

C priedas. Keleivinio vagono matematinio modelio masių, slopinimo ir standumo matricos

$$M_v = \begin{bmatrix} M_k & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & J_{ky} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & J_{kx} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & M_{v1} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & M_{v1} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & J_{vy1} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & J_{vy2} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & J_{vx1} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & J_{vx2} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & M_{a1} & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & M_{a2} & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & M_{a3} & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & M_{a4} & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & J_{ax1} & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & J_{ax2} & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & J_{ax3} & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & J_{ax1} \end{bmatrix}$$

	- $4K_a$	0	0	$2K_s$	$2K_s$	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	$-4K_{al_k}^2$	0	$2K_sl_k$	$-2K_sl_k$	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	$-4K_al_p^2$	0	0	0	0	$2K_al_p^2$	$2K_al_p^2$	0	0	0	0	0	0	0	0	0	0
	$2K_a$	0	0	$-2K_a-4K_p$	0	0	0	0	0	$2K_p$	$2K_p$	0	0	0	0	0	0	0	0
	$2K_a$	0	0	0	$-2K_a-4K_p$	0	0	0	0	0	0	$2K_p$	$2K_p$	0	0	0	0	0	0
	0	0	0	0	0	$2K_a-4K_p$	0	0	0	$2K_pl_v$	$-2K_pl_v$	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	$-4K_pi_v^2$	0	0	0	0	$2K_pi_v$	$-2K_pi_v$	0	0	0	0	0	0
	0	0	$2K_al_p^2$	0	0	0	0	$-4K_pi_p^2-2K_al_p^2$	0	0	0	0	0	$2K_pi_p^2$	$2K_pi_p^2$	0	0	0	0
K _v =	0	0	$2K_aI_p^2$	0	0	0	0	$-4K_pi_p^2-2K_aI_p^2$	0	0	0	0	0	0	0	$2K_pi_p^2$	0	0	0
	0	0	0	$2K_p$	0	$-2K_pi_v$	0	0	0	$-2(K_a+K_H)$	0	0	0	0	0	0	0	0	0
	0	0	0	$2K_p$	0	$-2K_pi_v$	0	0	0	$-2(K_a+K_H)$	0	0	0	0	0	0	0	0	0
	0	0	0	0	$2K_p$	0	$-2K_pi_v$	0	0	0	0	$-2(K_a+K_H)$	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	$-2K_pi_v$	0	0	0	0	0	$2l_p^2(K_a+K_H)$	0	0	0	0	0
	0	0	0	0	0	0	0	$-2K_pi_v$	0	0	0	0	0	0	$2l_p^2(K_a+K_H)$	0	0	0	0
	0	0	0	0	0	0	0	0	$2K_pi_p^2$	0	0	0	0	0	0	0	$2l_p^2(K_a+K_H)$	0	0
	0	0	0	0	0	0	0	0	$2K_pi_p^2$	0	0	0	0	0	0	0	0	$2l_p^2(K_a+K_H)$	0

