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微型电子测压器准动态校准的合理性

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摘　要：

准动态校准已应用于微型电子测压器的校准中，为了证明其合理性，从膛压发生器模拟实测火炮膛压的可行性、标准系统的动态响应特性、前沿抽样的合理性、测压器输入输出为线性关系的合理性4方面内容进行了论证。另外，实测试验结果表明，准动态校准后的微型电子测压器的可靠性和测试精度均能满足测试要求，从而进一步验证了准动态校准的可行性和合理性。

关键词：准动态校准；膛压发生器；校准系统；前沿；线性；合理性

Rationality Analysis on Quasistatic Dynamic Calibration Method for Micro Electronic Piezo Gauge

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Abstract:

Quasi-dynamic calibration method has been used extensively for micro electronic piezo qauge calibration. The retionality of this method was proved through four aspects which separately are the feasibility that chamber pressure generator simulates the artillery chamber pressure, dynamic response characteristic of standard system , the rationality of points sampling from the curves' rising edge, the linear relation between input and output.In addition, the actual measurement results show that reliability and testing accuracy of micro electronic pressure device meet the test requirements after quasi-dynamic calibration and further validates the feasibility and rationality of quasi-dynamic calibration system.

Keywords: Quasi-dynamic calibration; Chamber pressure generator; calibration system; rising edge; linearity; rationality

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