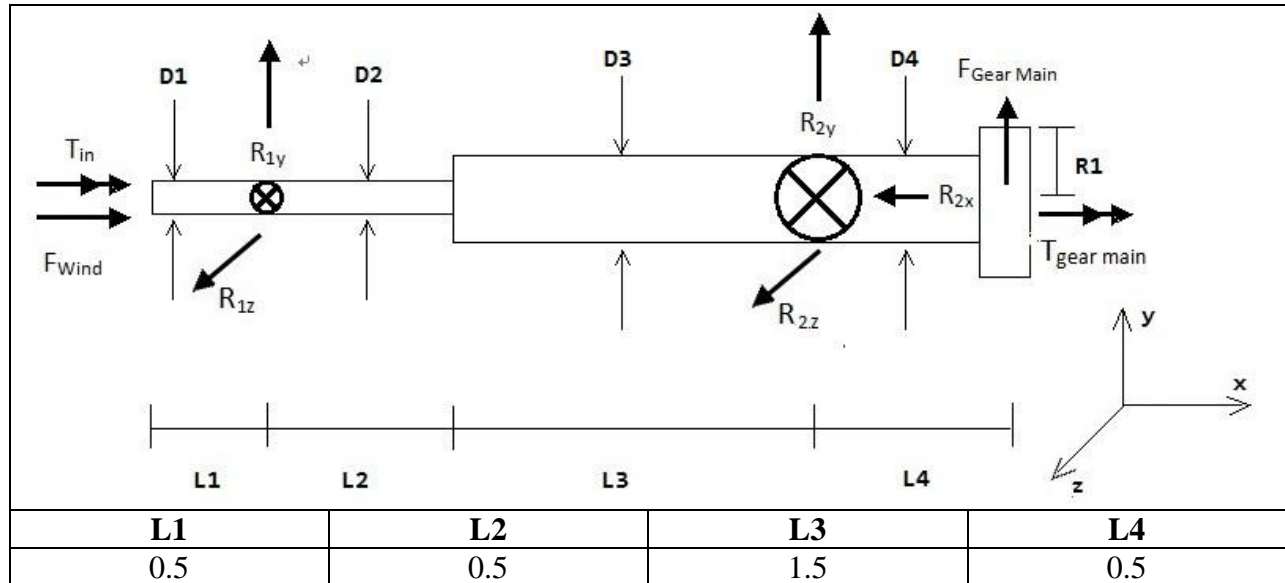


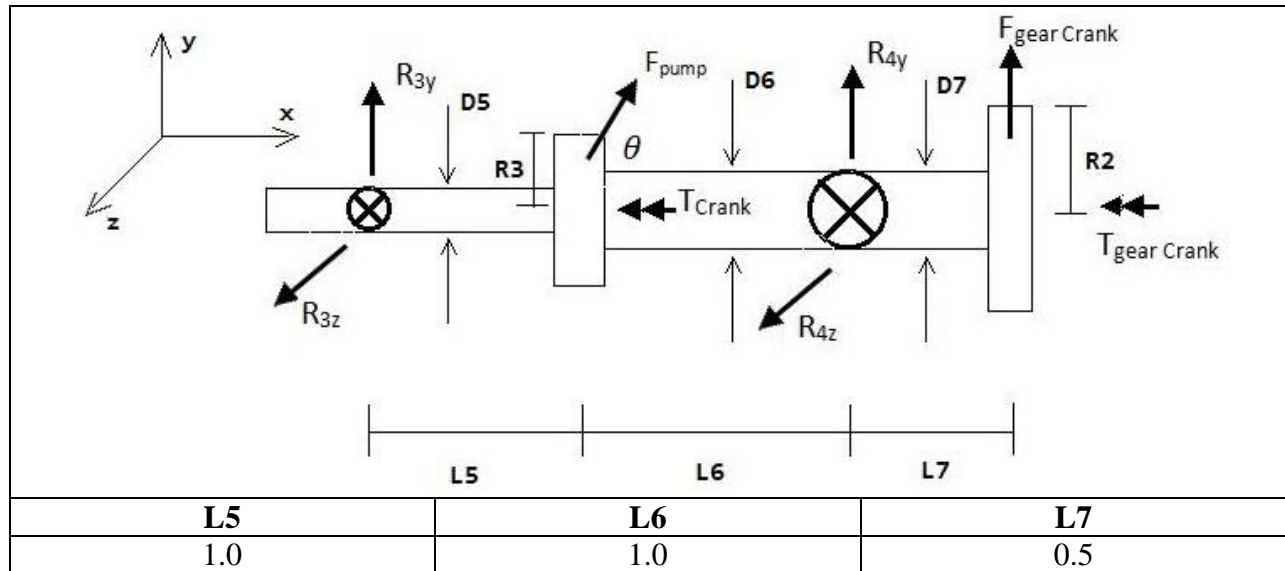
Project Specifications

For this project, the lengths of the wind turbine's shafts are fixed. These lengths have units of meters and are depicted in the diagrams below—the diagrams are not drawn to scale.

Main Shaft



Crankshaft



The wind turbine must also satisfy safety requirements and achieve a minimum service life.

Minimum Safety Factor Against Yielding, X_o	2
Minimum Safety Factor Against Fatigue, X_s	1.7
Maximum Allowable Angle of Twist	0.0025 radians
Desired Service Life	7300 days