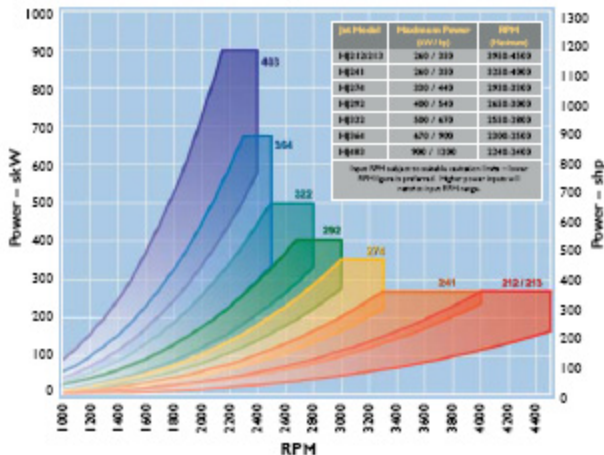


Power Values



Power & RPM Envelopes



Notes: More detailed Thrust & Power/RPM information for individual HI Series waterjets is available from your local Ham Rocket Distributor, in the Ham Rocket Waterjet Selection Guide, or from the Ham Rocket website (www.hamrocket.com).

The diagram above shows the Power/RPM envelopes for HI Series waterjets. Use proposed engine's power and RPM specifications to identify likely suitable waterjet size. Knowing required Power to Weight Ratio from previous case), you can determine the approximate Power Required per jet (kW or hp).

Match Power Required per Jet with the Power/RPM Envelope graph above to set a guide to likely engine specification required.

Power Required per Waterjet

$$= \frac{\text{Power to Weight Ratio (kW/T or hp/T)} \times \text{AUW (Tons)}}{\text{Number of Waterjets}}$$

Engine Matching

In many cases HI Series waterjets can be directly driven by a high speed diesel engine, without the need for a gearbox. However, some engine and vessel combinations may require the use of a gearbox to reduce RPM into the jet. This improves the margins over cavitation, as well as improving the vessel's acceleration and low speed bollard pull. A gearbox is also useful to allow running of the engine without driving the waterjet (neutral), for "Backflushing" (reverse rotation to clear debris), or for diverting engine power to another appliance.

Each Hamilton HI Series waterjet is fitted with an Impeller specifically matched to the engine/gearbox combination used. Consult HamiltonJet for further information regarding engine or gearbox issues.

Monohull Bottom Loading Limit (Planing Speed Craft)

