

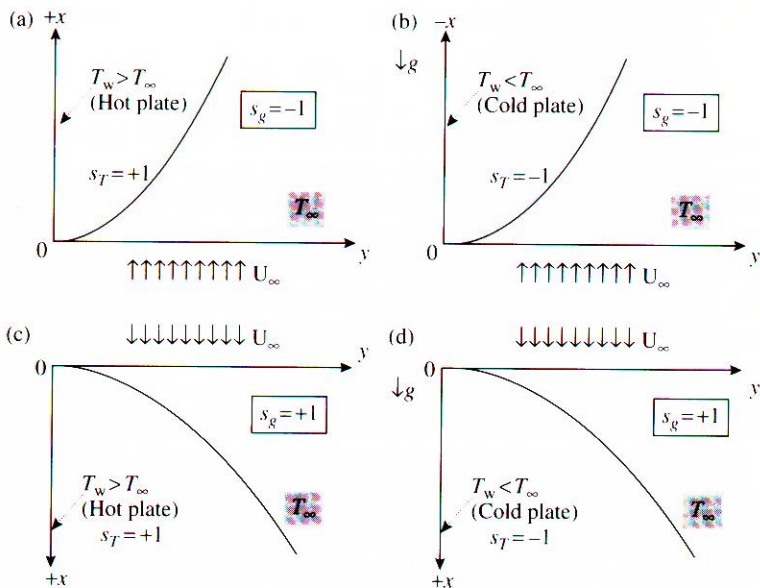
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Effect of Viscous Dissipation on the Flow in Fluid Saturated Porous Media

E. Magyari, D.A.S. Rees, and B. Keller

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**FIGURE 9.1**

Representations of the four different mixed convection situations involving either heated or cooled surfaces, and either forward or backward boundary layers. In the absence of viscous dissipation situations (a) and (d) are mathematically identical as are (b) and (c). In the presence of viscous dissipation, the four situations (a), (b), (c), and (d) become physically distinct.