



Driveshaft Selection Questionnaire

CUSTOMER: _____

CUSTOMER REFERENCE NUMBER: _____

REFERENCE: _____

APPLICATION						X Areas marked X must be completed to enable a correct shaft selection.
DRIVER TYPE						
DRIVER POWER		Nominate unit of measure				X
SHAFT SPEED		RPM				X
NORMAL OPERATING POWER		Nominate unit of measure				X
SPEED AT NORMAL OPERATING POWER		RPM				X
MAXIMUM OPERATING POWER		Nominate unit of measure				
SPEED AT MAXIMUM POWER		RPM				
MAXIMUM OPERATING SPEED		RPM				
POWER AT MAXIMUM SPEED		Nominate unit of measure				
MAXIMUM OPERATING TORQUE		Nominate unit of measure				
SPEED AT MAXIMUM TORQUE		Nominate unit of measure				
SERVICE FACTOR AT MAXIMUM TORQUE						
DUTY CYCLE FACTOR						
HORIZONTAL OFFSET		Nominate unit of measure				X
VERTICAL OFFSET		Nominate unit of measure				X
LENGTH FLANGE TO FLANGE		Nominate unit of measure				X
SLIP MOVEMENT REQUIRED		Nominate unit of measure				X
NOMINAL TORQUE		Nominate unit of measure				
REQUIRED LIFE (B ₁₀)		Hours				X

Notes:

- 1) **Driver type.** Please specify the type of driver. Common driver types are:
 Electric Motor, Electric Motor via Transmission, Turbine, Petrol Engine 1 - 3 Cylinders Direct Drive, Petrol Engine 4 + Cylinders Direct Drive, Petrol Engine 1 - 3 Cylinders with Damper, Petrol Engine 4 + Cylinders with Damper, Petrol Engine 1 - 3 Cylinders via Gearbox, Petrol Engine 4 + Cylinders via Gearbox, Diesel Engine 1 - 3 Cylinders Direct Drive, Diesel Engine 4 + Cylinders Direct Drive, Diesel Engine 1 - 3 Cylinders with Damper, Diesel Engine 4 + Cylinders with Damper, Diesel Engine 1 - 3 Cylinders via Gearbox, Diesel Engine 4 + Cylinders via Gearbox, Gearbox PTO Drive.

For other driver types, please specify.

- 2) Where a driveshaft is coupled directly to an internal combustion engine (diesel or petrol), we recommend that a Torsional Vibration Damper be fitted at the flywheel.
- 3) **Driver Power.** This should be the normal operating power or continuous rating of the engine. If this is not the max. power please also state the max. power.
- 4) **Shaft Speed.** This is the normal operating speed of the shaft. If a gearbox is fitted divide or multiply the engine speed by the gearbox ratio to obtain the shaft speed. If a higher speed than the normal speed is possible please also state the max. possible speed.
- 5) **Offset Angle.** Please state the joint angle in horizontal and vertical planes. If the angle is unknown please state the offset distance in both planes.
- 6) **Length.** Please state the installed or normal operating length of the shaft from flange to flange. If no flanges are fitted please state "no flanges".
- 7) **Required Life:** What life do you require from the U/J kits? For example a machine running 24hrs/day 7days/week will clock up 8760 hours in 1 year. As a guide the following life figures are used:
 Automotive - selected by lowest gear torque, not life
 Commercial Vehicle - selected by lowest gear torque, not life
 Pleasure boat - 1000 hours
 Charter boat - 3000 hours
 Fire Pump - 5000 hours
 Irrigation pump - 10000 hours
 Water Reticulation Pump - 30000 - 50000 hours
 Industrial Operation 40 hour week - 10000 hours
 Continuous Industrial Operation - 20000+ hours.
 B10 life is a calculated life where 90% of joints will still be operational.
- 8) **Marine Applications.** Please state the intended use (pleasure, charter, patrol, ferry etc.) & if marine certification or survey is required please advise which certification authority will be responsible.

PRODUCT LIABILITY:

Hardy Spicer products have been developed and tested with the latest technology. Characteristic features described in our information material or specification in writing have been subjected to careful inspection. Knowledge of specific demands on these products for a particular application lie with the purchaser, and it is their responsibility to verify drawings and documents prepared on the basis of the data available to us and to examine the suitability of the product for the proposed use.

The shaft selection and specification by Hardy Spicer shall in all cases be considered as a recommendation only.