

Aerodynamics, Unsteadiness and Mixing

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NOMENCLATURE

A	Area
CRZ	Central recirculation zone
C_D	Discharge coefficient
E(f)	Power spectral density
FoV	Field of View
FTF	Flame transfer function
Gm	Axial flux of angular momentum
Gt	Axial thrust
h	Diffuser passage height
L	Diffuser length
LDA	Laser Doppler Anemometry
HP	High Pressure
HWA	Hot Wire Anemometry
LDI	Lean Direct Injection
LPP	Lean Premixed Pre-vapourised
M	Mach number
M	Mass flow
OGV	Compressor Outlet Guide Vane (OGV)
PIV	Particle Image Velocimetry
PLIF	Planar Laser Induced Fluorescence
PVC	Precessing vortex core
PSD	Power Spectral Density
P, p	Stagnation, static pressure
Q	Heat release
α	Kinetic energy flux coefficient
q	Dynamic head ($1/2 \rho U^2$)
Sn	Swirl number
sfc	Specific fuel consumption
Tu	Turbulence Intensity (u'/\bar{u})
u,v,w	Velocity in x,y,z directions
x,y,z	Coordinates
Φ	equivalence ratio
ρ	density
τ	shear stress, time delay

Superscripts

'	Instantaneous value
-	time mean
~	mass weighted