عنوان مقاله:

CIMULATION OF FLOW AROUND CIRCULAR CYLINDER BY CLOUND IN CELL METHOD

محل انتشار:

سومین همایش بین المللی سواحل، بنادر و سازه های دریایی (سال: 1377)

تعداد صفحات اصل مقاله: 14

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خلاصه مقاله:

In this paper the simlllation of'the sub-cr~tical steady.flows around a cylinder lrJrn,q di.screte vortex method is reported. The governing equatzons of' /he flou ore /he contrnirrty and Nnvter Stokes equations which are cast into Pouson 's and vorrrcr p rr~rn.,/)orcr yitatrons. The later one 1s solved by the operator splitting technique. Random walk IS applied to point vortlces to slmillote viscorrs difision. The Poisson S equation u solved by Cloud in Cell method on a polar expanding mesh for convection purpose. The simulation is carried out till the flow reaches an almost tationary state. The pressure distributions as well as integrated forces are reported. The vortex trajectories are also plotted and compared with the results ofpow viszralisation. The reszllts of:jlow separation over the cylinder are compared with those o f experimental studies.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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