragraph overview of what the team worked on]

- Study of last year's documentation
- Research for appropriate mechanical drive train system and gearbox layout
- Research on relevant standards and guidelines
- Research on [gearbox](#) variants, [mechanical brake systems](#) and [couplings](#) (high speed side)
- Benchmark and definition of gearbox, brakes and coupling
- [Research on possible suppliers suitable for delivering to Syria](#)

• [Highlight tasks completed or in progress]

- Research on previous year documents and got information about gearbox,brake,coupling

Remarks- Fully research is still pending due to unable to access file through *GitHub and Microsoft account. (40% completed and 60% remain)*

- Research on appropriate drive train concept and gearbox

Remarks- Got mostly idea about which is most relevant concept for wind turbine in Syria region but still need conformation about the variants of the drive train and gearbox (*70% work done and 30% still remain*)

- Research on brake system and coupling for wind turbine

Remarks- Got idea about various kind of brake system and coupling which is use for most advance developments and which is most suitable for turbine but still needs to be use other medium to get more information about it (like research paper, YouTube, company gernal and documentation. (40 % *work done and 60% pending*)

- Research on standards and guild line and benchmarks for gearbox,brake,coupling

Remarks- Mostly aware and filmier with standards but still required to few (*80% done and 20% pending*)

- Research on Syrian market and know about suppliers

Remarks- Research on possible suppliers suitable for delivering to Syria is still remain just because lack of knowledge and new country for project which is quite far from wind turbine market. (*30% done and 70% pending*) *cost and value maybe play major role.*

• [Mention any collaboration with other teams, if applicable]

Not now for first week.....

2. Milestone/Deadline Status

- Current Phase: [Concept Phase, Interface Freeze, etc.]
- On Track? [Yes/No]
- Notes: [If delayed, explain why and new estimate]
 - Got some idea about from the internet and some website that is **Winenergy** group of company which origin of the German possible to provide in Syria because they have large production of gearbox which can gives good amount of work output and higher generation rates.
 - Enercon company is also leading for supplies in Syrian region.
 - ZF wind power Antwerpen also who is responsible to provide in this country
 - ZF wind power and giants company like Siemens and flander 40-50% stockholder for this project for suppliers.

(Above companies are located **in European region** mostly are capable enough)

- Goldwind and Dongfang is also could become leading for suppliers of gearbox,brake,coupling (**Asian region** and these companies located in china)
- **Remarks-** possibility for some other companies can do still research and proof required for supply chain

3. Next Week's Plan

- [Brief tasks or goals for the upcoming week]
- [Mention any planned meetings or dependencies]
- Complete pervious week work better to do fully
- Software installation (Solidworks, Ansys, Dlubal)
- YouTube videos gearbox design , brake, coupling tutorial learning
- Get some idea about calculation
- Get more information or gathering from companies website , articles and generals
- Familiar with wind turbine data trough research paper
- **Practice and try to improve data and information about topic.**

- **8 hours / This week**
 - **Media used**

(Google chrome, YouTube, WhatsApp, research paper, company's pdf and documents)

- **Medium of compunction with team mates**

(WhatsApp group) **Remarks- will try to improve for offline as well as online meeting (zoom, WebEx)**

4. Request to Head of Project

- [Specify if you need any files, software, licenses, or support from other teams]

- License version access of solidworks,anysys,dlubal
- Access of previous year documents (Optimus Shakti 2024)
- Possible to provide some research paper of Syria region for gearbox,brake,coupling

- [Any organizational support or coordination help]

- Possible to meeting with same group member who took this topic for previous year or provide contact like email.

- [Mention any technical or coordination issues]

- Unable to sign-in for Microsoft account but will try again if any then get back to contact you soon.

- [Explain what support is needed, if any]

- To provide documents of previous year
- Software installation guide
- Contact with same team who did this topic last year
- Arrange at least one meeting in month to our professor guide.