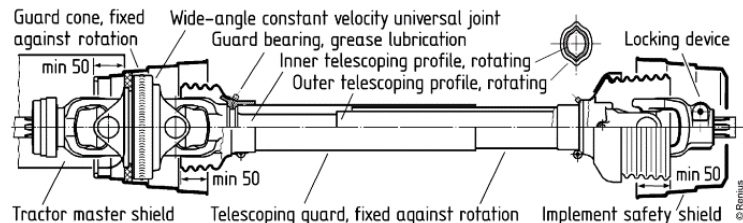


## Semester Thesis, Team Project, Master Thesis

# Real-World PTO Data Analysis for Comprehensive Dynamics Assessment of Tractor-Implement Systems

### Introduction

The Power Take-Off (PTO) is a crucial link in tractor-implement systems, directly influencing operational efficiency, safety, and reliability. This thesis focuses on real-world PTO data analysis to assess system dynamics comprehensively. By evaluating performance under practical working conditions, the study provides insights for optimizing design, enhancing durability, and supporting informed decisions in agricultural machinery applications.



### Work packages

- Literature review and data import
- Signal processing
- Time-Domain Analysis
- Frequency-Domain Analysis
- Reporting and dissemination

### Prerequisites

- Being a good team player
- Lecture "Tractor Engineering Fundamentals"
- Experience with MATLAB/Simulink
- Motivation to learn new topics
- Structured and independent way of working
- Hands-on work mentality