"Turbo"
"HW2 P2"
"Zhaoyi Jiang(.1364)"

"Inlet"
p0=3.5[bar]
t0=600[k]
s0=**entropy**(***Air***,***P***=p0,***T***=t0)
h0=**enthalpy**(***Air***,***T***=t0)

"Exit"
p1=2[bar]
h01=h0
s0=s1
t1=**temperature**(***Air***,***s***=s1,***P***=p1)
h1=**enthalpy**(***Air***,***T***=t1)
h01-h1=0.5*v1^2***convert**(m,km)

SOLUTION
Unit Settings: SI K bar kJ mass deg

h0 = 607.3 [kj/kg]	h01 = 607.3 [kj/kg]	h1 = 518 [kj/kg]
p0 = 3.5 [bar]	p1 = 2 [bar]	s0 = 6.053 [kj/kg-k]
s1 = 6.053 [kj/kg-k]	t0 = 600 [K]	t1 = 514.2 [k]
v1 = 422.8 [m/s]		

No unit problems were detected.