

## § 61.20-21

(b) On tailshafts with a taper, keyway, (if fitted) and propeller designed in accordance with American Bureau of Shipping standards to reduce stress concentrations, the forward 1/3 of the shaft's taper section must be non-destructively tested in addition to a visual inspection of the entire shaft.

(c) On tailshafts with a propeller fitted to the shaft by means of a coupling flange, the flange, the fillet at the propeller end, and each coupling bolt must be nondestructively tested in addition to a visual inspection of the entire shaft.

[CGD 84-024, 52 FR 39652, Oct. 23, 1987, as amended by CGD 84-024, 53 FR 32231, Aug. 24, 1988]

### § 61.20-21 Extension of examination interval.

The Commandant (G-MOC) may authorize extensions of the interval between tailshaft examinations.

[CGD 84-024, 52 FR 39652, Oct. 23, 1987, as amended by CGD 95-072, 60 FR 50463, Sept. 29, 1995; CGD 96-041, 61 FR 50728, Sept. 27, 1996]

### § 61.20-23 Tailshaft clearance; bearing wear.

(a) Water lubricated bearings, other than rubber, must be rebushed as follows:

(1) Where the propelling machinery is located amidship, the after stern tube bearing must be rebushed when it is worn down to 6.4 mm (0.25 in) clearance for shafts of 229 mm (9 in) or less in diameter, 7.95 mm (0.3125 in) clearance for shafts exceeding 229 mm (9 in) but not exceeding 305 mm (12 in) in diameter, and 9.53 mm (0.375 in) clearance for shafts exceeding 305 mm (12 in) in diameter.

(2) Where the propelling machinery is located aft, the after stern tube bearing must be rebushed when wear down is 1.6 mm (.0625 in) less than the applicable clearance for propelling machinery located amidship.

(b) Water lubricated rubber bearings must be rebushed when any water groove is half the original depth.

(c) Oil lubricated bearings must be rebushed when deemed necessary by the Officer in Charge, Marine Inspection. The manufacturer's recommenda-

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tion shall be considered in making this determination.

[CGD 78-153, 45 FR 52388, Aug. 7, 1980]

### Subpart 61.30—Tests and Inspections of Fired Thermal Fluid Heaters

SOURCE: CGD 80-064, 49 FR 32193, Aug. 13, 1984, unless otherwise noted.

#### § 61.30-1 Scope.

The term *thermal fluid heater* as used in this part includes any fired automatic auxiliary heating unit which uses a natural or synthetic fluid in the liquid phase as the heat exchange medium and whose operating temperature and pressure do not exceed 204 °C (400 °F) and 225 psig, respectively. Thermal fluid heaters having operating temperatures and pressures higher than 204 °C (400 °F) and 225 psig, respectively, are inspected under subpart 61.05—Tests and Inspections of Boilers.

#### § 61.30-5 Preparation of thermal fluid heater for inspection and test.

For visual inspection, access plates and manholes shall be removed as required by the marine inspector and the heater and combustion chambers shall be thoroughly cooled and cleaned.

[CGD 80-064, 49 FR 32193, Aug. 13, 1984, as amended by CGD 95-027, 61 FR 26002, May 23, 1996]

#### § 61.30-10 Hydrostatic test.

All new installations of thermal fluid heaters must be given a hydrostatic test of 1½ times the maximum allowable working pressure. The test must be conducted in the presence of a marine inspector. No subsequent hydrostatic tests are required unless, in the opinion of the Officer in Charge Marine Inspection, the condition of the heater warrants such a test. Where hydrostatic tests are required, an inspection is made of all accessible parts under pressure. The thermal fluid may be used as the hydrostatic test medium.

#### § 61.30-15 Visual inspection.

Thermal fluid heaters are examined by a marine inspector at the inspection for certification, periodic inspection and when directed by the Officer in