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SYMBOLS

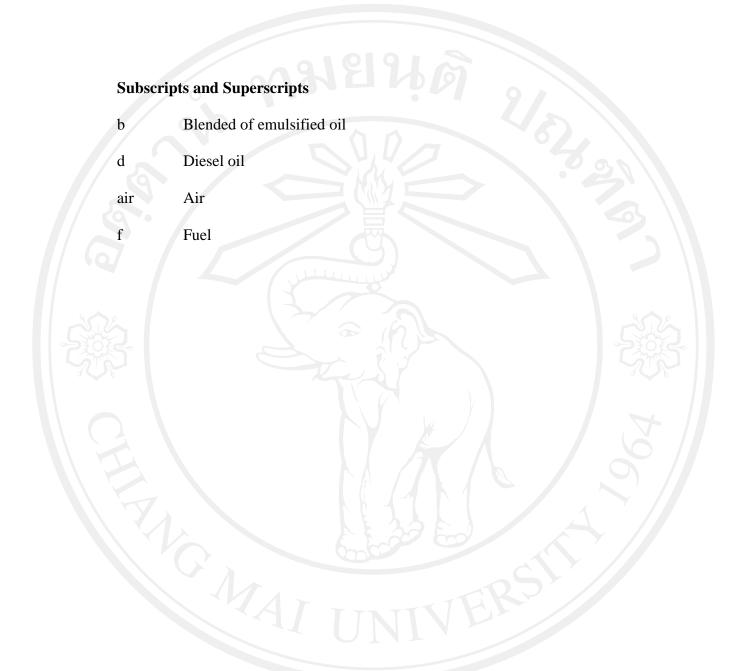
В		Mass transfer driving force
bs	fc	Brake specific fuel consumption (g/kW hr)
C		Constant of the initial drop size equation is $\sqrt[3]{\frac{3}{\pi A_{\theta}}}$
		where A_{θ} is constant of nozzle; $A_{\theta} \cong 0.01$
Cp	0	Specific heat of air (kJ/kg K)
Cŗ	Pfu	Specific heat capacity of fuel (kJ/kg K)
Cŗ	p _b	Specific heat capacity of vegetable oil(kcal/kg°C)
Cd	1	Discharge Coefficient of Nozzle = 0.6
d		Diameter of droplet oil(m)
g		Mass transfer conductance(kg/m ² s)
н		Heating value (kJ/kg)
L		Latent heat of evaporation of fuel (kJ/kg)
Μ		Molecular weight of fuel
m'	"	Mass transfer flux (kg/m ² s)
m _f	ŕ	Fuel consumption (g/hr)
m	ox,G	Mass ratio of O_2 in the ambient air = 0.232
N		Speed of engine (rpm)
P _b	5	Brake power of engine (W)
ΔF	P	Pressure difference in nozzle injection and combustion chamber (Pa)
Q_s^{\cdot}	sinale	The combustion heat rate from the single fuel droplet (g/s)

r	Ratio of O ₂ (Oxidant) to fuel for complete combustion
Re	Reynolds Number
spgr	Specific gravity of blended oil
Sc	Schmidt Number
Т	Torque of engine from dynamometer (N-m)
T _{bp}	Boiling point temperature (°C)
T _G	The ambient temperature (°C)
T _{fu}	Temperature of the fuel in the tank (°C)
T _{bp}	Boiling point temperature (°C).
Va	Velocity of air flow over a sphere (m/s)
$V_{\rm f}$	Velocity of fuel injection in combustion chamber (m/s)

Greek Letters

μ	Viscosity at average temperature of surrounding air and droplet (kg/m s)
μ_a	Viscosity of air at average temperature between combustion
	and air intake (N-s/m ²)

- ρ_a Density of air (kg/m³)
- $\rho_{\rm f}$ Density of fuel (kg/m³)
 - Surface tension of fuel (N/m)
- λ Dimensionless wavelength λ Dimensionless wavelength λ



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