"Turbo"
"HW2 P5"
"Zhaoyi Jiang(.1364)"

"Inlet"
p1=7.8***convert**(bar,pa)
c1=3[m/s]

"Exit"
c2=6[m/s]
p2=1***convert**(bar,pa)
rho=1000[kg/m^3]
Q=0.148[m^3/s]
z1=0.8[m]
z2=0[m]
g=9.8[m/s^2]

p_dot=rho*Q*(p1/rho+0.5*c1^2+z1*g)-rho*Q*(p2/rho+0.5*c2^2+z2*g)

SOLUTION
Unit Settings: SI C Pa J mass deg

c1 = 3 [m/s]	c2 = 6 [m/s]	g = 9.8 [m/s^2]
p1 = 780000 [Pa]	p2 = 100000 [Pa]	$\dot{p}$ = 99802 [w]
Q = 0.148 [m^3/s]	ρ = 1000 [kg/m^3]	z1 = 0.8 [m]
z2 = 0 [m]		

No unit problems were detected.