

R series

Mechanical high temperature creep durability testing machine

Product model:RDJ Series



01 Overview

RDJ series mechanical high temperature creep endurance testing machine

RDJ mechanical creep endurance testing machine adopts weight loading mode, which has the characteristics of long-term stability and reliability. It is mainly used for creep and rupture strength test of metal and alloy materials.

02 Advantages & Characteristics

Highly integrated integrated host (temperature control system integrated in the host) saves space.

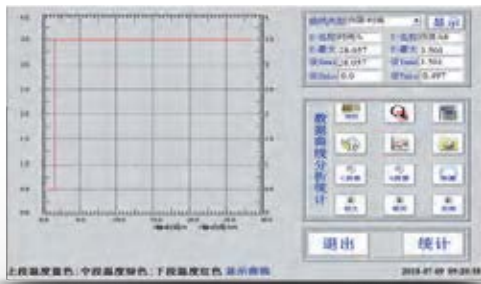
LCD + network communication manual control box makes user experience more convenient.

The automatic leveling system adopts redundant control and two-way opposed slot photoelectric switch, which is stable and reliable.

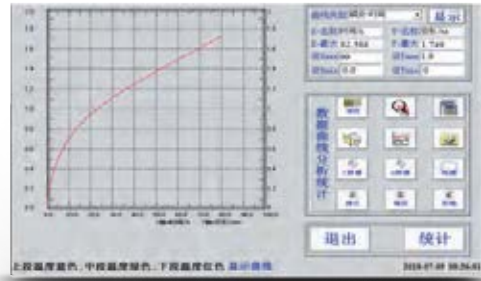
Ethernet distributed control is adopted, the data transmission speed is fast, and the wiring is simple and regular.

Software one key power off recovery test function, more convenient operation.

Each fulcrum of the lever adopts the structure of knife edge and knife bearing, which ensures the high sensitivity of the whole machine.



Endurance curve



Creep curve

03 RDJ series mechanical high temperature creep durability test technical parameter table

Model	RDJ10	RDJ30	RDJ50	RDJ100	RDJ600
Max test force	10kN	30kN	50kN	100kN	600kN
Accuracy level	0.5级				1级
Host coaxiality	≤8%				
Measurement range	0.5-10kN	0.5-30kN	0.5-50kN	1-100kN	12-600kN
Lever ratio	1:20	1:40	1:50	1:100	1:60
Lever level	一级			二级	
Lever offset	±0.1mm				
Minimum load	1N				100N
Down-rod speed	2.5---50mm/min				0.1---10mm/min
Down-rod stroke	≥200mm				
Power	Host220V, ≤750W; Atmospheric furnace380V, ≤4kW			Host220V, ≤1.5kW; Atmospheric furnace380V, ≤4kW	

Typical

Application introduction



Multi-head electronic relaxation creep testing machine

Product model: ZRDL-D Series

Main uses

The multi-head electronic creep endurance testing machine is mainly used for the compression creep and relaxation tests of non-metallic materials at a certain temperature.

Advantages and Characteristics

Three independent loading systems can be used for different tests at the same time.

With the corresponding accessories and software, creep test, relaxation test, low cycle fatigue test and creep fatigue test can be carried out.

Continuous working time: more than 500 hours.



Biaxial tensile creep testing machine

Product model: ZRDL-T Series

Main uses

It is mainly used to test the persistent creep test of glued materials under the condition of simultaneous force in the horizontal and vertical directions.



Bending creep testing machine

Product model: ZRDL-W Series

Main uses

It is mainly used for bending creep test of FRP and related materials under temperature environment. According to GB / T1456 Test Methods for Bending Performance of Sandwich Structure, the bending stiffness and shear stiffness of FRP can be calculated by three-point bending test of extended beam.



Compression creep testing machine

Product model: ZRDL-Y Series

Main uses

It is used for compression creep test of materials in high temperature environment.

Test Methods for Compression Creep of Rigid Foam



Small punch testing machine

Product model: ZRDL-CK Series

Main uses

It is used to test the creep properties of micro sheet specimens at high temperature. It is a new method to obtain the creep properties of in-service components.



Rubber creep testing machine

Product model: ZRDL-Y Series

Main uses

It is mainly used for tensile compression creep rupture test of rubber materials at high and low temperature. It meets the standard of GB / T1685 Determination of Compression Stress Relaxation of Vulcanized Rubber or Thermoplastic Rubber at Room Temperature and High Temperature.



Corrosion testing machine

Product model: ZRDL-GF Series

Seawater corrosion creep endurance testing machine

High temperature corrosion testing machine

High temperature salt spray corrosion testing machine

C-ring stress corrosion testing machine

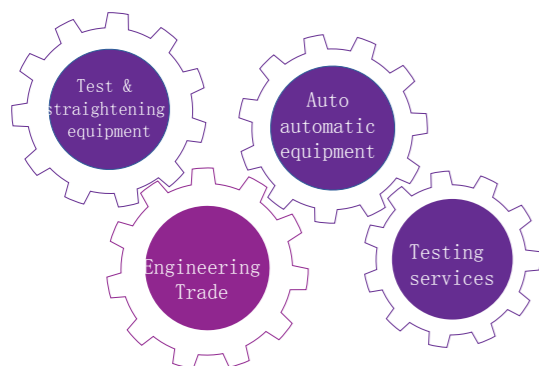
COMPANY PROFILE

Sinotest Equipment Co., Ltd. (short name: SINOTEST) was founded in 1959 (original name: Changchun Research Institute for Testing Machines of the Ministry of Machine Building Industry; former name: Changchun Research Institute for Mechanical Science Co., Ltd.). SINOTEST is a subsidiary of SINOMACH GROUP, one of the world's top 500 large state-owned enterprises. It is the support unit of the national testing machine quality supervision & inspection center and the national testing machine standardization committee. The national testing machine industry association and the association Secretariat are all located in SINOTEST. SINOTEST is known as the "cradle of China's testing machine technology". It is a high-tech enterprise with perfect innovation ability in China's test equipment industry.

SINOTEST is a state-level scientific and technological innovation enterprise mainly engaged in R & D and manufacturing of "test equipment". At present, the company has 120 patents, including 61 invention patents, 30 software copyrights and 29 utility models. The company presided over the formulation of 30 national standards and 42 industrial standards. SINOTEST has undertaken 4 national major scientific instrument projects. 3 of them have been accepted by the state. Currently, the project of "high temperature and high frequency in situ testing technology and application" is passing the acceptance of scientific research achievements. SINOTEST has kept continuously innovating. It has a number of international cutting-edge core technologies in the test equipment industry, and has solved a number of national "neck sticking" technical problems, including hydrostatic support technology, measurement and sensing technology, etc. A batch of key technology has been in an advanced position in the world.

SINOTEST is a professional engineering test and solution provider in China. It has advanced product innovation ability and special product R & D and manufacturing system in the industry. It is a high-end solution provider in the whole industry chain covering the development of unit components, manufacturing of finalized products, customized special products and overall construction of laboratory.

Now, SINOTEST has formed an industrial layout of one center and two bases, with R & D center located in Beijing and manufacturing bases located in Changchun and Wuxi. SINOTEST focuses on the field of high-end equipment manufacturing, leads the development of China's test equipment technology and industry, and makes unremitting efforts for the rise of national industry!



Core value :

Integrity, innovation, passion, joint efforts and win-win cooperation

With 60 years of material testing experience, SINOTEST provides professional material testing solutions for users with rich technology accumulation and strong innovation ability.



- Enterprise qualification
- High tech Enterprise
- Innovative technology enterprise
- ISO9001 quality management system
- German Rhine certification
- EU CE certification
- Safety production standardization certification
- Intellectual property management system certification
- Industry qualification
- National testing machine quality supervision & Inspection Center
- National Technical Committee of testing machine standardization
- National straightening machine standardization group
- Secretariat of National Testing Machine Industry Association
- Industry journal "Engineering and testing"
- R & D and testing institutions
- Academician workstation, postdoctoral research workstation
- Engineering Research Center of material testing instrument in mechanical industry
- Research Center of straightening equipment in mechanical industry

From standardized test equipment to customized test system and series test solutions, SINOTEST is working hard to meet the special needs of users, to build and establish a domestic first-class and internationally influential high-end brand.

MATERIAL MECHANICS TEST EQUIPMENT

SINOTEST is recognized as the most powerful test equipment technology leading brand in China. With excellent product quality, professional technical support and perfect after-sales service, it aims to provide users with perfect test solutions.

Application area

The technical capability of SINOTEST covers the whole system of material mechanics test, and can provide you with comprehensive test solutions to meet the test requirements of almost all industries, especially in the aspects of micromechanics, large-scale material structure, mechanical property test under high temperature and complex environment in scientific research level, as well as personalized special demand test equipment.

Application fields: metals, plastics, rubber, textiles, biomedical materials, composite materials, electronic industry, parts processing, automobile manufacturing, aerospace, etc.

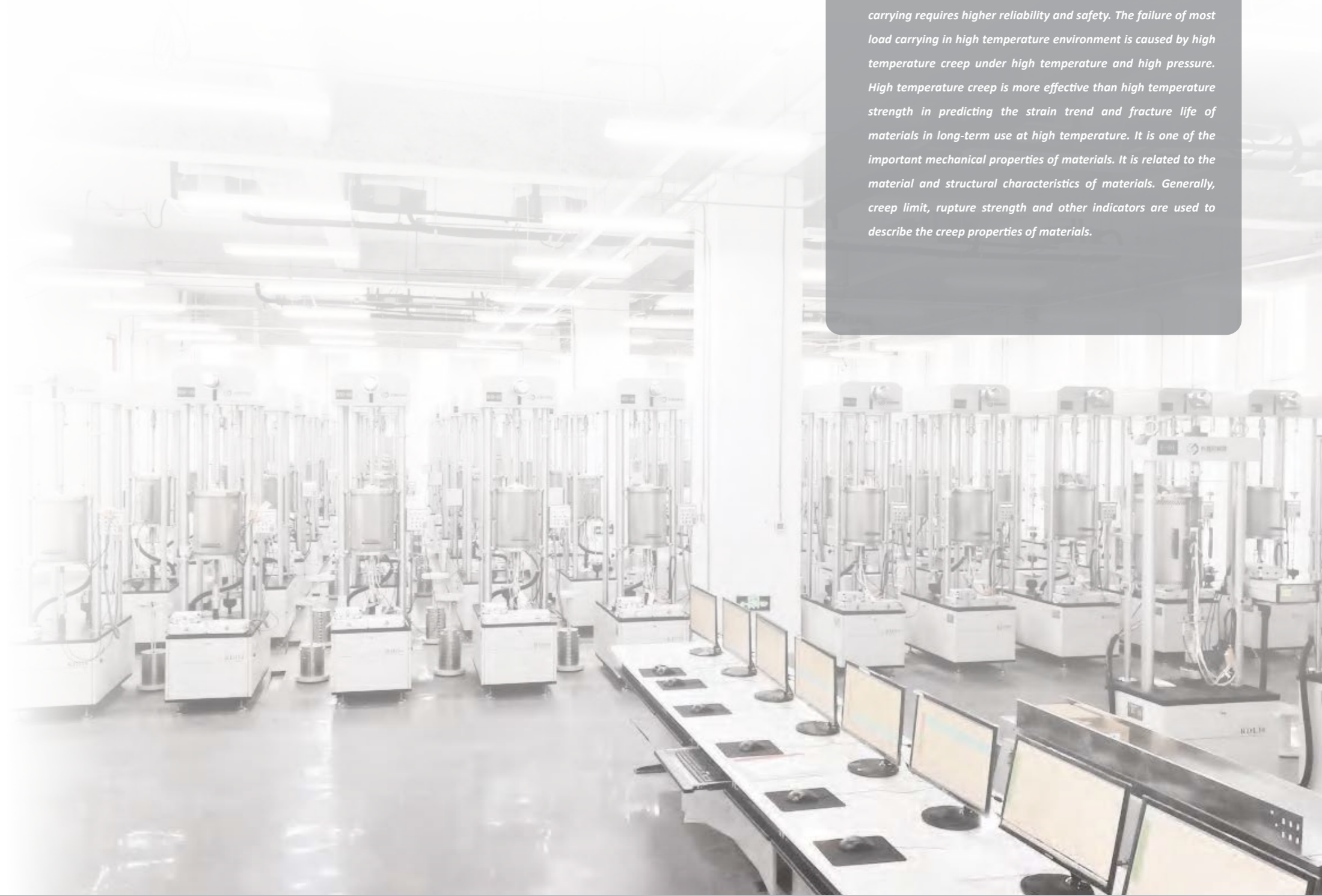
Flexible modular test procedure

Standard modular test accessories

Intelligent automatic test software

Accurate digitized measurement and analysis system

At present, due to high temperature and corrosion in petrochemical, energy, metallurgy and other industries, load carrying requires higher reliability and safety. The failure of most load carrying in high temperature environment is caused by high temperature creep under high temperature and high pressure. High temperature creep is more effective than high temperature strength in predicting the strain trend and fracture life of materials in long-term use at high temperature. It is one of the important mechanical properties of materials. It is related to the material and structural characteristics of materials. Generally, creep limit, rupture strength and other indicators are used to describe the creep properties of materials.



PARTNER

合作伙伴

High temperature creep endurance test equipment is generally composed of several machines to form a system, including host, control system and data processing system, and can also be composed of different types of machines. SINOTEST has always been focusing on the continuous innovation of creep equipment technology. The new generation of creep testing machine is based on the years technology accumulation of creep equipment. Coupled with advanced design concept, we seek breakthroughs in mechanical design, electrical control, software manipulation, ergonomics and other aspects. On the premise of retaining the original stiffness of the equipment, the new generation of creep testing machine improves the structure and operation of the host in order to provide more perfect new experience for customers. We have carried out all-round technical upgrading in the aspects of control mode and cluster control. Over the years, SINOTEST has provided thousands of high temperature creep endurance test equipment for hundreds of customers, serving the key industries and fields of the lifeline of the national economy.

重点战略合作客户

中国特种设备检验研究院	175
宝山钢铁股份有限公司	170
天津重型装备工程研究有限公司	145
中科院沈阳金属所	138
东方电气集团东方汽轮机有限公司	111
北京科技大学(国家长期材料服役中心)	112
合肥通用机械研究院	94
中国钢研科技集团 (钢铁研究院、钢研纳克检测技术有限公司、 钢研高纳科技股份有限公司)	91
长春中机检测公司	80
哈尔滨汽轮机有限公司	73
中国一重集团公司	55
西安热工研究院有限公司	53
东方电气集团东方锅炉股份有限公司	52
哈尔滨锅炉有限责任公司	47
抚顺特钢	40
上海汽轮机有限公司	39
中国航空标准件有限责任公司	33
中国二重集团	32
湖南航天天麓新材料检测公司	30
哈尔滨东安发动机	30
浙江海岩国检	30
山东电力研究院	30

高校

- 哈尔滨工业大学
- 吉林大学
- 大连理工大学
- 东北大学
- 北京科技大学
- 北京航空航天大学
- 北京工业大学
- 华北电力大学
- 天津大学
- 河北工业大学
- 燕山大学
- 太原理工大学
- 太原科技大学
- 武汉科技大学
- 海军工程大学
- 中南大学
- 湖南大学
- 长沙理工大学
- 国防科技大学
- 华中科技大学
- 浙江大学
- 浙江工业大学
- 江苏大学
- 南京航空航天大学
- 南京工业大学
- 上海交通大学
- 上海大学
- 同济大学
- 华东理工大学
- 上海工程技术大学
- 中国石油大学(华东)
- 中国科学技术大学
- 山东理工大学
- 南方科技大学
- 南昌航空航天大学
- 广东工业大学
- 西北工业大学
- 西安交通大学
- 西安科技大学
- 西北大学

科研院所

- 中国特种设备检验研究院
- 合肥通用机械研究院
- 中国核动力研究设计院
- 核工业西南物理研究院
- 中国科学院沈阳金属所
- 重庆仪表材料研究所
- 中国科学院长春应用化学研究所
- 上海电缆研究所有限公司
- 中国科学院上海应用物理研究所
- 南京玻璃纤维研究设计院有限公司
- 中国兵器工业第五二研究所烟台分所
- 中国钢研科技集团公司
- 中国船舶重工集团公司第七二五研究所
- 北京钢研高纳科技股份有限公司
- 中石油管道工程技术研究院
- 钢研纳克检测技术有限公司
- 清华大学核能与新能源技术研究院
- 上海发电设备成套设计研究院有限责任公司
- 上海材料研究所

材料机械

- 大连鑫运佳机械有限公司
- 德阳钰鑫机械制造有限公司
- 沈阳新松机器人自动化股份有限公司
- 中国人民解放军第五七〇一工厂
- 鸿富锦精密工业(深圳)有限公司
- 常州新众精密合金锻材有限公司
- 丹阳市精密合金厂有限公司
- 山东兖矿合金有限公司
- 江苏图南合金股份有限公司
- 湖南金天钛业科技有限公司
- 浙江久立特材科技股份有限公司
- 聚威工程塑料(上海)有限公司
- 长沙群辉金属材料科技有限公司
- 长沙羽杰新材料科技有限公司
- 江西省宏达机械成套设备有限公司
- 哈尔滨中科龙祥科技有限公司
- 山东南山铝业股份有限公司
- 天津忠旺铝业有限公司
- 卓然(靖江)设备制造有限公司
- 江苏久保联实业有限公司

检测机构

- 浙江国检检测技术股份有限公司
- 上海远熙检测技术有限公司
- 北京科大分析检验中心有限公司
- 北京市理化分析测试中心
- 山东省特种产品质量监督检验中心
- 四川省产品质量监督检验检疫院
- 长春中机检测有限公司
- 上海上材工程材料检测有限公司
- 钢研纳克检测技术有限公司
- 西安热工研究院有限公司
- 苏州热工研究院有限公司

重型装备

- 东方电气集团东方锅炉股份有限公司
- 东方电气集团东方汽轮机有限公司
- 哈电集团哈尔滨锅炉厂有限责任公司
- 哈电集团哈尔滨汽轮机厂有限责任公司
- 中船重工龙江广翰燃气轮机有限公司
- 山东伏雷克电气有限公司
- 华北电力科学研究院有限责任公司
- 上海电气电站设备有限公司汽轮总厂
- 天津重型装备工程研究有限公司
- 二重集团(德阳)重型装备股份有限公司

钢铁

- 宝山钢铁股份有限公司
- 山西太钢不锈钢股份有限公司
- 马鞍山钢铁股份有限公司
- 中信重工机械股份有限公司
- 抚顺特殊钢股份有限公司
- 哈电集团(秦皇岛)重型装备有限公司
- 大冶特殊钢股份有限公司
- 湖北新冶钢有限公司

航空航天

- 沈阳飞机工业集团有限公司
- 哈尔滨飞机工业集团有限责任公司
- 沈阳黎明航空发动机(集团)有限责任公司
- 哈尔滨东安发动机有限公司
- 中国航发成都发动机(集团)有限公司
- 中国航发四川成发航空科技股份有限公司
- 中国航空工业标准件制造公司
- 首都航天机械公司
- 信阳航天标准件厂
- 成都成发泰达航空科技有限公司
- 中航上大高温合金材料有限公司
- 无锡透平叶片有限公司



专业工程试验与测试解决方案提供商

中机试验装备股份有限公司 Sinotest Equipment Co.,Ltd.

全国统一服务热线：**400-965-1118**

E-mail:Richardlu@camcjsw.com

传真号码：0431-85171288

官网：www.ccss.com.cn

总部地址：中国吉林省长春市越达路1118号

研发及营销中心地址：中国北京市朝阳区北沙滩一号院

本资料内容归中机试验装备股份有限公司所有，未经许可不得复制。本资料内容仅供参考，不作为同等法律文件之依据，内容如有变动，请参照中机试验官网www.ccss.com.cn产品最新信息。



中机试验官方微信平台