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**INDUSTRY STANDARD OF THE
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**Calibration Specification for Working Force Measuring
Machines for Special Purposes
(English Translation)**

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Special working dynamometer calibration specification

1 Scope

This specification is applicable to special working force measuring machines such as compression testers and particle strength testers of various specifications and grades.

(hereinafter referred to as the force measuring machine) force value calibration.

The force value calibration of other special force measuring devices can be referred to this specification.

2 Citations

JJF 1059-1999 Evaluation and representation of measurement uncertainty JJF 1094-2002 Measuring instrument characteristics evaluation Use of this specification should be done with the current valid version of the above cited documents.

3 Overview

The force measuring machine is widely used in products, components and their tensile strength, pressure or related parameters in manufacturing and assembly processes.

calibration. The force measuring machine is mainly composed of two parts. a force driving device and a force indicating device. When the dynamometer is working, it is driven by force.

Apply a test force to the sample. The force indicating device indicates the measured force value or related measurement result.

4 Measurement characteristics

4.1 Basic requirements A) The indicating device of the dynamometer should use the legal unit of measurement consistent with the unit being measured as the basic meter Bit.

B) The relevant measurement results displayed by the indicating device shall be able to provide technical descriptions, calculation formulas and Verification of constants and coefficients.

C) Zero adjustment function of the indicating device

1) The zero adjustment range of the force value should be greater than the gravity generated by the self-contained attachment, and different working positions and directions.

The maximum zero point change caused by the general consideration of vertical and horizontal directions.

2) The zero adjustment function should be limited after entering the test state or the measured value is greater than the lower measurement limit.

3) When there are multiple ranges in the measuring part, the zero points of each range switching should be consistent, and the change is not greater than the smaller range.

1/2 of the maximum allowable error.

D) The measured values displayed by numbers should be able to distinguish between positive and negative numbers.

4.2 Safety device

A) The force measuring machine shall have a safety protection structure to prevent the sample from breaking, splashing, unstable popping, breaking and throwing, etc.

(or) facilities.

B) The following safety protection functions should be used when the loading system adopts hydraulic and mechanical driving methods.

1) When the test force reaches 102%~110% of the rated value, the overload protection device should immediately stop applying the force value.

2) When the power drive carrier moves to the limit position, the limit device should immediately stop moving.