

高速铁路轴承试验机

High-speed railway bearing testing machine

Railway bearing simulation testing machine is mainly used for the simulation test and high speed performance test of the wheel hub bearing for railway vehicles. The industrial control computer and hydraulic servo control technology are used to automatically measure and control the testing machine, simulate the load spectrum, speed spectrum and impact load of the train and other conditions (including the airflow cooling of the train against the wind) for durability and performance test. The maximum speed of the test is 400 kilometers per hour. The test runs automatically according to the set program, and the screen displays all test parameters and curves in real time. When the test bearing fails, it can automatically alarm and stop, and record and print the reason for stop.

铁路轴承模拟试验机主要用于铁路车辆轮毂轴承的模拟试验和高速性能试验。采用工控计算机和液压伺服控制技术对试验机进行自动测控，模拟列车的载荷谱、速度谱和冲击载荷等工况（包括列车逆风行驶的气流冷却情况）的耐久性和性能测试。试验最高时速可达 400 公里。试验按设定程序自动运行，屏幕实时显示所有测试参数和曲线。当试验轴承出现故障时，可自动报警停机，并记录并打印停机原因。

Test type:测试类型	Railway axle box bearing 铁路轴箱轴承
Test inner diameter range:测试内径范围	φ 80 ~ φ 200mm

Test number:测试数量	2
Maximum test load: 最大 测试载荷	径向 Radial 250kN 轴向 axial $\pm 200\text{kN}$
Maximum test speed: 最 高测试速度	3800 r/min (550km/h)
Analog wind speed: 模 拟 风速	0 ~ 180 km/h (50m/s)
Test methods:测试方法	Automatic computer control, monitoring and recording 计算机自动控制，检测，记录
Test parameters:测试参数	Speed, load, temperature, vibration, motor current, etc. 速度、载荷、温度、振动、电机电流等。