

CH_2

Kinematic Chain

is an assembly of links connected by means of paris

- Locked Chain
- A Constrained Chain
- An Unconstrained Chain

Mobility

the mobility is the numbers of freedom

Gruebler's Equation

$$M = 3(L - 1) - 2J_1 - J_2$$

Where:

- M = mobility
- L = number of links (**including ground**)
- J_1 = number of 1 degree of freedom joints
- J_2 = number of 2 degrees of freedom joints

where k links connect at a single joint, it must be counted as k-1 joints

Summary: Mobility

- $M > 1$: maybe an unconstrained mechanism
- $M = 1$: a constrained mechanism
- $M = 0$: a statically determinate structure
- $M < 0$: a statically indeterminate structure

Paradoxes