

Project # 2

Known Data:

Power = 25 kW

Input Velocity = 1500 RPM

Output Velocities = 500, 600, 700, and 800 RPM

Note: The changing of speeds is allowed only when the motor is off.

Constraints:

- Only a single stage between the input and the output is allowed.
- The center distance (C) between the input and the output shafts must be equal for any step meshing.

Possible Solution

