



Choose certainty.  
Add value.

## Wheel testing 车轮测试

Ensure your wheels match OEM and export requirements.

确保您的车轮满足整车厂要求和出口要求

### Your challenges

When it comes to selecting wheels for series production, vehicle original equipment manufacturers (OEM) have demanding requirements for quality, safety and performance. To ensure acceptance by these OEMs and meet export requirements, wheel manufacturers must have their products tested and provide technical reports from a neutral, independent third-party organisation.

### What wheel tests are available?

Wheel testing involves a series of tests that are carried out to meet vehicle OEM requirements or the specifications of test standards on bending fatigue, radial fatigue, biaxial impact, energy absorption, radial impact or torsion.

### 您的挑战

随着车轮产品种类的选择越来越多，整车厂对于质量、安全和性能的要求也越来越高。为了保证能被整车厂认可和满足出口要求，车轮制造厂商必须把车轮送至中立的第三方机构进行测试并提供报告。

### 我们能提供哪些车轮测试？

车轮测试包括一系列的测试来满足整车厂对车轮的要求，测试标准包括弯曲疲劳、径向疲劳、冲击、吸能、径向冲击及扭转等。



### **Why are these tests important for your business?**

Independent wheel tests carried out by a certified test lab play a pivotal role in evaluating the quality of your product and increasing sales. They are also necessary to meet the testing requirements for homologation, enabling export to key markets. Furthermore, manufacturers need wheel tests to ensure the consistent quality of their product, and to gather the test data used for the development of new wheel models.

### **How can we help you?**

TÜV SÜD provides you with the full scope of wheel tests according to standards, regulations and customer-specified requirements. These tests are applicable to wheels for passenger cars, motorcycles, trucks, agriculture vehicles and other special vehicles. We can conduct wheel testing to the following test standards: StVZO, ECE, VIA, JWL, JASO, SAE, ISO, INMETRO, EUWA and AK-L08.

### **为什么车轮测试对于车轮制造商非常重要?**

通过专业、独立的车轮测试认证机构进行测试，在评估产品质量和提升销量上都有至关重要的影响。与此同时，这些测试也是获得认证从而使产品进入国外核心市场所必需的。从长远来说，制造厂商需要车轮测试来确保产品稳定的质量，同时为研发新的车轮模型积累实验数据。

### **我们可以为您提供哪些帮助?**

TÜV南德意志集团根据标准法规及客户的特殊要求，提供全面的车轮测试。这些测试涵盖了乘用车、摩托车、卡车、农用机械及特种车辆的车轮。我们可以按如下车轮标准进行相应的测试：StVZO, ECE, VIA, JWL, JASO, SAE, ISO, INMETRO, EUWA and AK-L08.



## Our wheel testing services: 我们的车轮测试服务：

TESTS 测试	WHEEL DIAMETER 车轮直径	WHEEL WIDTH 车轮宽度	BENDING MOMENT 弯曲扭矩	SPEED RANGE 速度范围	LOAD RANGE 载荷范围	TORSION 扭转
BENDING FATIGUE 弯曲疲劳	10" to 34"	5" to 26"	2 kNm to 70 kNm	Variable speed		
RADIAL FATIGUE 径向疲劳	13" to 36"	5" to 26"		20 to 450 km/h	100 kg to 12,000 kg	
RADIAL FATIGUE – BIAXIAL 双轴径向疲劳	13" to 22"	10" to 20"		20 to 360 km/h	5,000 kg	
IMPACT TEST 冲击测试	13" to 22.5"	10" to 22"		Not specified	Up to 1,000 kg	
ENERGY ABSORPTION TEST 吸能测试	Until 22.5"	1 x 1 [m]		Not specified	250 kN	
RADIAL IMPACT TEST 径向冲击测试	13" to 22"	10" to 20"		Not specified	Up to 4,500 J	
TORSIONAL TEST 扭转测试	10" to 22"	3.5" to 9"		Variable speed		1,800 Nm
MATERIAL PROPERTIES 材料性能	All	All		Not specified		

### Your business benefits

- **Reduce design time and improve product quality** – through advanced testing by the highly experienced and skilled TÜV SÜD wheel testing team.
- **Gain recognition and reputation for your brand** – among OEMs and end consumers by leveraging on TÜV SÜD's strong reputation as the leading tyre and wheel testing expert.
- **Benefit from a complete solution** – with the full scope of tyre and wheel tests provided by TÜV SÜD.

### 您的企业收益

- **缩短设计时间同时提升产品质量** —— 通过我们具有丰富经验的专家和专业的TÜV南德意志集团车轮测试团队提供的高级检测。
- **赢得更高的品牌知名度** —— 在整车厂和用户群中TÜV南德意志集团代表了车轮测试的权威。
- **从综合全面的解决方案中获得提升** —— 通过提供全方位的轮胎及车轮测试，使您从我们的整体解决方案中受益。

## Why choose TÜV SÜD?

TÜV SÜD has over 25 years of experience in wheel testing, and is the biggest independent institute for tyre and wheel technologies in Europe. We operate advanced wheel testing facilities that are equipped to conduct the full scope of tyre and wheel tests.

Our experts are highly trained professionals who work extensively with top automotive OEMs and suppliers worldwide. Through this experience, we have developed a strong knowledge of manufacturer and vehicle OEM requirements. We also have the expertise to conduct testing on special wheels that are not covered by any standards, such as wheels for trucks and agriculture vehicles.

## Choose certainty. Add value.

TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in testing, inspection, auditing, certification, training and knowledge services. Represented in over 800 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East and Asia. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

## 为什么选择TÜV南德意志集团?

TÜV南德意志集团拥有超过25年的车轮测试经验，同时也是在欧洲针对车轮检测的最大的独立测试机构。我们有先进的车轮测试设备，可以覆盖所有规格的车轮测试。

我们的专家全部经过了高标准的专业培训，并且与世界顶级的整车厂和供应商有广泛的合作。我们对汽车厂商和原始设备制造商的需求有着深入的了解，同时我们也可完成无明确标准的特种车轮的测试，例如卡车特种车轮或农业机械特种车轮。

## 权威认证, 创享价值

TÜV南德意志集团是一家优质、安全和可持续性解决方案提供商，专门从事测试、检验、审核、认证、培训和知识服务。我们在世界各地有800多个分支机构，并在欧洲、美洲、中东和亚洲持有认证资质。通过为客户提供客观的解决方案，我们可以为企业、客户和环境创造有形价值。

### Related services

TÜV SÜD provides the following related services:

- Vehicle and component testing
- Functional safety services related to ISO 26262
- Integrated quality assurance
- ISO/TS 16949 – Automotive certification scheme
- International homologation and type approval
- Tyre testing

### 相关服务

TÜV南德意志集团提供以下的相关服务:

- 整车及零部件测试
- ISO 26262 功能安全服务
- 综合质量保证
- ISO/TS 16949——汽车行业体系认证
- 车轮国际认证和型式认证
- 轮胎测试

Our branches in Greater China:

我们在大中华区的分支机构:

上海	Shanghai	Tel.: +86 21 6141 0123	青岛	Qingdao	Tel.: +86 532 8503 0106
上海测试中心	Shanghai Testing Center	Tel.: +86 21 6037 6300	大连	Dalian	Tel.: +86 411 8230 4203
上海工业材料实验室	Industry Material Testing Lab	Tel.: +86 21 6014 9880	沈阳	Shenyang	Tel.: +86 24 6223 3726
无锡	Wuxi	Tel.: +86 510 8820 3737	长春	Changchun	Tel.: +86 431 8462 9833
宁波	Ningbo	Tel.: +86 574 2786 6658	香港	Hong Kong	Tel.: +852 2776 1323
永康	Yongkang	Tel.: +86 579 8711 7995	香港元朗实验室	Hong Kong Lab	Tel.: +852 2443 3774
南京	Nanjing	Tel.: +86 25 8779 0058	深圳	Shenzhen	Tel.: +86 755 8828 6998
合肥	Hefei	Tel.: +86 551 6537 8730	广州	Guangzhou	Tel.: +86 20 3832 0668
台州	Taizhou	Tel.: +86 576 8966 1886	厦门	Xiamen	Tel.: +86 592 7706 188
苏州	Suzhou	Tel.: +86 512 6809 5318	东莞	Dongguan	Tel.: +86 769 2168 7092
成都	Chengdu	Tel.: +86 28 8952 0656	泉州	Quanzhou	Tel.: +86 595 2281 3681
杭州	Hangzhou	Tel.: +86 571 8111 0758	长沙	Changsha	Tel.: +86 731 8458 5815
常州	Changzhou	Tel.: +86 519 8123 9872	柳州	Liuzhou	Tel.: +86 772 3858 696
重庆	Chongqing	Tel.: +86 23 8980 9513	台北	Taipei	Tel.: +886 2 2898 6818
北京	Beijing	Tel.: +86 10 6590 6186	台中	Taichung	Tel.: +886 4 2287 0566
天津	Tianjin	Tel.: +86 22 8319 2258			