

KES

Torsion Durability Test for Propeller Shaft

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1. Scope of Application

This standard determines the Torsion Durability Test for Propeller Shaft's strength evaluation.

2. Purpose

This standard is to evaluate the strength and durability of the propeller shaft that has by repeating torsion load.

3. Evaluation Standard

There shall not be any crack and shape change on each propeller shaft after the test.

4. Testing Method

4.1 Specimen Taking : Fix one of the end of P/shaft Ass'y on the torsion tester using a jig.

Make it as you can load torsion load on the other side.

(Refer to the specimen taking drawing.)

Remark : The universal joint snapped angle shall be 0°.

4.2 Testing Conditions

(1) Load Torque (T) : $\text{Lowest Gear Ratio} \times \text{Maximum Engine Gear Torque}$

Remark : The load torque of the front driving type drive shaft test shall be ;

$\text{Lowest Gear Ratio} \times \text{Maximum Engine Torque} \times \text{Final Gear Ratio}$

(2) Repetition : Vehicles for person – 250,000 times, commercial vehicle – 50,000 times

(3) Repetition Velocity : 1 ~ 10 Hz

4.3 Contents of Check after the test

There shall not be any breakage, cracks, and shape change with following part.

(1) Pipes and welded part