

**VFTest**

Wevford  
Technology

Your trusted partner

## Directory of contents / Contents

credibility  
and integrity



team



honour



win-win



persist  
in

aim for the  
highest



**01.** About the enterprise

**02.** product presentation

**03.** Customer case

**04.** after-sale service

**01**  
Part

**VFTest**

**enterprise profile**

## 1.1 Business profile



Weifu De (Yangzhou) Technology Co., Ltd. is specialized in the research and development, production and sales of material testing machine, photovoltaic new energy and machine tool processing parts. Our products include universal testing machine, fatigue testing machine, creep testing machine and other material mechanical testing systems, as well as key components of material mechanical testing equipment such as actuators, sensors, fixtures, high and low temperature environment box, as well as automatic distribution robot and automatic sweeping robot.

The company has cooperated with a number of well-known enterprises and research institutes, after years of continuous efforts and research and development, has gradually formed a complete reliability test system development system. We have become a professional manufacturer and service provider in the field of material mechanics testing equipment in China, with a complete product range and high reliability. Weifu Technology has provided many reliability test solutions for customers in various industrial fields, such as automobile, rail transit, shipbuilding, construction and so on at home and abroad, and has won unanimous praise and many honors in the industry.

Based on today, we are full of confidence; looking forward to the future, we sing and laugh all the way!

### 1.2

## Development process

The company was established in 2014

In 2015, Establish strategic partnership with Dongcompany, realize the import of more critical parts of fatigue test machine, and complete the export projects to South Korea, Russia

In 2016, Turkey and Mexico school straight machine project completed

In 2017, Cooperation with iterative fatigue test system

In 2018, Signed the creep fatigue test and fatigue test machine project with Russia

In 2019, Establish a creep testing machine cooperative development project with budatech, India

In 2020, Complete 2500°C ultra-high temperature mechanical properties test test system; Spain test machine plant oem equipment frame.

In 2021, Cooperate with non-standard fatigue test system of Institute of Metals of CAS; establish partnership with German VF



## 1.3

### Corporate culture



**corporate  
vision**

Become the international  
world-class test equipment  
service provider

**business  
mission**

Provide a trusted trial  
solution

**core  
values**

Honest, fair and steady  
creation

**Enterprise  
style**

Diligent, rigorous, realistic,  
pragmatic

**02**  
Part

**VFTest**  
**product presentation**

## 2.1 Test type products

### Electronic universal and creep testing machine

Mechanical properties and long-time test of static materials

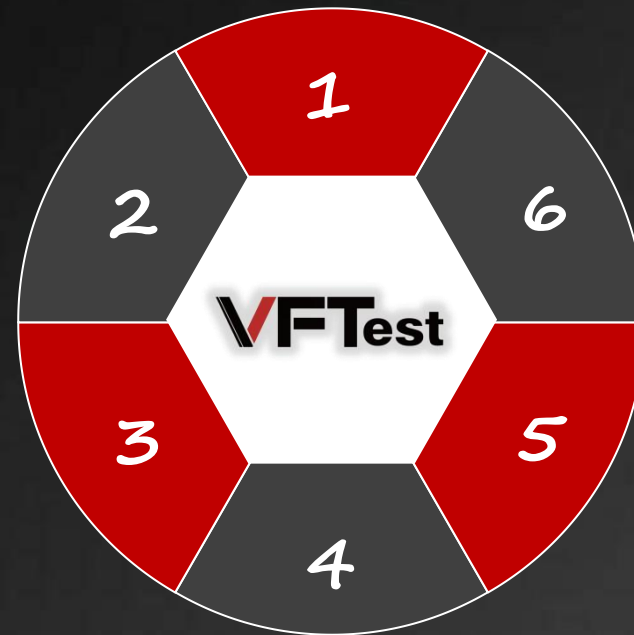
### Electro-hydraulic servo-fatigue testing machine

High week, low week, equal amplitude, variable amplitude, block wave loading, static, dynamic, durability, strength, and custom tests

### Electromagnetic resonance high-frequency fatigue testing machine

High frequency tensile, compression test and fatigue performance and fracture mechanical performance test under tension pressure

alternating load.



### Ultra-high temperature and complex environment mechanics test system

800-2500°C atmosphere and vacuum

### leveler

10 tons-1000 tons of shaft parts, rod production line straightening machine, automatic loading and unloading and quality sorting.

### Appendix of test machine

High temperature clamp, high and low temperature environment box, actuator, extension meter, force sensor, controller, etc



## 2.2 Product features

**Non-standard customization: non-standard customization of frame size, test fixture, high and low temperature environment box, software and other modules**

**Products and services: the field installation, commissioning and training of professional engineers and technicians**

**Remote control: It can realize the remote control of the test equipment.**

- **Static mechanics**
- Long-term performance was stable
- Dynamic calibration function
- Sensor

- **Dynamic mechanics**
- fracture toughness
- Road spectrum iteration
- Multi-axis mixing test

- **Environmental mechanics**
- 2,500°C Vacuum test
- Water vapor environment
- atmospheric environment
- High low

- **leveler**
- Hot and cold calibration
- High beat efficiency
- Automatic loading and unloading and sorting

- **appendix**
- High-precision load sensor is of 0.03% level
- 1600°C high temperature extension meter
- High temperature

on

## 2.3 Electronic universal testing



01

operative norm:

GB / T 7314-2005 Test Method for Room Temperature (per ASTM E9-89a (2000))

GB / T 232-2010 method for bending (per ISO 7438-2005)

ASTM E8-2016a Method for tensile test at room temperature

ISO 6892-1-2016 Tensile tests for metallic materials- -Part 1: Test methods at room temperature

BS EN 10002-1 tensile test method for metal materials

02

JIS Z 2241-1998 Tensile test method for metal materials

technical parameter

1. Host form double column landing type host double space

2. The maximum test force is 20 kN / 10 kN

3. If the test force measurement range / min, it is better than  $\pm 0.5\%$

11. Speed / test force capacity 200mm0.4%~100%FS / 0.2%~100%FS (customized)

4. The accuracy of the test force measurement value is  $\pm 0.5\%$

5. Force control rate adjustment range is 0.005 to 5% FS / s

6. When the precision rate of force control rate control is less than 0.05%FS / s, it is better than the set value of  $\pm 1\%$ ;

A rate greater than 0.05%FS / s exceeds  $\pm 0.5\%$

7. Cross displacement resolution is 0.00004mm

8. Cross bar displacement accuracy is  $\pm 0.5\%$

9. The speed range is 0.005~1000mm / min

10. Cross am speed accuracy speed below 500mm / min

The maximum test force of 1 / 2 is allowed below 1000mm / min

12. Deformation measurement range 2% FS~100%FS (optional axial extension)

## 2.3 Creep testing machine



01

### operative norm:

GB / T2039-2012 Metal Tensile Creep and Persistent Test Methods  
 GB / T10120 Test Methods for Stress and relaxation of Metal Materials  
 HB5151- -96 Test Method for Creep  
 HB5150- -96  
 ASTM E139-2011 Test Methods for Creep and Breaking of Metal  
 Materials  
 ASTM E1012-2019 Standard for Force Value and Coaxial Degree  
 Verification

02

ASTM E4-2016 Routine Practice for Test Force Value Calibration  
 ASTM E 83-2016 Standard Practice for Classification and Verification of  
 technical parameter

1. Maximum test force: 50 kN / 100 kN;
2. Measurement error of test force:  $\pm 0.5\%$ ;
3. Measurement range of test force: 1%FS~100%FS;
4. Pull rod speed: 0.001~100mm / min;
5. Maximum stroke of the pull rod: 200mm;
6. Coaxial degree of the upper and lower clamping heads: 8% (national standard);
7. Deformation measurement range: 0~12mm;
8. Deformation measurement resolution: 0.001mm;
9. Deformation measurement error:  $\pm 0.002\text{mm}$ ;
10. Heating control mode: three electric heating wire heating, section control;
11. Furnace wire diameter:  $\Phi 1.5\text{mm}$  /  $\Phi 5\text{mm}$ ;
12. Operating temperature: 300~1100°C;
13. Unitropical length: 150mm / 200mm;
14. Furnace shell surface temperature rise: 90°C;
15. Temperature fluctuation degree:  $\pm 2^\circ\text{C}$ ;
16. Temperature gradient: 3°C;

## 2.3 Electro-hydraulic servo fatigue testing machine



01

### operative norm:

GB / T 2611-2007 General Technical Requirements for Test Machine

JB / T 8612-2015 Electro-hydraulic Motor Motor Universal Testing Machine

JJG 556-2011 Axial Afterforce Fatigue Testing Machine

GB / T 6398-2000 Test Method for Fatigue Crack Extension Rate of Metal Materials

GB / T 4161-2007 KIC Test Method for plane strain fracture toughness of metal materials

02

### technical parameter

1. Maximum static test force is  $\pm 100$  kN
2. Maximum dynamic test force is  $\pm 80$  kN
3. Test force measurement range is 4-100%FS
4. Load static measurement accuracy:  $\pm 0.5\%$  of the value
5. Load dynamic measurement accuracy:  $\pm 2.0\%$  of the value
6. Movement of actuator  $\pm 75$ mm ( $\pm 50$ mm optional)
7. Precision of the displacement measurement:  $\pm 0.5\%$ FS
8. Test frequency range is 0.01-50Hz
9. The external size is about 7209002800 mm (length, width and height, subject to the actual design)
10. Net spacing of columns is 500mm
11. Vertical test space 50-650 mm (distance between clamlets)

## 2.3 Electromagnetic resonant high-frequency fatigue testing machine

**01****operative norm:**

JB / T 5488-1991 Standard for High-Frequency Fatigue Testing Machine

**02****technical parameter**

1. Maximum average load (kN):  $\pm 20$
2. Max. unidirectional pulse load (kN):  $\pm 20$
3. Maximum alternating load (peak kN): 10
4. The test force measurement range is 4%~100% F · S
5. Relative error of the average load value:  $\pm 0.5$
6. Frequency range (Hz): 60~300 (multistage frequency regulation)
- 7, the whole machine power: AC 220V 1.0kW
8. Average load fluctuation degree: 0.5 F · S
9. Transtation load fluctuation: 0.5 F · S
10. Max. distance (mm): 500
11. Max. distance between the two columns (mm): 350



## 2.3 Ultra-high temperature mechanical properties test

function Introduction:

on

The system is used for the high temperature mechanical properties of 600-2,050°C. Including short-time stretching, fatigue test, low weekly cycle, lasting creep and other tests. The corresponding test fixture can also be configured for compression, three-point bending, short beam shear, double gap shear and d



- leveler
- Hot and cold calibration
- High rate of shooting
- Automatic loading and unloading and sorting mechanism

model	ZK1600	ZK2000	ZK2500
working temperature	600~1600°C	600~2000°C	600~2500°C
operative mode	Vacuum or inflatable		
uniform temperature zone length	50mm or custom-made		
temperature gradient	600~1200°C	1200~1600°C	1600~2500°C
	≤5°C	≤10°C	≤1%T
temperature fluctuation	≤±3°C		
heating element	Select the molybdenum alloy and the tungsten alloy according to the used temperature		
Temperature measurement element	Select K, S, B, tungsten, photoelectric chromatometer, or two combinations according to the temperature range		
Temperature measurement sensitivity	0.1°C		
temperature measurement accuracy	Thermocouple precision level, photoelectric colorimeter: ± 0.75%		
Measurement and control temperature point number	Both tropical: 1 temperature control, 1 or 3 temperature measurement		
heating rate	5~50°C/min		
Deformation measurement	Imported differential transformer: minimum degree of 1 μ m, linear error: ± 0.25%FS;		
Workvacuum	510-4 Pa (steady-state)		
final vacuum	810-5 Pa (cold state)		
Argon gas inflating rate	The rate is adjustable, and the argon gas purifier can be selected according to the requirements		

## 2.3 Automatic straightening



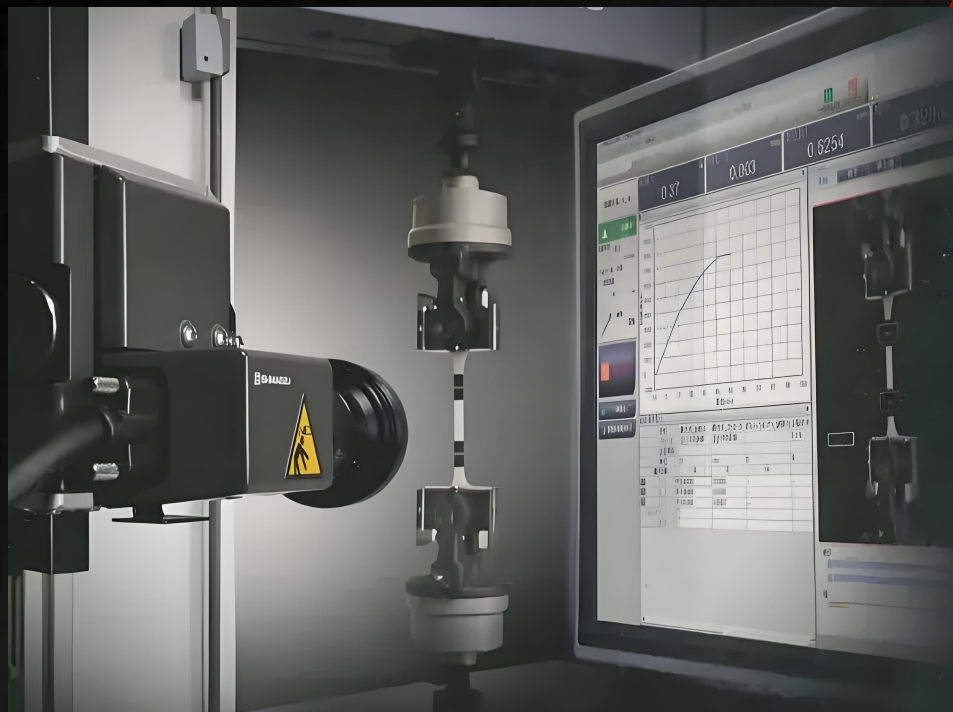
01

### technical parameter

- leveler
- Hot and cold calibration
- High rate of shooting
- Automatic loading and unloading and sorting mechanism

model	JEC 10	※JE C10-L	JEC 30	※JE C30-L	JEC 50	※JE C50-L	JEC 80	※JE C80-L
project								
Host type	Through the type							
Can calibrate the outer diameter of the axis	φ10~φ30		φ30~φ50		φ40~φ70		φ50~φ90	
Can be the length of the axis	≤500m	≥500m	≤500m	≥500m	≤500m	≥500m	≤500m	≥500m
Fixed point number	≤3	≤5	≤3	≤5	≤3	≤5	≤3	≤5
Measure the number of points	≤3	≤5	≤3	≤5	≤3	≤5	≤3	≤5
certainty of measurement	±5μm							
Measurement method	Round rod (semi-) inclusive measuring sheet standard gear							
Workpiece speed	30~120r.p.m							
Workpiece positioning mode	Top hole or outer circle reference at each end of the workpiece							
navar	Industrial Integration Workstation (Data collection and processing) PLC (control unit)							
Maximum loading capacity	100KN		300KN		500KN		800KN	
source	Three-phase value of 380V 15KVA							
Host weight	1.6 Tons	1.8 Tons	2.2 Tons	2.4 Tons	2.5 Tons	2.8 Tons	2.9 Tons	3.2 Tons

## 2.3 HD automatic video extensometer



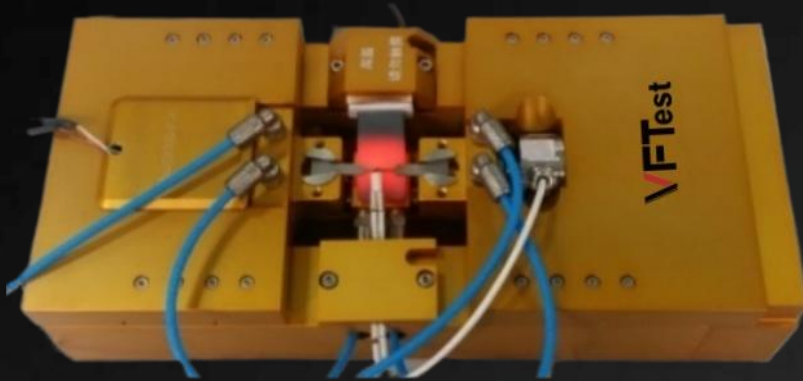
01

Model number	LVE-12M
Resolution	1200 万 pixel
Frame rate	≤200fps
Strain range	0.002%-1000%
Resolving power	up to 0.5 μm
Displacement accuracy	up to ± 1 μm (60mm-150mmFOV)
	up to ±0.01mm (150mm-1000mmFOV) up to ±0.05mm (1000mm-1500mmFOV)
Test field of view	Standard visual field: 60mm-150mmtunable Expand one's vision: 150mm-1500mmtunable
Support range of scale	Standard use: <100mm
	Extended use: <1500mm
Extensometer accuracy	IS09513 Lv. 0.5 (Standard visual field)

LVE series video extensometer is a non-contact high-precision real-time measurement system, it uses a separate digital camera and real-time image processing algorithm, by shooting the image of the specimen experiment process, analyze the image characteristics changes, can dynamically measure the strain, displacement and other data, interworking with the signal of the testing machine, measure the stress strain curve and other mechanical properties parameters. Suitable for all kinds of mechanical tests.

## 2.3 Micromechanical comprehensive performance testing machine

01



1. Host type: horizontal desktop
2. Test force: 10-5000N
3. Test force measurement range: 4% ~ 100% FS
4. Test force measurement accuracy: indicating value  $\pm 1\%$
5. Accuracy of deformation measuring grating: better than  $\pm 2\mu\text{m}$
6. Beam displacement resolution:  $0.01\mu\text{m}$
- Seven. Beam test speed range:  $0.01 \sim 3\text{mm/min}$
8. Beam no-load adjustment speed: the maximum allowable test force below  $3\text{mm/min}$
9. Operating temperature:  $-40 \sim 1000$  degrees
10. Test frequency: 20HZ

In situ test (micromechanical test + visual monitoring) : The mechanical properties of the specimen materials are tested at the nanoscale, which is a mechanical testing technology compatible with imaging equipment such as type microscope, metallographic microscope, ultra-depth microscope, scanning electron microscope, and CT to carry out dynamic monitoring of the microscopic deformation and damage of the material. The micromechanical behavior, damage mechanism and the correlation between load action and material properties of various materials and their products are deeply revealed. It can also be used independently to test the mechanical properties of materials



## 2.3 Closed-Loop Control Torque Synchronous Asynchronous Motion Fatigue Actuator Test /Test Parts

01



- | Working pressure: 21Mpa
- | Maximum tensile static force: 100kN
- | Maximum tension dynamic force: 80kN
- | Total tension stroke: 336mm
- | Effective stroke: 300mm
- | Maximum torsional static force: 3000Nm
- | Maximum torsional dynamic force: 2400Nm
- | Total torsion Angle: 100°
- | Effective torsion Angle: 90°
- | Linear servo actuator independent working frequency: 0.01Hz-100Hz
- | Oscillating servo actuator independent working frequency: 0.01Hz-50Hz
- | Compound operating frequency: 0.01Hz-20Hz



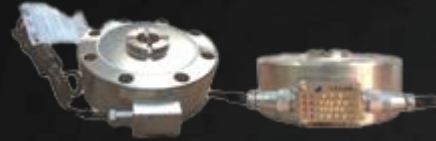
Tension-torsion servo actuator is a device that outputs tension and torsion force in electro-hydraulic servo system, and is a key component of dynamic loading. It is mainly used in the field of dynamic, static and fatigue testing. The tension-torsion composite static pressure support servo actuator is mainly composed of the servo linear cylinder, the servo swing cylinder, the displacement sensor, the Angle sensor and the connection mechanism of the linear cylinder and the swing cylinder, etc., which can realize a variety of closed-loop control.



### 2.3 Test machine accessories



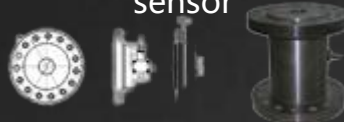
Static-pressure bearing actuator



Wheel spoke sensor



Type S sensor



torque sensor



Dynamic fatigue controller



high-temperature extensometer



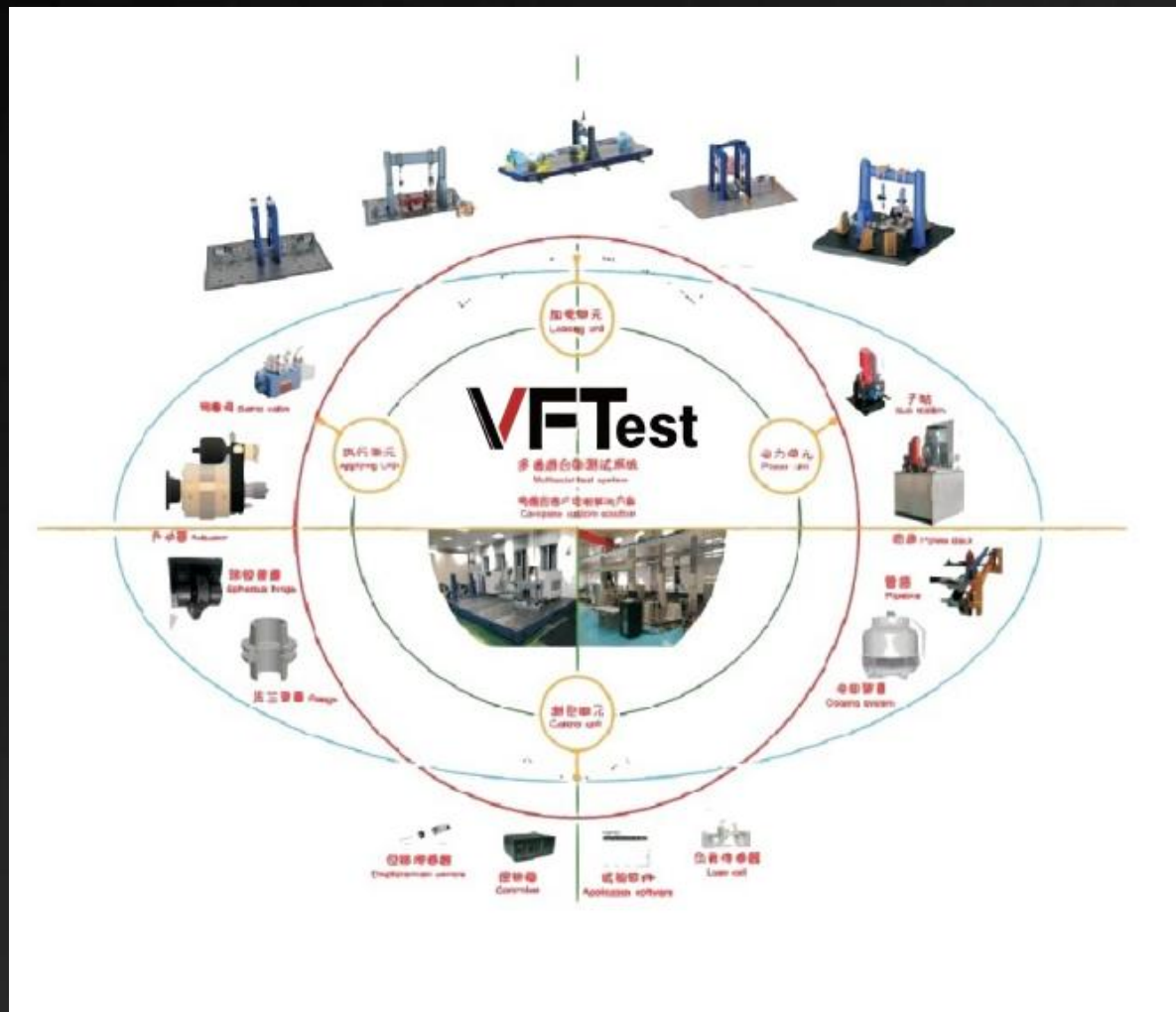
High temperature fixture



High temperature atmospheric furnace



high and low temperature environment box



## 2.2 Servo-feeder class

01

### 高涨力板三合一伺服送料矫正机

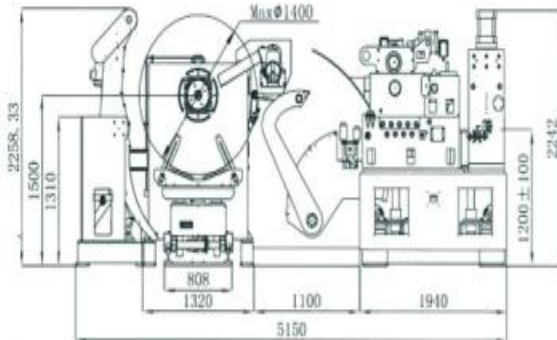
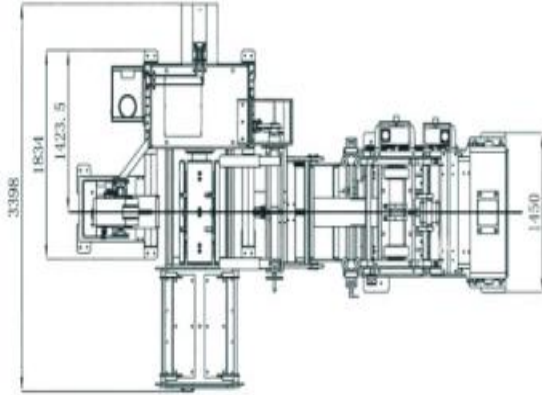
High-strength force plate three-in-one servo feeding straightening machine



#### 技术规格 Technical specifications

型号 model	NCLG-600	NCLG-800	NCLG-1000	NCLG-1300
料宽(mm) Material width (mm)	70-600	70-800	70-1000	70-1300
料厚(mm) Material thickness (mm)	0.8-9.0			
最大料重(kg) Maximum material weight (kg)	5000	5000	7000	10000
卷料内径(mm) Coil inner diameter (mm)	508			
卷料外径(mm) Coil outer diameter (mm)	1400			
最大速度(m/min) Maximum speed (m/min)	22			
标准送料精度(mm) Standard feeding accuracy (mm)	±0.15			
矫正滚轮 Correction roller	上 Upper 5 / 下 Lower 4			
送料滚轮(组) Feed roller (group)	1			
背压滚轮组 Back pressure roller set	有 / Provided			
标准送料高度(mm) Standard feeding height (mm)	1200 ± 100			
电源电压 voltage	AC220V 50Hz / AC380V 50Hz			
空气压(kg/cm <sup>2</sup> ) Air pressure (kg/cm <sup>2</sup> )	5kg/cm <sup>2</sup>			
料架扩张方式 Rack expansion method	油压 Hydraulic			
伺服马达(kw) Servo motor (kw)	AC22			
料架马达(kw) Rack motor (kw)	2.2	2.2	3.7	7.5

## 外形尺寸 Dimensions



## 矫正能力表 Corrective ability table

型号 Model	材料厚度 Thickness						
	0.8-3.2	4.0	4.5	5.0	6.0	8.0	9.0
NCLG-600	600				450	253	200
NCLG-800	800			648	450	253	200
NCLG-1000	1000		800	648	450	253	200
NCLG-1300	1300	1013	800	648	450	253	200

表中的屈服强度临界值245N/mm<sup>2</sup>(拉伸强度为392N/mm<sup>2</sup>)

yield strength threshold value in the above table is 245N/mm<sup>2</sup> (tensile strength is 392N/mm<sup>2</sup>)

## 矫正能力表二 Corrective ability table (对应高张力板 Corresponding to high tension plate)

型号 Model	材料厚度 Thickness								
	0.8-3.2	2.8	3.2	4.0	4.5	5.0	6.0	7.0	8.0
NCLG-600	600	533	374	292	257	228	180	132	101
NCLG-800	800	527	369	289	254	225	180	132	101
NCLG-1000	1000	521	365	286	251	223	180	132	101
NCLG-1300	1300	511	358	281	246	219	178	132	101

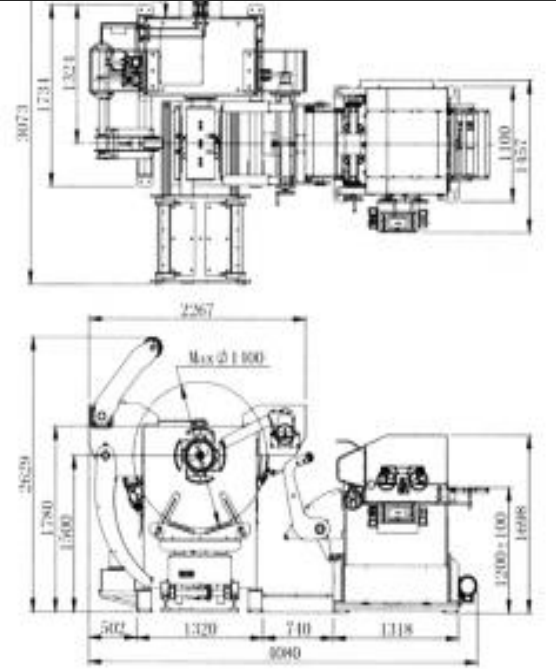
表中的屈服点应力  $\sigma_s=600N/mm^2$ (抗拉强度  $\sigma_b=960N/mm^2$ )

yield point stress  $\sigma_s=600N/mm^2$  in the above table (tensile strength  $\sigma_b=960N/mm^2$ )



## 三机一体式伺服料架整平送料机 Three-machine integrated servo rack leveling feeder

01





on

技术规格 Technical specifications

型号 model	NLF2-400	NLF2-500	NLF2-600	NLF2-800	NLF2-1000
料宽(mm) Material width (mm)	70-400	70-500	70-600	70-800	70-1000
料厚(mm) Material thickness (mm)	0.3-4.5				
最大料重(kg) Maximum material weight (kg)	3000(5000)			5000(7000)	
卷料内径(mm) Coil inner diameter (mm)	508				
卷料外径(mm) Coil outer diameter (mm)	1400				
最大速度(m/min) Maximum speed (m/min)	22				
标准送料精度(mm) Standard feeding accuracy (mm)	± 0.15				
矫正滚轮 Correction roller	上 Upper 4 / 下 Lower 3				
送料滚轮 (组) Feed roller (group)	1				
标准送料高度(mm) Standard feeding height (mm)	1200 ± 100				
电源电压 voltage	220VAC 60Hz / AC380V 50Hz				
空气压(kg/cm <sup>2</sup> ) Air pressure (kg/cm <sup>2</sup> )	5kg/cm <sup>2</sup>				
料架扩张方式 Rack expansion method	油压 Hydraulic				
伺服马达(kw) Servo motor (kw)	AC4.4			AC5.5	
料架马达(kw) Rack motor (kw)	1.5(2.2)			2.2(3.7)	

矫正能力表 Corrective ability table

型号 Model		NLF2-400	NLF2-600	NLF2-800	NLF2-1000
		料宽(mm) Width(mm)			
料厚(mm) Thickness(mm)	0.3-0.8	400	600	800	1000
	1.0	400	600	800	750
	1.2	400	600	700	600
	1.6	400	590	480	430
	1.8	400	500	420	380
	2	400	430	370	330
	2.3	400	360	320	290
	2.8	370	290	250	230
	3.2	300	250	220	200
	4.5	160	160	150	110

上表中的屈服点应力  $\sigma_s=245N/mm^2$ (抗拉强度  $\sigma_b=392N/mm^2$ )  
Yield point stress  $\sigma_s=245N/mm^2$  in the above table (tensile strength  $\sigma_b=392N/mm^2$ )

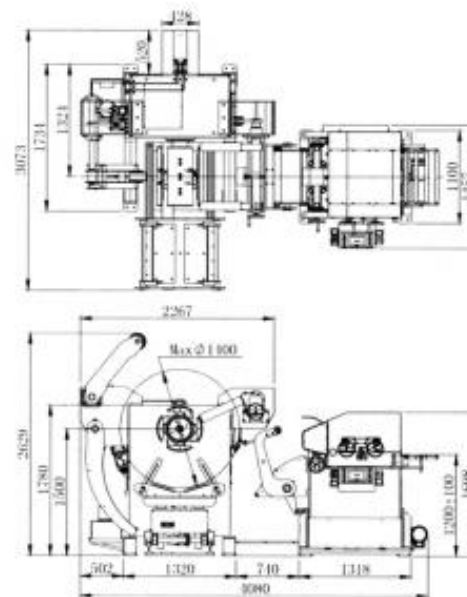
## 三机一体式伺服料架整平送料机

Three-machine integrated servo rack leveling feeder

01



外形尺寸 Dimensions



技术规格 Technical specifications

型号 model	NLF2-400	NLF2-500	NLF2-600	NLF2-800	NLF2-1000
料宽(mm) Material width (mm)	70-400	70-500	70-600	70-800	70-1000
料厚(mm) Material thickness (mm)	0.3-4.5				
最大料重(kg) Maximum material weight (kg)	3000(5000)		5000(7000)		
卷料内径(mm) Coil inner diameter (mm)	508				
卷料外径(mm) Coil outer diameter (mm)	1400				
最大速度(m/min) Maximum speed (m/min)	22				
标准送料精度(mm) Standard feeding accuracy (mm)	± 0.15				
矫正滚轮 Correction roller	上 Upper 4 / 下 Lower 3				
送料滚轮 (组) Feed roller (group)	1				
标准送料高度(mm) Standard feeding height (mm)	1200 ± 100				
电源电压 voltage	220VAC 60Hz / AC380V 50Hz				
空气压(kg/cm <sup>2</sup> ) Air pressure (kg/cm <sup>2</sup> )	5kg/cm <sup>2</sup>				
料架扩张方式 Rack expansion method	油压 Hydraulic				
伺服马达(kw) Servo motor (kw)	AC4.4		AC5.5		
料架马达(kw) Rack motor (kw)	1.5(2.2)		2.2(3.7)		

矫正能力表 Corrective ability table

型号 Model	料厚(mm) Thickness(mm)	NLF2-400	NLF2-600	NLF2-800	NLF2-1000
		料宽(mm) Width(mm)			
料厚(mm) Thickness(mm)	0.3-0.8	400	600	800	1000
	1.0	400	600	800	750
	1.2	400	600	700	600
	1.6	400	590	480	430
	1.8	400	500	420	380
	2	400	430	370	330
	2.3	400	360	320	290
	2.8	370	290	250	230
	3.2	300	250	220	200
	4.5	160	160	150	110

上表中的屈服点应力  $\sigma_s=245\text{N/mm}^2$ (抗拉强度  $\sigma_b=392\text{N/mm}^2$ )  
Yield point stress  $\sigma_s=245\text{N/mm}^2$  in the above table (tensile strength  $\sigma_b=392\text{N/mm}^2$ )

## 三机一体式伺服料架整平送料机

Three-machine integrated servo rack leveling feeder

01



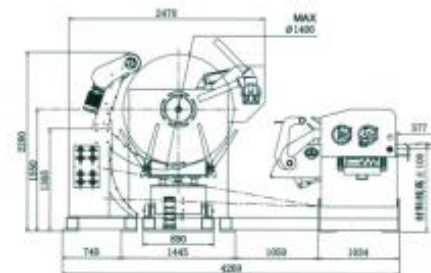
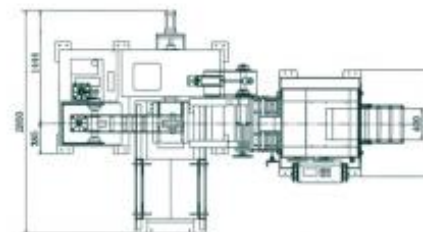
### 产品特性 Product Features

特别为强力厚板而设计的上下整平背压滚轮组，  
可达到保证的应力消除效果。

The upper and lower flattening back pressure roller  
set specially designed for strong thick plates can  
achieve the guaranteed stress relief effect.



### 外形尺寸 Dimensions





技术规格 Technical specifications							
型号 model	NLF3-400	NLF3-500	NLF3-600	NLF3-800	NLF3-1000	NLF3-1300	NLF3-1600
料宽(mm) Material width (mm)	70-400	70-500	70-600	70-800	70-1000	70-1300	70-1600
料厚(mm) Material thickness (mm)	0.6-6.0						
最大料重(kg) Maximum material weight (kg)	5000	5000	5000	7000	7000	10000	15000
卷料内径(mm) Coil inner diameter (mm)	508						
卷料外径(mm) Coil outer diameter (mm)	1400						
最大速度(m/min) Maximum speed (m/min)	16-24						
标准送料精度(mm) Standard feeding accuracy (mm)	± 0.15						
矫正滚轮 Correction roller	上 Upper 4 / 下 Lower 3						
送料滚轮(组) Feed roller (group)	1						
背压滚轮组 Back pressure roller set	有 / Provided						
标准送料高度(mm) Standard feeding height (mm)	1200 ± 100						
电源电压 voltage	AC220V 50Hz / AC380V 50Hz						
空气压(kg/cm <sup>2</sup> ) Air pressure (kg/cm <sup>2</sup> )	5kg/cm <sup>2</sup>						
料架扩张方式 Rack expansion method	油压 Hydraulic						
伺服马达(kw) Servo motor (kw)	AC5.5	AC5.5	AC7.5	AC7.5	AC11	AC11	AC15
料架马达(kw) Rack motor (kw)	2.2	2.2	2.2	3.7	3.7	7.5	11

矫正能力表 Corrective ability table							
型号 Model		NLF3-400	NLF3-600	NLF3-800	NLF3-1000	NLF3-1300	NLF3-1600
滚轮长度(mm) Roller length		420	620	820	1020	1320	1620
料厚(mm) Thickness(mm)	0.6-1.6	400	600	800	1000	1300	1600
	2.0	400	600	800	1000	1300	1600
	2.3	400	600	800	1000	1300	1600
	2.5	400	600	800	1000	1170	1500
	2.8	400	600	800	933	1053	1200
	3.2	400	600	714	856	937	980
	4.0	400	484	686	743	825	860
	4.5	400	426	593	681	764	770
	5.0	293	362	472	543	643	650
	6.0	203	287	367	437	515	535

上表中的屈服点应力  $\sigma_s=245N/mm^2$ (抗拉强度  $\sigma_b=392N/mm^2$ )  
Yield point stress  $\sigma_s=245N/mm^2$  in the above table (tensile strength  $\sigma_b=392N/mm^2$ )



偏摆三合一  
Partial three-in-one

01



技术规格 Technical specifications

型号 model	NCPB-1300	NCPB-1600
材料宽度 (mm) Material width (mm)	100-1300	100-1600
材料厚度 (mm) Material thickness (mm)	0.3-4.5	0.3-4.5
卷材重量 (kg) Coil weight (kg)	10000	15000
卷材外径 (mm) Coil outer diameter (mm)	1400	1400
卷材内径 (mm) Coil inner diameter (mm)	450-530	480-530
送料公差 (mm) Feeding tolerance (mm)	200 ± 0.2	200 ± 0.2
偏摆公差 (mm) Yaw tolerance (mm)	200 ± 0.4	200 ± 0.4
工作滚轮 (支) Working roller (support)	上 Upper 5 / 下 Lower 4	上 Upper 5 / 下 Lower 4
送料滚轮 (组) Feed roller (group)	1	1
主电机 (KW) Main motor (KW)	AC11	AC15
偏摆电机 (KW) Yaw motor (KW)	AC15	AC22
扩充方式 Expansion mode	液压 Hydraulic	液压 Hydraulic
料架电机 (KW) Rack motor (KW)	5.5	7.5
电源 (V) Power supply (V)	380	380
空气压力 (Mpa) Air pressure (Mpa)	0.49	0.49



## 新型夹式送料机

New clip feeder

01

### GS-906N/GS-1512N 技术规格 Technical specifications

型号 Model	GS-906N	GS-1512N
送料长度(mm) Feed length(mm)	0-60	120
送料角度 Feed angle	180°	180°
材料宽度(mm) Material width (mm)	0-90	0~150
材料厚度(mm) Material thickness (mm)	0.1~1.5	0.1~1.5
材料线高度(mm) Material line height (mm)	60~120	60~120
放松角度 Relaxation angle	可调整 Adjustable	
送料机构 Feeding mechanism	曲轴传动 Crankshaft drive	
安装位置 Installation location	左边 Left	
送料方向 Feeding direction	左 left → 右 right	
重量(kg) Weight(kg)	188kg	188kg

### GS-906N 产品特点 Product Features

- 1、适用于要求高速加工，且需要高精度送料的冲制品。(每分钟送料最高可达1200次)
- 2、机械运转时，安静无声，不造成工作场所的噪音。
- 3、材料表面不会留下任何压痕，可使冲制电镀材料铝合金、不锈钢、铜、铁、或二次工程厂商、得到最完美的冲制成品。
- 4、所有调整均采用刻度式，操作简单，稳定性佳，任何人员均可轻易操作。本体为一体成形，可避免冲压时所产生的共振影响送料精度。

1. It is suitable for punching products that require high-speed machining and require high-precision feeding. (up to 1200 leads per minute)
2. When the machine is running, it is quiet and silent, and does not cause noise in the workplace.
3. the surface of the material will not leave any indentation, can make the plating material aluminum alloy, stainless steel, copper, iron, or secondary engineering manufacturers, get the most perfect stamping products.
4. all adjustments are scaled, easy to operate, good stability, any staff can easily operate. The body is integrally formed to avoid the resonance caused by the stamping and affect the feeding accuracy.



## 工业机器人 Industrial robot

01



### 技术规格 Technical specifications

型号 Model	ER12-C604	ER10-C60	ER20-C10	ER50-C10
轴数 Number of axes	4	6	6	6
有效负载 Payload (kg)	12	10	20	50
最大臂展 Maximum wingspan (mm)	1620	1640	1722	2146
重复定位精度 Repeatability (mm)	±0.07	±0.05	±0.06	±0.08
运动范围 Range of motion	1轴 1 axis	±165°	±165°	±175°
	2轴 2 axis	+40° /-85°	+80° /-135°	+64° /-142°
	3轴 3 axis	+15° /-70°	+165° /-75°	+165° /-73°
	4轴 4 axis	±360°	±180°	±178°
	5轴 5 axis	/	±130°	±132°
	6轴 6 axis	/	±360°	±720°
最大速度 Maximum speed	1轴 1 axis	210° /s	170° /s	170° /s
	2轴 2 axis	165° /s	160° /s	165° /s
	3轴 3 axis	155° /s	180° /s	170° /s
	4轴 4 axis	440° /s	330° /s	360° /s
	5轴 5 axis	/	360° /s	360° /s
	6轴 6 axis	/	600° /s	600° /s
本体重量 Body weight (kg)	180	190	220	550
安装方式 Installation method	地面/支架/倒置 Ground/bracket/inverted; 地面/支架/倒置 Ground/bracket/inverted; 地面/支架/倒置 Ground/bracket/inverted; 地面/支架/倒置 Ground/bracket/inverted			

- ◆ 用途：搬运、码垛、上下料、抛光打磨。
- ◆ 采用全伺服电机驱动，定位精度高，使用寿命长。
- ◆ 示教器操作，人机界面友好，能实现高性能的动作控制与时序控制。

- ◆ Uses: handling, palletizing, loading and unloading, polishing and polishing.
- ◆ Driven by full servo motor, it has high positioning accuracy and long service life.
- ◆ The teach pendant operates with a friendly man-machine interface and enables high-performance



## 现场案例

Site case



## 2.4 Agency product category outdoor robot DR-

3

**DR3 is an unmanned intelligent robot designed for outdoor with the ability of multi-scene errands. It has the ability of autonomous walking and automatic obstacle avoidance, providing customers with the benefits of reducing costs, improving efficiency, improving safety and other aspects.**

### Autonomous driving

According to the preset destination and route point, automatically plan the route and drive safely.

### Avoid obstacles and avoid obstacles

Real-time detection of the surrounding obstacles, and automatically avoid or detour under the premise of ensuring safety.

### Task planning

Tasks are set for driverless cars through the mobile app, such as destination, driving route, passing point, cargo loading type, and timing tasks, etc.

### Remote control

The remote control will remote control the driverless car, including driving, stopping, steering and other operations.

### Voice communication

Through the natural way of speaking, to the vehicle intelligent system to consult questions, can be fully answered. At the same time, you can also send task commands to the car by voice.

### Touch-controlled operation

Direct click on the touch screen, visual human-computer interaction with the car, support the rapid initiation of tasks on the screen.

### Inspection and monitoring

Carry out inspection tasks according to fixed route, and support real-time view and video uploading.





## 2.4 Agency product category outdoor robot DR-

### 3

DR3 is an unmanned intelligent robot designed for outdoor design with the ability of multi-scene errands. It has the ability of autonomous walking and automatic obstacle avoidance, providing customers with the benefits of reducing costs, improving efficiency, improving safety and other aspects.



长/宽/高(mm)	1095*628*904
整备质量 (kg)	115
货舱容积 (L)	>110
<b>电机</b>	
额定功率 (kw)	0.752
峰值扭矩 (N.m)	20
最高速度 (km/h)	20
<b>电池</b>	
容量 (kwh)	2.5
类型	磷酸铁锂
充电电压	220V交流电
充电时长(H)	1.5
续航里程(KM)	40

## 2.4 Agency product category outdoor robot DR-

### 3

DR3 is an unmanned intelligent robot designed for outdoor design with the ability of multi-scene errands. It has the ability of autonomous walking and automatic obstacle avoidance, providing customers with the benefits of reducing costs, improving efficiency, **improving safety and other aspects.**



#### 悬架、制动系统

驱动形式

轮毂电机后驱

制动系统

电磁刹车

悬架系统

阿克曼底盘

轮胎规格

真空充气公路胎

#### 设计与装备

LED近光灯

√

LED尾灯

√

智换货舱

√



## 2.4 Agency product category outdoor robot DR- on

3

DR3 is an unmanned intelligent robot designed for outdoor design with the ability of multi-scene errands. It has the ability of autonomous walking and automatic obstacle avoidance, providing customers with the benefits of reducing costs, improving efficiency, improving safety and other aspects.



最小转弯半径 (mm)	2500
爬坡度数	15°
最小离地间隙 (mm)	124



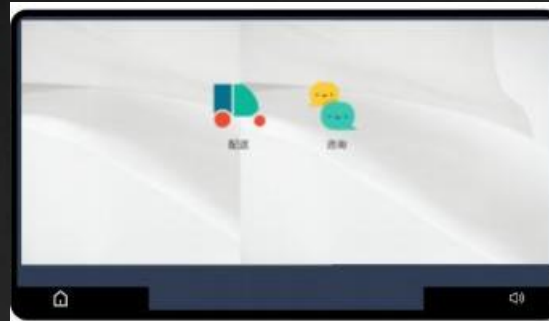
## 2.4 Agency product category outdoor robot DR- on

3

### Preparation before autonomous driving

Before preparing for autonomous driving, the remote control robot goes to the designated outdoor parking point, so that the car can receive the satellite signal.

Click on the delivery of the screen to start the intelligent driving system, this process is about 60~120s. After the system is successfully started, it will enter the interface of task planning (below 3), indicating that the car is ready to perform the autonomous driving task.



## 2.4 Agency product category outdoor robot DR-3 Use the mobile App to initiate tasks





## 2.4 Agency product category outdoor robot DR- on

3  
Shipping, task to complete the unpacking pickup, process voice interaction





**Products are developing, overloaded cars over 100 KG and automatic cleaning robots**



**03**

Part

**VFTest** Customer case

## 3.1 International market



South Korea abnexo electronic universal testing machine, electro-hydraulic servo fatigue testing machine  
Turkish company Akasan company straightening machine  
MEM Mexico  
Creep test machine and fatigue test machine of Russian Trip company  
Ukraine company electronic universal test machine relaxation test machine  
Biss Creep testing machine

## 3.2 Domestic market



Shenyang Institute of Metal Research,  
Chinese Academy of Sciences  
Harbin Institute of Technology  
JLU  
Central South University  
Wuxi Ambo Auto Parts Co., LTD  
Jilin Research Institute of High-entropy  
New Materials  
Jilin Wall Test Equipment Co., LTD  
Jinan East Test  
Geely Automobile  
CRRC Jiufang Equipment



**04**  
Part

**VFTest** after-sale service

## 4. After-sales service

---

01

Professional engineers and technicians provide installation, commissioning and training worldwide

02

Dealers shall provide after-sales service in key countries

03

Reasonable after-sales service price

04

For the 24-hour remote assistance



**VFTest**

We wish you a great success!

