

## Engine Sizing

For Hallberg Rassy Rasmus

Boat specs		Rasmus	Disp./length	Speed/length	hull speed	shaft HP	HP needed
length over all	34.5	34.5	276.04	1.44	7.56 knots	31.89	37 HP
beam	10	10				not factoring in	31
draft	4.25	4.25				losses from alt.	HP needed
displacement	13000	12125			7.4200187	and shaft	with high
length water line	27.6	27.6			751.6479		powered
sail area	500	500					alternator
keel wt	5500	5500					

## Propeller Sizing

For Westerbeke 35D with 2.47/1 reduction gear on Rasmus

Pitch		Diameter	
750.88	Feet/minute	Propeller aperature	22.00 inches
2.47	reduction gear	Max propeller diameter	17.60 inches
3000.00	max engine RPM	Max shaft RPM	1214.57 RPM
1153.85	shaft rotation in RPM	Shaft horsepower	27.45 HP
13.58	propeller pitch	Propeller Diameter	17.31 inches

### Blade Loading

Blade area	132.16 in^2	3 blade propeller
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