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Turbulent Drag Reduction; 2.2 Characteristics of Drag Reduction by Surfactant Additives and Its Influencing Factors; 2.2.1 Characteristics of Drag Reduction by Surfactant Additives
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4.3 Governing Equation and DNS Method of Drag-reducing Flow

Sommario/riassunto

Turbulent drag reduction by additives has long been a hot research topic. This phenomenon is inherently associated with multifold expertise. Solutions of drag-reducing additives are usually viscoelastic fluids having complicated rheological properties. Exploring the characteristics of drag-reduced turbulent flows calls for uniquely designed experimental and numerical simulation techniques and elaborate theoretical considerations. Pertinently understanding the turbulent drag reduction mechanism necessities mastering the fundamentals of turbulence and establishing a proper relationship between t