

Exemple de calcul pour application Stern Drive :

Volvo Penta MPS - [Stern Drive]

File View Options Window Help

Marine Propulsion Software

Stern Drive - D4-D6 DP (200-400 hp)

Calculation Report Sheet

Speed calc.
 Prop calc.

Total power crankshaft: hp

Length over all: foot

Boat weight: ton

Speed: 41 Kts

Propeller selection

| Engine model | Propeller series | RPM Min | RPM Max | Ratio | Crankshaft power |
|--------------|------------------|---------|---------|--------|------------------|
| D6-330 | G-Series | 3400 | 3600 | 1.76:1 | 330 |
| D6-350 | G-Series | 3400 | 3600 | 1.69:1 | 350 |
| D6-370 | G-Series | 3400 | 3600 | 1.63:1 | 370 |
| D6-400 | G-Series | 3400 | 3600 | 1.59:1 | 400 |

27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48

G2 G3 G4 G5 G6 G7 G8

Exemple de calcul pour application voile :

Volvo Penta MPS - [Sailing Yachts]

File View Options Window Help

Marine Propulsion Software

Sailing Yachts

Calculation Report Sheet

Speed Calculation Propeller Calculation

Vessel Data:

Boat weight: kg

Speed: Kts

Waterline length: m

Waterline beam: m

Engine Data:

No. of engines:

Power/engine: kW

Engine speed: rpm

Transmission Data:

Rev. gear ratio: :1

No. of blades:

Vessel Data Result:

Estimated speed: Kts

Volvo Penta Folding Propeller:

Prop. diameter: inch

Pitch: inch

Exemple de calcul pour application Ligne d'arbre :

Volvo Penta MPS - [Quick Inboard]

File View Options Window Help

Marine Propulsion Software

Quick Inboard

Calculation Report Sheet

Speed Calculation Propeller Calculation

| Vessel Data | Engine Data | Transmission Data |
|---------------------------------------|------------------------|-------------------------|
| Hull type: Semi Planing(Plan Hull She | No. of engines: 2 | Rev. gear ratio: 2,5 :1 |
| Displacement: 8000 kg | Power/engine: 200 kW | Prop. diameter: inch |
| Speed: Kts | Engine speed: 3500 rpm | No. of blades: 3 |
| Waterline length: 12 m | | |
| Waterline beam: 4,2 m | | |

| Vessel Data Result | Propeller Data Result |
|--|---|
|  Estimated speed: 31,7 Kts | Thrust: 17,2 kN P/D ratio: 1,4 Prop. diameter: 23 inch Blade area ratio: 53 % Pitch: 31,6 inch Efficiency: 71 % Blades: 3 |

Wageningen B-series propeller with Volvo Penta corrections

Exemple de calcul pour définition Ligne d'arbre :

Volvo Penta MPS - [Shaft Line]

File View Options Window Help

Marine Propulsion Software

Shaft Line

Calculation Report Sheet

| Material Data | Engine Data | Transmission Data |
|---------------------------------------|------------------------|-----------------------|
| Recommended calc. factors: LD/R3 | Power: 300 kW | Rev. gear ratio: 3 :1 |
| Calculation factor: 6 | Engine speed: 2500 rpm | |
| Materials: Medium grade stainless ste | | |
| Modulus of elasticity: 200000 MPa | | |
| Tensile yield strength: 600 MPa | | |
| Density: 7800 kg/m ³ | | |

| Possible Error Description | Shaft Data Result |
|----------------------------|---|
| |  Minimum diameter: 64,1 mm Max. Bearing distance: 3,03 m Recommended diameter: 65 mm Max. Bearing distance: 3,05 m |