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**Unsteady incompressible flows past two cylinders in tandem and staggered arrangements.**

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A stabilized finite element formulation is employed to study incompressible flows past a pair of cylinders at Reynolds numbers 100 and 1000 in tandem and staggered arrangements. Computations are carried out for three sets of cylinder arrangements. In the first two cases the cylinders are arranged in tandem and the distance between their centres is  $2 \cdot 5$  and  $5 \cdot 5$  diameters. The third case involves the two cylinders in staggered arrangement. The results are compared with flows past a single cylinder at corresponding Reynolds numbers and with experimental observations by other researchers.

**MSC:**

**76M10** Finite element methods applied to problems in fluid mechanics

Cited in **30** Documents

**76D05** Navier-Stokes equations for incompressible viscous fluids

**Keywords:**

[vortex shedding](#); [stabilized finite element formulation](#)

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