Q1

December 15, 2021 12:24 AM

a) $m_e = 3850\ kg$

$\mathcal{E} = 0.78$

$m_c = 1600\ kg$

$a = uniform = a_c$

$V_\emptyset = 0.35\ m/s$

$V = 3.6\ m/s$

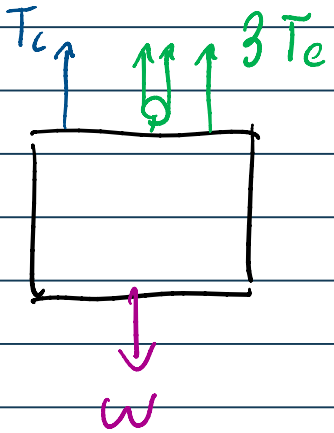
$t = 7\ s$

$V = V_\emptyset + a\ t$

$3.6 = 0.35 + a\ (7)$

$a = 0.464\ m/s^2$

b)



$T_c = ?$

$\uparrow \Sigma F_y = m\ a$

$w = 9.81 \cdot 3850$