



Given: mass m , mass moment of inertia I , stiffnesses k_o , k_p , dimensions l_i , r and x_0 , y_0 , rotating unbalance m_0 , ω , $B = \kappa \cdot K$

Determine:

1. system of equations of motions
2. system of equations of motions in matrix form
3. calculation of natural frequencies in matrix form
4. calculation of amplitudes of steady state oscillations in matrix form