

## Designer and Manufacturer of High Output Propulsion Systems

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## **Konrad Marine Analysis Form**

Konrad Marine Inc. does not guarantee the performance of any vessel. Operators should rely on certified naval architects for speed calculations.

Instructions: Please enter the information as completely and accurately as possible. Fill in your responses on this form, save it, then email it to your sales rep or sales@konradmarine.com.

Date:  Name:  Company:  Address:			Fax: E-mail:	Fax:					
I.	Go	oals & Objectives							
	A.	Vessel Name:							
	B.	Vessel Condition:  New Build  Repower/Reprop  Date Manufactured							
	<ul> <li>C. Vessel Use Patterns (i.e. hours per year anticipated, distances traveled, purpose):</li> <li>*1. Operational (hours/year):</li> <li>2. Normal Long Distance Run (miles/km)</li> <li>*3. Service:</li> </ul>								
		Recreational/Pleasure Work/Commercial Other	Towing/Bollard Pull Military Enforcement	Personnel Transport/Crew Commercial Hire					
	D.		re #1 is most important, and blank  Maneuverability Acceleration Less cavitation, noise or vi	☐ Efficiency at cruise speeds ☐ Heavy weather operation					
	E.	Tasks:  Recommend a gear ratio Recommend a propeller Recommend an engine	Recommend a transmission Recommend a Konrad stern						

## II. Principal Vessel Condition

All calculations will be based on this data, so this should reflect the principal operating condition of the vessel. If possible, attach a sketch, photograph or print of the vessel.

Barge Planing Semi-displacement Catamaran Other:  C. Hull Material: Aluminum Wood Fiberglass / Resin Composite (specify materials):  D. Dimensions (supply units):  1. Length: * a. overall: b. at waterline:  2. Beam:  3. Draft:  * 4. Deadrise angle at stern:  * 5. Number of propulsion units (single, twin, triple, quad):  6. Weight (specify units): * a: operational (full fuel):  * b: normal max load:  * describe fuel volume:  * describe cargo weight:							
Semi-displacement  Catamaran  Other:							
C. Hull Material: Aluminum Wood Fiberglass / Resin Composite (specify materials):  D. Dimensions (supply units):  1. Length: * a. overall: b. at waterline:  2. Beam:  3. Draft:  * 4. Deadrise angle at stern:  * 5. Number of propulsion units (single, twin, triple, quad):  6. Weight (specify units):  * a: operational (full fuel):  * b: normal max load:  * describe fuel volume:							
Aluminum							
Fiberglass / Resin Composite (specify materials):							
D. Dimensions (supply units):  1. Length:  * a. overall: b. at waterline:  2. Beam:  3. Draft:  * 4. Deadrise angle at stern:  * 5. Number of propulsion units (single, twin, triple, quad):  6. Weight (specify units):  * a: operational (full fuel):  * b: normal max load:  * describe fuel volume:							
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* b: normal max load:  * describe fuel volume:							
* describe fuel volume:							
* describe passenger quantity:							
Transom thickness (surface the stern drive is mounted to):							
* 8. Vessel voltage (DC):							
12V 24V Both Available							
ngine Room Geometry							
Distance from transom to engine room bulkhead:							
* (FWD - rear engine room):							
(AFT – midship engine position only):							

III.

B. Engine Position in Hull:	Distance from trans	om face (exterior) to:				
* a: front of engine:						
b: front engine mount cer	nterline:					
c: bell housing adapter face (where transmission attaches):						
* C. Transom Rake Angle:						
* D. Distance from engine cen	terline to vessel cen	terline (keel – for tie bar length in twin applications):				
(Twin application only):						
E. Engine from trim pumps (	(usually transom mo	ounted) to helm control station:				
V. Proposed Engine/Gear						
* A. New Engine Ex	xisting Engine	Remanufactured Product				
* B. Engine make/model:						
* C. Rated horsepower (maxim.	um):					
* D. Rated RPM (maximum): _						
E. Rated max fuel consumption	E. Rated max fuel consumption (gallons or litres per hour at max output):					
F. Transmission: 1. Model:						
2. Ratio:						
G. Steering						
*1. Power (necessary for		Manual hydraulic				
*2. If Power:	Electric 12V	Mechanical driven pump				
3. Please describe if helms are needed, and their location:						
*4. Cylindar Placement:	Internal	External				

## V. Prior Performance

Note: Information about prior trial performance of the vessel (or one exactly like it) will improve the accuracy and reliability of the analysis. Define this data as accurately as possible - do not guess. This data should be for typical operation at the vessel condition described above.

A. Location of trial:			
* 1. Trial speed (kts)	:		
Radar	GPS	Loran	
2. Were current wind	l speed and	headings accounted for (averaged)	?
B. Previous Engine and	Propulsion	System Characteristics:	
*1. Engine make/mo	odel:		
2. Rated max powe	r:		
*3. Rated max RPM	:		
*4. Engine RPM (ma	ax attainabl	(e) at trial speed:	
*5. Propulsion system	m make/mo	del:	
*6. Transmission and	d/or drive ra	atio:	
*7. Number of prop	ulsion units	·	
C. Propeller Characteristic	es Make: _	Model:	
*1. Diameter:		*4. Pitch:	
2. Number of blades: _		5. Cup type (if any):	
3. Material:			
Aluminum		Stainless	
Ni Br Al		Other (describe):	
I certify that the information I have s	supplied abo	ove is a true and correct representat	ion of the vessel.
Name		ignature	Date



