



Application of kite and its effect on reduction of fuel consumption and marine environmental protection in ships

M.Sayehbani^{1*}, M.Ghiasi¹, S.Dehesh²

¹Assistance Professor,
Faculty of Marine Technology
Amirkabir University of Technology
B. Abbas, Iran

²B.Sc student,
Faculty of Marine Technology,
Amirkabir University of Technology
B. Abbas, Iran

ABSTRACT

Approximately, fuel cost of ships is annually increased up to 70%. This dramatic increase in fuels cost has forced sailing companies to use kite on the ships as an appropriate solution for saving fuel and reducing greenhouse gases which is threatening global warming. The application of wind power can decrease fuel costs for sailors up to 1 thousand dollars per day. In this paper, the effect of assisting power of wind on fuel consumption of ships and rate of increase in efficiency and velocity of the ship is investigated when using a kite. The objective of this article is introducing kite for application of that in the industry of marine transportation of Iran

Key words: kite, ship fuel, marine transportation, ship buoyancy, marine environment