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**Calibration Specification for Wheel Dynamic Balancers
(English Translation)**

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Wheel dynamic balancer calibration specification

1 Scope

This specification applies to the calibration of the off-road hard-supported wheel dynamic balancing machine (hereinafter referred to as the balancing machine).

2 Citations

ZBN73001-1988 Horizontal Hard Support Balancing Machine GB 4201-1984 Universal Horizontal Balancer Verification GB 6444-1995 mechanical vibration balance vocabulary GB 9239-1988 Determination of the allowable imbalance of the rigid rotor balance quality JBN73004-1989 Flash dynamic balancing machine technical conditions Use of this specification should be done with the current valid version of the above cited documents.

3 terms

3.1 Separation ratio - refers to the interference ratio of the two correction planes A and B for a given rotor. IAB and IBA are defined as follows.

$IAB = UABUBB \times 100\%$

$IBA = UBAUAA \times 100\%$

Where. UAB, UBB--- respectively indicate that after adding the specified unbalance amount to the correction plane B, the A and B planes are not Balance amount indication value;

UBA, UAA--- respectively indicate that after adding the specified unbalance amount to the correction plane A, the B and A faces are not Balance amount indication value;

IAB---B faces the separation ratio of the A side;

IBA---A faces the separation ratio of the B side.

3.2 Minimum reachable residual unbalance (emar)-The minimum amount of unbalance that the balancer can achieve. Yes A performance metric that measures the balance of the machine's highest balance. The unit of measurement is g·mm/kg.

3.3 Permissible residual unbalanced mass (me)---Check the remaining unevenness of the rotor per calibration plane test Measured, the unit of measure is g.

4 Overview

The working principle of the balancing machine is realized according to the theory of rotating rigid body dynamic balance, which is generally determined by the electromechanical conversion system.