

Inquiry date:



# Propulsion Application Checklist for MJP CSU and DRB

<b>Customer</b>	Company	
	Contact	
	Address	
	Telephone	Email

**Input Data**

Hull resistance attached	Yes <input type="checkbox"/>	No <input type="checkbox"/>	<input type="text" value="Architect/Designer"/>
Lines Drawing attached	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Classification required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
G. A. Drawing attached	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Shaft position details attached	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

**Customer expected performance**

Max speed at lightship displacement [knots]	Max speed at laden displacement [knots]
Cruising speed at lightship displacement [knots]	Cruising speed at laden displacement [knots]

**Engine and gear specification (if available)**

Engine make and model (full designation)
Rated power _____ kW at _____ rpm
Gearbox make and model (full designation), gear ratio (if available)

Number of steerable jets    One  Two  Three  Four   
 Number of booster jets    One  Two  Three  Four

**Input for MJP Performance Diagram (PD)**

(\*) mandatory information

(*) Number of engines/jets	(*) Engine power [kW]
(*) Target ship speed [knots]	(*) Vessel length [m]
Engine speed [rpm]	Wetted length at target speed [m]
Reduction gear ratio	Waterjet size

<b>Number of jet in</b>	Trailing mode	
	Shaft locked mode	

Intake grid    No (standard)     Yes (optional)

<b>Vessel resistance data</b>	<input type="checkbox"/> Not available (will not be shown in diagram)	
	<input type="checkbox"/> As per attachment	File name: _____
	<input type="checkbox"/> As per table example below (please complete table with several displacements, conditions, ship speeds and resistance data)	

Resistance curve 1		Resistance curve 2	
Identification label		Identification label	
Vessel speed [knots]	Resistance [kN]	Vessel speed [knots]	Resistance [kN]

### Preferred steering unit (tick appropriate box)

- CSU, Compact Steering Unit  
(available in models 450, 550, 650, 750, 850, 950, 1100, 1350, 1550)
- DRB, Double Reverse Bucket  
(available in models 350, 400, 450 and 500)

### Intake (tick appropriate box)

- GRP bend + drawing for intake made by yard in the same material as hull (Standard CSU)
- Complete intake from MJP made of GRP (Standard DRD)
- Drawing for yard (local) manufacturing of intake in FRP (Option)
- Pattern for yard (local) manufacturing of intake in FRP (Option)

### Shaft arrangement (tick appropriate box)

- Distance from transom to gear flange < 30 x jet shaft diameter = MJP standard drive shaft arrangement.
- Distance from transom to gear flange > 30 x shaft diameter, intermediate shaft arrangement is required: (Optional)
  - By yard, please specify preferred shaft interface
  - Steel by MJP
  - Composite by MJP
- Shaft arrangement drawing is included and the following items are requested in MJP supply e.g. (Optional)
  - shaft split support bearing
  - bulkhead seal
  - combined support bearing and bulkhead seal

### Hydraulic and oil circulation system (tick appropriate box)

- Separate tanks
  - Main PTO driven hydraulic pump with piggy back mounted lube oil circulation pump. (Standard)
  - Main PTO driven hydraulic pump with electric driven lube oil circulation pump, start and control box. (Option)
  - Main PTO driven hydraulic pump with electric driven back up and piggy back mounted lube oil circulation pump, start and control box. (Option)
- Combined tank
  - Main PTO driven hydraulic pump with piggy back mounted lube oil circulation pump. (Option)
  - Main PTO driven hydraulic pump with electric driven lube oil circulation and back up pump, start and control box. (Option)

### Control system (tick appropriate box)

- CSW, combinator and steering wheel with VCS Joystick. Basic system with single CU, cabled in wheel house, acombined alarm and command panel with clutch, terminal, dial type indicator, back up panel push button control, autopilot interface, split steering. (Standard)
- VCS, Vector Control System with one VCS joystick and a steering tiller. Basic system with double CU, cabled in wheelhouse, terminal, led bar indicator, back up with joy stick, autopilot interface, split steering. (Option)
- ACS, Azimuth control system with two Azimuths and a second steer tiller. Basic system with double CU, cabled in wheelhouse, terminal, led type indicator, back up with joy stick, autopilot interface, split steering. (Option)

### Control system options

- Cabled from wheelhouse to engine room
- Clutch panel (Note: standard for CSW) (tick appropriate box):
  - without backflush (Standard)
  - with backflush
- Interceptor / Trim tab to provide steering assistance and trim and roll control (tick appropriate box):
  - Hydraulic and electric integration of yard supplied arrangement, giving steering assistance, trim and roll control.
  - MJP supply of electric inteceptor system integrated with MJP control system giving steering assistance.
  - Integration of external system, please specify:

- Rudder (tick appropriate box)
  - Hydraulic and electric integration of yard supplied rudder
  - Design assistance for yard manufactured rudder arrangement
  - Active rudder control (supplied by MJP, incl. rudder assembly)

- Steering indicator engine room

- Steering wheel replacing second steering tiller (ACS) or steering tiller (VCS) (tick appropriate box)

- Bridge wing station (tick appropriate box)
  - Wing stations with controls, transfer and command panel (tick appropriate box):
    - Indoors, 2 fixed wing stations
    - Outdoors, 2 fixed wing stations
    - Fly bridge, 1 fixed fly bridge station
    - Portable, 1 portable station
  - Optional fixed bridge wing station equipment (tick appropriate box)
    - Clutch
    - Indicator

Additional stations please specify:

.....  
 .....

### Classification:

- Works certificate
  - Classification certificate
- Society: .....
- Classification notation: .....