

Analysis Of Four Bar Mechanism Using Vector Analysis

Problem Statement

Find the Output torque of the four bar mechanism for one full cycle of motion when forces are applied on the coupler link and the follower link. Given Data
Length Of each Link in meters.

Control Buttons

"RUN" button starts the animation.

"STOP" button stops the animation.

"RESET" button resets the animation.

Procedure

Set all the input parameters using sliders. Press reset button and then start button to start the animation.

Concepts used

Free body Diagram.

D'Alembert's Principle.

Displacement analysis.

What to see

Various graphs are plotted.

Graph of the angle of coupler link vs. angle of the driver link

Graph of the angle of follower link vs. angle of the driver link

Graph of the output torque vs. angle of the driver link

Free body diagrams for each link is plotted.