

Nomenclature

COP	Coefficient of performance	
\dot{Q}	Heat load or Cooling load	kJ/s
Rm	Entrainment ratio	
\dot{m}	Mass flow rate	kg/s
Pr	Pressure ratio	
P	Pressure	kPa
M	Mach number	
C	Speed of sound in a gas	m/s
U	Gas flow velocity	m/s
T	Temperature	K or °C
R	Gas constant	kg/kmol.K
D	Diameter	m
Y	Diameter of the primary nozzle's exit	m
Z	Diameter at the entrance of the mixing chamber	m
l	Throat length	m
NXP	Nozzle exit position (the distance between the nozzle exit plane and the mixing chamber inlet plane)	m
η	Friction loss efficiency	
k	Ratio of specific heats or isentropic index of a gas	
V	velocity of fluid	m/s
h	Enthalpy	kJ/kg.K
A	Cross sectional area	m ²
F	Applied force	N

Greek Letters

ρ	Density of fluid	kg/m ³
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Subscripts

evap	Evaporator
generator	Vapour-generator
p	The primary fluid
s	The secondary fluid
b	Diffuser's exit
c	Condenser
op	Operating condition
th	Primary nozzle's throat

Nomenclature (Cont')

n	Primary nozzle
m	Mixing chamber
d	Diffuser
i	Inlet
e	Exit
0	Stagnation point
1	Primary nozzle throat position
2	Primary nozzle's exit position
3	Secondary flow choking position
4	Ejector's throat inlet position
5 and 6	Shocking position in the throat based on 1-D assumption
7	Ejector's throat outlet position
max	Maximum
e	Evaporator
c	Condenser