**SERVICE CLASSIFICATION DEFINITIONS**

**Pleasure Craft**
Maximum power capacity is intended only for personal use, planing hull pleasure craft where full engine throttle operation will be less than 5% of total time with balance of time at 87% of full throttle engine RPM or less. Marine Gears used in long range pleasure cruisers, sportfish charters or any commercial service should not be selected according to Pleasure Craft Service Classification.

**Intermediate Duty**
pleasure or Commercial usage of planing or semi-displacement hull craft can qualify for Intermediate Duty Service Classification if full throttle operation will average only a few hours per day with major portion of usage at partial throttle and total annual usage will be 2000 hours or less.

**Continuous Duty**
Commonly called "Workboat Duty," these Marine Gear applications are expected to operate continuously at full engine governed speed. The propulsion engine power setting must be known and must be within the Marine Gear’s allowable input rating for continuous daylong or around-the-clock service.
Most displacement hull vessels are powered for Continuous Duty service. However, the actual engine (and Marine Gear) power loading depends on:
 a. The propeller used
 b. The vessel’s work assignment
 c. The captain's choice of throttle setting during continuous service
Hitachi Nico Transmission Co., Ltd. (HNT) recommends that all displacement and semidisplacement hull commercial applications be classed as Continuous Duty usage of the Marine Gear,
Examples: Fishing trawlers, Purse seiners, Lobster boats and crab boats, Tugs, Tow boats, Buoy tenders, Offshore crew/supply boats, Ferries, Research vessels, Ocean freighters

**IMPORTANT NOTICE**: Torsional vibration analysis is required and can be made by the engine manufacturer and independent consultants. HNT is prepared to assist the analysis in relation to the transmissions. Hitachi Nico Transmission Co., Ltd. advises users of these products that their safe operation depends on use in compliance with technical information provided in the product manuals. Proper installation, operation and periodical inspection and maintenance are prerequisite for safe operation of these products. It is the responsibility of users to provide and install safety devices, which may be required by recognized safety standards.

**IMPORTANT APPLICATION INFORMATION**

- Transmission ratings are based on use of the transmission in a torsionally compatible system utilizing suitable input torsional coupling.
- Ratings are for diesel engines at the indicated speeds unless otherwise limited.
- Consult factory for ratings applicable to gasoline engines or gas turbines or for all other applications not conforming to the given service classification definitions.
- Ratings apply to right hand engines, i.e., counterclockwise flywheel rotation when viewing rear of engine.
- The power transmission capacity of the forward and reverse components is the same. However, helical directions of gear for stbd and port unit on some models will be changed.