$$\rho\Delta h_f = \Delta H_{-1/-10} - \rho c_s(-1 - -10)$$
$$= 228\times10^6 - 2.1\times10^6\times9 = 209.1\times10^6\ J/m^3$$
$$\Delta H_2 = 2.1\times10^6(-7.5 - -20) + 209.1\times10^6 = 235.4\times10^6\ J/m^3$$
$$t_f = 9\times3600 = 32400\ s$$

$$32400 = \frac{1}{1.24}\left(\frac{54.3\times10^6}{38.3} + \frac{235.4\times10^6}{30.5}\right)\left(\frac{0.043}{h_e} + \frac{0.043^2}{2\times1.59}\right)$$
$$40176 = 9.136\times10^6\left(\frac{0.043}{h_e} + 5.814\times10^{-4}\right)$$
$$4.40\times10^{-3} = \frac{0.043}{h_e} + 5.814\times10^{-4}$$
$$\frac{0.043}{h_e} = 3.816\times10^{-3}$$
$$h_e = 11.3\ W/m^2K$$
$$\frac{1}{h_e} = \frac{1}{h_a} + \frac{0.0028}{0.064} \Rightarrow h_a = 22.2\ W/m^2K$$
$$22.2 = 7.3\ v^{0.8} \Rightarrow v = 4.0\ m/s$$

Note that E changes slightly with h_e

$$Bi = 11.5\times0.043/1.59 = 0.311$$
$$E = 1 + 0.157 + 0.077 = 1.23$$
$$\Rightarrow h_e = 11.4\ W/m^2K \Rightarrow v = 4.1\ m/s$$

so in this case a second iteration is required.