《车载动态称重系统校准规范》

试验报告

《车载动态称重系统校准规范》起草小组

2025 年4 月

一、试验目的

通过对有代表性车载动态称重系统进行试验的方法，验证《车载动态称重系统》的科学性、合理性和可行性。

二、试验依据：

本试验依据《车载动态称重系统校准规范》中的相关要求进行。

三、记录格式：

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 校准日期 | 2025.4.16 | 记录编号 | 001 | 校准证书编号 | M2025-001 |

现场及器具的信息

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 送校单位 | 常州方斗机电设备有限公司 | | 校准地点 | | G312国道 | | | |
| 制造单位 | 常州方斗机电设备有限公司 | | 型号/规格 | | FD-YCZ | | 出厂编号 | 205022 |
| 分度值d | 10kg | 称量速度范围km | | 5-60 | | 最大秤量Max | | 60t |
| 温度 | 22.5℃ | 湿度 | | 43%RH | | | | |

标准器信息：

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 名称 | 测量范围 | 准确度等级 | 证书号 | 有效期 |
| 汽车衡 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 参考车辆类型 | 编号 | 车型 | 静态车辆称量结果 | 控制衡器（Max /分度值） |
| 载荷1 | 四轴 | 20.04t | 20kg |
| 载荷2 | 32.12t |

载荷1：

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 编号 | 速度km/h | 静态称量VMref | 20.04t | | (%) |
| (t) | | (t) |
| 1 | 5.6 | 18.91 | | 19.466 | -2.86 |
| 2 | 6.2 | 19.52 | |
| 3 | 5.4 | 18.62 | |
| 4 | 6.0 | 19.55 | |
| 5 | 5.2 | 19.47 | |
| 6 | 5.0 | 19.66 | |
| 7 | 5.5 | 19.78 | |
| 8 | 5.7 | 19.88 | |
| 9 | 5.4 | 19.55 | |
| 10 | 5.3 | 19.72 | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 编号 | 速度km/h | 静态称量VMref | 20.04t | | (%) |
| (t) | | (t) |
| 1 | 31.2 | 19.12 | | 19.205 | -4.12 |
| 2 | 31.5 | 18.56 | |
| 3 | 30.5 | 19.01 | |
| 4 | 32.0 | 19.52 | |
| 5 | 31.8 | 19.31 | |
| 6 | 30.8 | 18.95 | |
| 7 | 31.7 | 19.52 | |
| 8 | 32.0 | 19.87 | |
| 9 | 31.5 | 19.56 | |
| 10 | 32.5 | 18.63 | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 编号 | 速度km/h | 静态称量VMref | 20.04t | | (%) |
| (t) | | (t) |
| 1 | 59.8 | 19.56 | | 19.298 | -3.70 |
| 2 | 58.5 | 18.89 | |
| 3 | 58.9 | 19.78 | |
| 4 | 59.6 | 18.98 | |
| 5 | 59.4 | 19.87 | |
| 6 | 58.7 | 19.42 | |
| 7 | 59.6 | 19.24 | |
| 8 | 59.7 | 19.52 | |
| 9 | 58.6 | 19.47 | |
| 10 | 58.1 | 18.25 | |

载荷2：

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 编号 | 速度km/h | 静态称量VMref | 32.12t | | (%) |
| (t) | | (t) |
| 1 | 6.8 | 30.98 | | 31.214 | -3.01 |
| 2 | 6.2 | 31.21 | |
| 3 | 7.3 | 31.24 | |
| 4 | 6.8 | 30.87 | |
| 5 | 6.5 | 31.42 | |
| 6 | 6.7 | 31.45 | |
| 7 | 7.5 | 31.32 | |
| 8 | 7.8 | 30.99 | |
| 9 | 7.6 | 31.12 | |
| 10 | 7.4 | 31.54 | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 编号 | 速度km/h | 静态称量VMref | 32.12t | | (%) |
| (t) | | (t) |
| 1 | 29.5 | 30.89 | | 31.183 | -2.92 |
| 2 | 29.8 | 31.12 | |
| 3 | 28.1 | 31.21 | |
| 4 | 28.5 | 31.24 | |
| 5 | 28.4 | 31.54 | |
| 6 | 27.9 | 31.01 | |
| 7 | 27.8 | 31.09 | |
| 8 | 28.1 | 31.08 | |
| 9 | 28.6 | 31.42 | |
| 10 | 29.4 | 31.23 | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 编号 | 速度km/h | 静态称量VMref | 32.12t | | (%) |
| (t) | | (t) |
| 1 | 57.6 | 30.56 | | 30.987 | -3.53 |
| 2 | 56.8 | 30.89 | |
| 3 | 56.7 | 30.99 | |
| 4 | 58.4 | 30.95 | |
| 5 | 58.1 | 31.02 | |
| 6 | 56.4 | 31.12 | |
| 7 | 58.9 | 30.87 | |
| 8 | 57.6 | 31.23 | |
| 9 | 57.4 | 31.15 | |
| 10 | 58.4 | 31.09 | |

四、试验结论

以上试验包括了本规范的主要内容，试验数据具有一定的代表性和说服力，能够证明此规范规定的技术指标、校准方法和校准过程适用、科学、合理，满足对车载动态称重系统的校准要求。

《车载动态称重系统校准规范》起草小组

2025 年 4月16 日