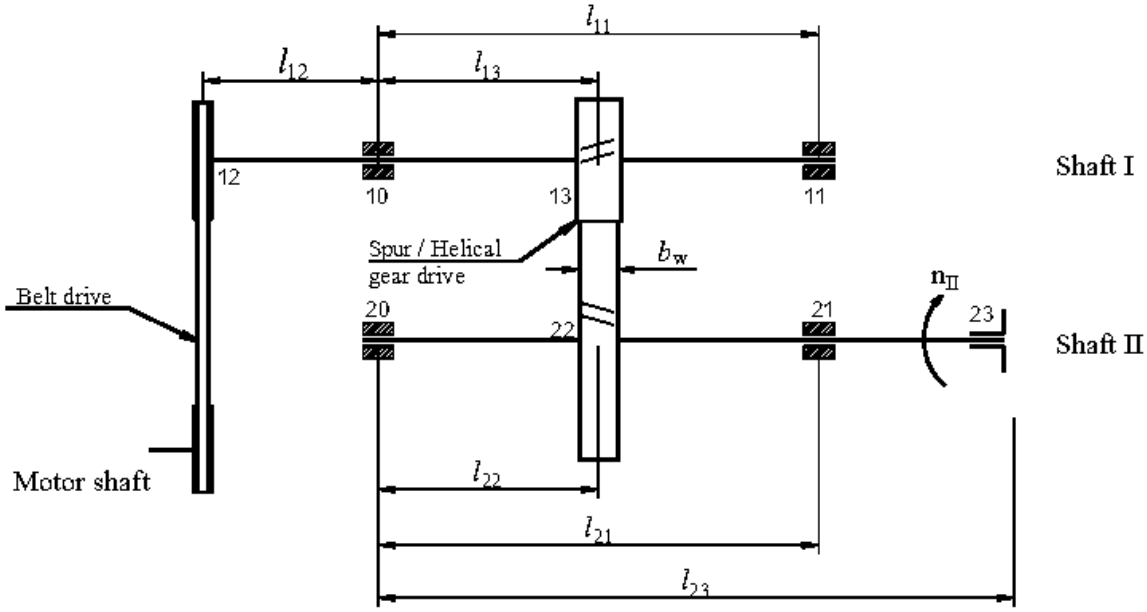
PHENIKAA UNIVERSITY
FACULTY OF MECHANICAL ENGINEERING & MECHATRONICS

MINOR PROJECT
Course Code: MEM703002
Class: Chi tiết máy-1-1-24(N01)
Semester: 2024.1

Project number: 1/P.MEM16.H1

A transmission system is given as:



- Working conditions and parameters are given as:
  - Service time: L_h = 24000 (hour)
  - Number of shifts: 2 (shift)
  - The tilt angle of the center line of the belt drive: 40° (Đai dẹt)
  - Load property: Va đập nhẹ
  - Coupling force on the shaft: 49.74 (N)

Params \ Shaft	Motor	I	II	Working
P (kW)	0.6	0.564	0.542	0.531
n (v/ph)	720	257.14	58.44	58.44
T (Nmm)	7958.3	20946.6	88571.2	86773.6
u	2.80		4.40	1

- Distances between the load positions are given by the formula as:
  $l_{12} = 5.b_w$ $l_{13} = l_{22} = 4.b_w$ $l_{11} = l_{21} = 2.l_{13}$ $l_{23} = l_{21} + 6.b_w$

Requirements:
+ Performing the design calculation of the belt and gear drives
+ Performing the design calculation of the shaft: 1
+ Presenting the report on paper with A4 size.

Student: ***Hoàng Trung An……..22010740*** *Class:* ***K16-KTCĐT_2***

Instructor: *Vũ Lê Huy*

DEAN
(sign and full name)

LECTURER
(sign and full name)