DESIGN OF MACHINERY SYSTEM ON TRAILING SUCTION DREDGER (TSD) AS A DREDGING METHOD IN THE PORT

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Abstract

Trailing Suction Dredger (TSD) is one kind of several types of dredges. Machinery system that operate more varied because to moving the ship also perform dredging activities. In operation, the dredger will work in the Port of Tanjung Emas Semarang. In its design of machinery system there are a few parameters that need to be considered include the dredging location, production capacity, dredging depth, type of material to be dredged, vessel size, and access to the workplace. In this thesis, will be some variation in the calculation, analysis and design arrangement of dredger ship (TSD). Calculation and analysis of the machinery sistem is a capacity calculation and determination of the suction pump, capacity calculation and determination of the towing winch suction pipe, capacity calculation and selection engine of the dredger ship, as well as design of general arrangement dredger ship. Furthermore, after the calculation and analysis, variation will be determined of specification wa used as the basis for the selection of components / units in machinery system on the dredger ship TSD.
Keywords: Trailing Suction Dredger, Machinery system, Towing winch suction pipe, Pump.