# SERVICE CLASSIFICATION DEFINITIONS

## **CONTINUOUS DUTY**

Often called "Work Boat Duty," these marine transmission 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 transmission's allowable input rating for continuous day long or around the clock service.

Most displacement hull vessels are powered for Continuous Duty service. However, the actual engine (and marine transmission) power loading depends on:

- a. The propeller used
- b. The vessel's work assignment
- The captain's choice of throttle setting during continuous service

Twin Disc recommends that all displacement and semi-displacement hull commercial applications be classed as Continuous Duty usage of the marine transmission.

## Examples:

Fishing trawlers
Purse seiners
Lobster boats and crab boats
Tugs
Tow boats
Buoy tenders
Offshore supply boats
Ferries
Research vessels
Ocean freighters

#### 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.

## **Examples:**

Long Range Pleasure Cruisers Sportfish Charter Boats Party Fishing Boats Crew Boats Harbor and Coastal Patrol Boats Search and Rescue Boats Fire Boats

#### 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 transmissions used in long-range pleasure cruisers, sportfish charters or any commercial service should not be selected according to Pleasure Craft Service Classification.

## **IMPORTANT NOTICE**

Disregarding propulsion system torsional compatibility could cause damage to components in the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear clatter at low speeds.

The responsibility for ensuring that the torsional compatibility of the propulsion system is satisfactory rests with the assembler of the drive and driven equipment.

Torsional vibration analysis can be made by the engine builder, marine survey societies, independent consultants and others. Twin Disc is prepared to assist in finding solutions to potential torsional problems that relate to the marine transmission.



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