

# Pacific Driveline Limited

## MARINE & INDUSTRIAL TRANSMISSION & BEARING SPECIALISTS

55G Druces Road, Manukau 2104, AUCKLAND, NEW ZEALAND  
 P O Box 97869, Manukau 2241  
[www.pacificdriveline.co.nz](http://www.pacificdriveline.co.nz)

Phone: +64 (9) 262-3241  
 Fax: +64 (9) 262-3240  
 E-Mail: [pacdrive@clear.net.nz](mailto:pacdrive@clear.net.nz)

**PROPELLER CALCULATION**

**PROPULSION VIABILITY SPECIFICATION SHEET**

Propeller Calculation with Existing Installation

Name: _____		
Address: _____		
Address: _____		
Phone: _____	Mobile	Fax
Email: _____		
Designer: _____	Builder	Owner

**PLEASE NOTE:** By completing and returning this form, you agree to a **\$150.00 incl GST** service charge to be paid before "Propulsion Viability" study is supplied. This value will be deducted from the total invoice upon purchase of new equipment from Henley's or PDL.

**BOAT DATA**

Type	Power Mono Planing <input type="checkbox"/>	Power Mono Displacement <input type="checkbox"/>	Racing Yacht <input type="checkbox"/>	Cruising Yacht <input type="checkbox"/>
	Motor Sailor <input type="checkbox"/>	Power Catamaran <input type="checkbox"/>	Sailing Catamaran <input type="checkbox"/>	Power Tri Hull <input type="checkbox"/>
	Surface Drive <input type="checkbox"/>	Tunnel Hull <input type="checkbox"/>		
Hull Form	Round <input type="checkbox"/>	Chine <input type="checkbox"/>	Multi Chine <input type="checkbox"/>	
Use	Pleasure Craft <input type="checkbox"/>	Charter <input type="checkbox"/>	Ferry <input type="checkbox"/>	Trawler <input type="checkbox"/>
	Towing <input type="checkbox"/>			
Construction	G.R.P <input type="checkbox"/>	Wood <input type="checkbox"/>	Aluminum <input type="checkbox"/>	Steel <input type="checkbox"/>
	Ferro <input type="checkbox"/>			
Displacement (Tons)	Light Ship <input type="checkbox"/>	Heavy Ship <input type="checkbox"/>	Sea Trial <input type="checkbox"/>	
LOA	<input type="text"/>	LWL <input type="text"/>	Beam Deck <input type="text"/>	
Beam LWL(max)	<input type="text"/>	Multihull Beam LWL (max - one hull) <input type="text"/>		
Draft (Hull Section)	<input type="text"/>	Draft (Max) <input type="text"/>		
	New Vessel <input type="checkbox"/>	Rebuild <input type="checkbox"/>	Repower <input type="checkbox"/>	
	Deadrise Amidships <input type="checkbox"/>	Deadrise Transom <input type="checkbox"/>		
Distance from Centerline prop boss to LWL	<input type="text"/>			
LCG Fwd of Transom	<input type="text"/>			
Hull Resistance Data	<input type="text"/>			
Designers/Present Estimated Max Speed	<input type="text"/>		knots @ displacement of	<input type="text"/>
Designers/Present Estimated Cruise Speed	<input type="text"/>		knots @ displacement of	<input type="text"/>

**ENGINE DATA**

	Single <input type="checkbox"/>	Twin <input type="checkbox"/>	Triple <input type="checkbox"/>	Quadruple <input type="checkbox"/>
Manufacturer	<input type="text"/>			
Max Power/engine	<input type="text"/>			
Continuous Power	<input type="text"/>			
Gearbox Model	<input type="text"/>			
Gearbox Type	Inline <input type="checkbox"/>	Drop Centre <input type="checkbox"/>	Down Angle <input type="checkbox"/>	V-Drive Integral <input type="checkbox"/>
	V-Drive Island Mount <input type="checkbox"/>	V-Drive Quill <input type="checkbox"/>		

**EXISTING PROPELLER DATA**

Diameter	<input type="text"/>	Pitch	<input type="text"/>	No. of Blades	<input type="text"/>	Blade Area	<input type="text"/>
Material	<input type="text"/>	Shaft Angle	<input type="text"/>	Rotation	<input type="text"/>		
Strut/Shaft Bracket	P Bracket <input type="checkbox"/>	I Bracket <input type="checkbox"/>		Y Bracket <input type="checkbox"/>		Keel Exit	<input type="text"/>
Maximum Diameter can swing with 20% (of prop dia) Tip Clearance to Hull <input type="text"/>							
Blade Option	Two <input type="checkbox"/>	Three <input type="checkbox"/>		Four <input type="checkbox"/>		Five <input type="checkbox"/>	

**EXISTING SHAFT DATA**

Material	<input type="text"/>	Shaft Dia	<input type="text"/>	Taper	<input type="text"/>	1:10; 1:12; 1:16
Keyway Width	<input type="text"/>	Keyway Depth	<input type="text"/>			
Approval Required	Yes/No <input type="checkbox"/>	USL <input type="checkbox"/>		Lloyds <input type="checkbox"/>		Other <input type="text"/>

**Caution** Speed Predictions and propeller pitch are approximate only and dependent on the efficiency of the hull design  
 For more accurate speed estimates, please supply hull resistance data which can be superimposed over the propeller dynamic thrust curve. Information supplied is critical to propeller size and estimated performance / engine load