

Mirage Notes

SPEED/POWER CHART

Displacement = 30,600 lbs.

12.5 knots	230 SHP
15.5 knots	280 SHP
18.7 knots	350 SHP
21.7 knots	470 SHP
25 knots	610 SHP
28 knots	760 SHP

The calculated speeds listed are approximate and considered accurate on the listed displacement. Changes in displacement (or weight) will modify the figures and will not give the speeds listed. All speeds listed are in knots per hour. To convert to miles per hour, divide by .87. Note that the horsepower is given as SHAFT HORSEPOWER (SHP). Since most motors are listed at BRAKE HORSEPOWER (BHP), it will be necessary to reduce the BHP to SHP. A reliable factor to multiply the BHP by is .70 to determine the SHP. All speeds assume that the proper gear ratio and propeller size is used. For twin engines, divide the SHP figure by two in order to determine horsepower required for each engine.

Estimating Range

The following may be helpful in determining the fuel consumption and range.

- Inboard diesel: 1 gal per hour for each 20 hp produced.
- Inboard gasoline: 1 gal per hour for each 13 hp produced.
- Range depends on speed traveled and fuel carried.

Using the above information and the Speed Chart:

- Traveling at 18.7 knots (350 shp), using a Diesel engine.
- 350 (shp) divided by 20 (Diesel) = 17.5 gallons an hour.
- Fuel: 450 gallons
- 450 divided by 17.5 = 25.7 hours
- At 18.7 knots x 25.7 = 480.6 knot range.