

Steady Flow Past a Cylinder - Exercises

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Exercises

To study the effect of the Reynolds number, increase Re to 40 by adjusting the viscosity in FLUENT. Obtain the numerical solution for $Re=40$ on the original mesh.

Compare the streamline distribution and total drag coefficient with results in "A Numerical Study of Steady Viscous Flow Past a Cylinder" (Fonberg, 1980). What is the effect of increasing Re on the separation bubble behind the cylinder and on the drag coefficient?

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