

VOLUME 7
PROPELLER CALCULATION

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7.1 Summary

Program PROP calculates trial and service speed, power, propeller, propulsion coefficients, wake factor and thrust deduction factor. Calculation is based on ITTC recommendations and SSPA correction factors. Coefficients file 'prop.data' is necessary for the calculation and should therefore be within the seaking directory.

7.2 Data sheet description

ship no is the same number as in hull form

day is defined with two digits (for example 15)

month is defined with two digits (for example 05)

year is defined with two digits (for example 05)

Lwl is the length on the waterline

Lpp is the length between perpendiculars

B is the breadth of the ship

T is the design draft

C_B is the block coefficient

C_M is the midship section coefficient

LCB is the longitudinal position of center of buoyancy (in percentage)

b= 1 bow with bulb

b= 0 bow without bulb

P_B is brake horse power

N_M is the number of revolutions (RPM)

no of prop (1 or 2)

no of blades (4, 5 or 6)

N_T is the number of propeller revolutions (RPM)

S_M is the sea margin (recommended value is 15)

∇ , δ are the stern angles (recommended values are 60, 35)

v_I is the minimum speed

v_N is the maximum speed

v_S is the speed step

Description of ship, engine and propeller

ship no							
	1	1	1				
Lwl	Lpp	B	T	C_B	C_M	LCB	b
P_B	N_M	prop	blades	N_T	S_M	∇	δ
v_1	v_N	v_S	40				

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