

**Ginlan Electric  
Apparetus Manufactor**  
**全数字式电子汽车衡**



宁波精联电子衡器制造有限公司

## Introduction 企业简介



厂房外景 a tour outside our factory

宁波精联电子衡器制造有限公司是一家集科研、开发、制造及经营工业、商业衡器的专业化公司。公司主要开发制造 SCS系列全电子汽车衡、GL系列电子台秤、GL系列平台秤、GL系列电子吊钩秤、GL系列配料系统、称重管理软件系统和机械秤电子化改造。

公司注重企业形象，不断努力打造“精联”品牌。宁波精联电子衡器制造有限公司全体员工将以优质的产品、完善的售后服务、强有力的技术支持满足市场和用户的需要，以回馈广大用户对我们的支持和厚爱。我们欢迎各界用户、合作伙伴公司光临指导！

Ningbo Ginlan Electric Weighing Corporation specialize in commercial weighing apparatus,with scientific research ,exploiture,manufacture and management all-in-one. the corporation mainly develope and manufacture SCS series electric truck scale ,GL series electric platform scale , GL series platform scale , GL series electric crane scale ,and GL series batching system and weighing management software system and machinery scale eletron alteration . The corporation pay attention to image.make great efforts to inaugurate "Ginlan" brand.The staff in Ningbo Ginlan Electric Weighing Corporation will satisfy the customer and market with favorable products ,good after service and cogent technique in order to appreciate customer's affection. Welcome all circles consumer and cooperated partner to our corporation.

## Certificate.cervice 证书&服务

服务目标 Service goal 零投诉 Zero complain

服务项目 Service item 安装测/定期检修/维修保养/大中修理/机电改造/技术升级  
Installation test, routine examine, equipment maintain Repair, equipment making over, technique update



服务体系 Service system 生产部移交产品 → 技术部安装调试 → 售后服务部管理 → 用户信息反馈 → 售后服务部 → 技术部 → 技术员上门服务  
delivery of the products from the plant → testing and installation of the technique department → after service administration → feedback → after service department → technique department → technician's home service

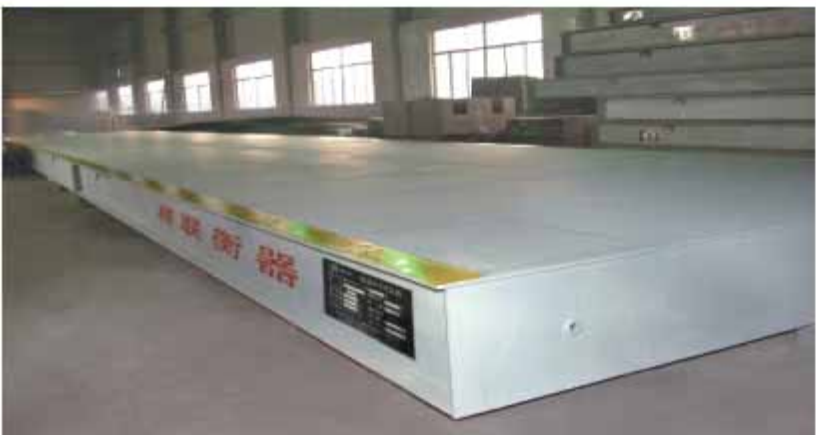
服务宗旨 tenet of service 用技术保证质量 用服务完善产品  
Quality guaranteed by technique, and be perfect by service.

服务承诺 Service promise 用户距本公司200公里以内，24小时内上门服务在保修期限内由于产品质量原故，免收一切费用在保修期限外由于产品质量原故，要收取工本费。  
24 hours home service while the user is around 200 km. Free of repairing if due to the quality under guaranty only charge the cost after guaranty.

服务联系电话 Service line 售后服务部：0574-86902636-8888, 0574-86902672 传真：0574-86904968 24小时服务热线：13566587875  
联系人：方先生 After service department: 0574-86902636-8888, 0574-86902672 Fax: 0574-86904968  
24 hours service line: 13566587875 Contact: Mr. Fang



## 全数字式电子汽车衡



## Blocking platform digital truck scale SCS全电子汽车衡（数字式）

产品详细说明：Product Details:

数字式电子汽车衡称重准确度高，系列化模块秤台，易于校准和四角调整，自动复位传输距离远、抗干扰能力强，可配接计算机、打印机、大屏幕。人机对话、键盘设定/校正、防雷击保护，防浪涌电压保护。

The digital electronic truck scale has a high accuracy, series platform, easy to calibrate and adjust the four corners, automatically reset, has a long transporting distance, strong anti-interference, can access series computer, printer, large screen.

SCS系列电子汽车衡是我公司生产的第三代汽车衡，秤台结构采用槽钢截面组焊，整体钢度、抗扭性能及台面的局部钢度都有很大的改进，秤台设计模块化、标准化、系列化，可以自由组成多种规格。

SCS series of electronic truck scale it is our company's third-generation truck Balance structure of the channel section by welding, and the overall hardness of steel, torsional performance and hardness of the surface there is a partial improvements throughout the product design using a modular, standardized and serialized, free group a variety of specifications.

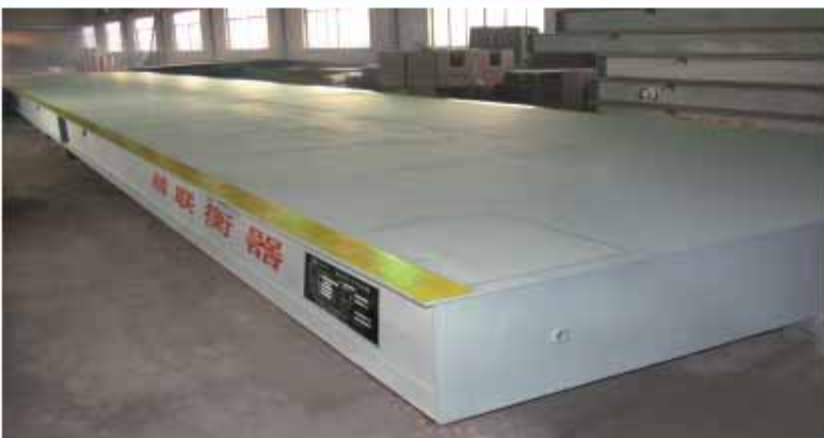
SCS系列电子汽车衡选用高精度的桥式或柱式称重传感器和功能丰富、存储功能强的称重显示仪表组成多功能的称重计量系统。整个汽车衡系统计量性能优越、准确度高、长期稳定性好、安装测试维护方便。广泛应用于粮仓、工厂、货场、仓储码、车间、港口等场合的进出物资计量、生产监控及数据管理。适用于各种载货卡车、挂车、半挂车、集装箱车等车辆的称重计量。

SCS series of high-precision electronic truck scale use of the bridge column or weighing sensors and feature-rich, highly functional storage Weighing Display Instrument of the weighing-metering system. The Truck superior performance measurement systems, high accuracy, long-term stability, and installation of test maintenance convenience. Widely used in silos, factories, warehouses, storage yards, workshops, the port field And from the measurement of materials, production control and data management. Apply to all cargo trucks, trailers, semi-trailer, container trucks and other vehicles weighing measures.

量程规格 Model	台面尺寸 Platform size	分度值(kg) Division(kg)	精度 Precision
SCS-10t-20t	2.4*4.5m 2.5*5m	2	
SCS-30t-40t	3*7m 3*8m	5	
SCS-50t-60t	3*12m 3*14m	10	静态 0.1ML
SCS-70t-80t	3*14m 3*16m	10	
SCS-80t-100t	3*16m 3*18m	10	
SCS-120t	3.2*18m 3.5*18m	10	
SCS-150t	3.5*18m 3.5*21m	20	



## 全数字式电子汽车衡



适用电源 Applicable Power: 220V50-60HZ;

安全系数 Safety factor: 150%MAX

停电备用电瓶 Stand by battery power outage: 12VDC

- 1, the user make construction must to be according to the civil construction drawings, there is open sewer and grounding line.
- 2, vehicles traveling in and out must be taken into account in the choice of based location, loadometer can maintain a straight line.
- 3, non-professional and technical person is prohibited to demolition and repair.
- 4, overloading is strictly prohibited.
- 5, the region of voltage instability must be equipped with a voltage regulator.
- 6, the truck is strictly prohibited to use the road, conditional requirements with railings.
- 7, in the choice of an external configuration, accessories must meet the configuration requirements of loadometer manufacturers.
- 8, in the choice of weighing software installation, which must be consistent configuration of loadometer manufacturers.
- 9, as a standard measurement equipment, it is prohibited individuals from changing weighing accuracy.
- 10, Handicapper must read carefully and understand all the specification requirements of instruction.

## Blocking platform digital truck scale SCS全电子汽车衡（数字式）

使用说明：Use:

- 1, 用户必须按土木施工图要求施工, 有通畅排水管道, 有接地线。
- 2, 选择基础位置时必须考虑到车辆进出, 地磅能保持直线行驶。
- 3, 严禁非专业技术人员拆卸或维修。 4, 严禁超载。
- 5, 电压不稳定区域必须配备有稳压器。
- 6, 严禁把汽车衡做交通道路使用, 有条件的要求配备栏杆。
- 7, 在选择外接配置时, 配件必须符合地磅生产厂家配置要求。
- 8, 在选择安装称量软件时, 必须和地磅生产厂家配置一致。
- 9, 作为标准计量器具, 严禁个人私自改变称量准确度。
- 10, 施磅员上岗前必须认真阅读并理解使用说明书各项要求。



## 秤体结构



**精联秤体：**采用槽钢结构焊接而成，具有耐冲击，抗负重防腐之功能。焊材采用造船业专用焊条，按桥梁设计原理施工，有效保证了作为承受负重支架平台的优良性能。

Ginlan scale: The structure of the channel welded together, with the function of impact resistance and anticorrosion. Welding consumables used ship building Industry dedicated electrode, by bridge construction of design principles, which can guaranteed that the scaffold platform under load can make excellent performance effectively.

## Scale Structure

Structure comparison between Channel scales and the U-shaped steel scales:

### 槽钢秤体与U型钢秤体结构对比：

- 1, 槽钢秤体支架为槽钢，由钢厂生产过程中一次性成型；U型钢秤体支架为板材，其板材由衡器厂家人工折弯成U型支架。
  - 2, 槽钢秤体结构已经使用数十年，结构合理，性能稳定；U型钢秤体结构则近几年刚刚投放市场。
  - 3, 槽钢秤体内部结构有横隔板进行支撑；U型钢秤体则没有。
  - 4, 槽钢秤体底部有封板，起到张力作用；U型钢秤体没有封板。
  - 5, 同一型号的槽钢秤体自重要多于U型钢秤体，强度要高于U型钢秤体。
- 1, channel steel stent for the scale of the channel from the one-time steel production process molding; U-steel stent for the scale of the plate, sheet manufacturers from Weighing artificial bending into a U-shaped stand.
  - 2, the channel structure weighing has been the used in several decades, structure is reasonable, performance stable; U-shaped steel structure, weighing has put on the market in recent years.
  - 3, the internal structure of the channel weighing is supported by a diaphragm; U-steel body is not.
  - 4, at the bottom of weighing has closure plate, can play a tension role; U-steel plates is not.
  - 5, the same type of channel scales weigh more than U-steel body, intensity is higher than that of U-steel scales.

## 数字式称重传感器



## Digital Load Cell

### 数字式传感器

产品详细说明：Product Details:

可用于汽车衡、轨道衡、料斗秤等计量系统中

Can be used in car weighter, orbit weighter, hopper weighing, measurement system.

传感器内部有高精度A/D转换模块和CPU处理器。总线结构：标准的RS485信号输出，传输距离可达1200m，电磁兼容强。传感器的非线性和温度性能参数采用数字化自动补偿。更换传感器时不需重新对秤进行校准。数字化使电子衡器的偏载（四角误差）校准自动完成，可实现多台秤联网和远程控制。

A/D module and CPU in the load cell. Bus structure :RS485 serial interface, the transmitting distance is more than 1200 meters, electromagnetism compatibility is strong. Realizing self compensation of data such as non-linearity and temperature performance by digital technology. No needing calibrating the scale after changing load cell. It's digital technology enables corner calibration of electrical truck scale to be finished in one time; May units network and remote control.

采用数字技术，优化提高传感器的各项性能指标，直接输出数字信号。

Load cell manufactured by Board company can directly output digital signal by using digital technique to enhancing various performance index.



# Digital Load Cell

## 数字式传感器

数字式称重传感器：采用优质合金钢制作而成，密封不锈钢激光焊接技术，内充保护气体保护内部电路可靠工作，防护等级达到IP68。增加了各种保护电路和防雷击设计，对仪表提供的电源先进行处理，稳压后再用于电桥的激励，就消除了来自电源和雷击的浪涌干扰，使得传感器输出稳定的信号，保证了传感器的正常工作。

Digital Load Cell: high-quality steel produced by sealed stainless steel laser welding technology, the protection of the gas filling reliable protection of the internal circuitry, level of security to IP68. Add to the variety and anti-lightning protection circuit design, the first instrument to provide processing power, voltage regulator for the bridge after the incentive, to eliminate from power surges and lightning of interference, making The sensor output signal stability and ensure the normal operation of the sensor.

### 传感器标准技术数据参数 Sensor data parameters of Standards and Technology

型号 Model: QSD-T

额定输出 Rated Output : 3000Div

综合误差 Total Error: 2/3000Div

蠕变 (30分钟) Creep (30 minutes):  $\pm 0.02\%F.S/30min$

最大工作电压 Maximum Excitation Voltage: 20VDC

工作温度范围 Operating Temperature Range:  $(-30\sim+80)^\circ\text{C}$

防护等级 Protection Class: IP68

引用标准 Citation: OIML R60 GB/T7551

传输距离 Transmission Distance: 50~1200m

通讯协议 Communication Protocol: BDM-KEN-01

## 数字式仪表



## XK-3190-DS1 Digital Instruments

### XK-3190-DS1 数字式仪表

#### 产品详细说明：Product Details:

- 1, 采用RS485标准接口与数字式传感器实现通讯,最大信号传输距离达1200米;
- 2, 可直接通过仪表进行偏载调节(四角调整);
- 1, Using Rs485 standard interfaces interface and digital sensor communications, the biggest signal transmission distance of 1,200 m ;
- 2, Directly through the instrument panel contains a partial adjustment (Four-way adjustment);
- 3, 能自动对单只传感器寻址并读取数据,可判断多只传感器组秤时受力是否均匀;
- 3, Can automatically on the single sensor reading and addressing data can be judged only multi-sensor, the group weighed whether all of Absorbed,
- 4, 可在现场更改传感器编号,即具有自动故障诊断功能;
- 4, The scene changes in the use of sensors code, as well as with automatic fault diagnosis function;
- 5, 可储存810条记录,预置皮重200辆,断电时数据保护时间50000h;
- 5, Can store 810 records, 200 preset tare weight, power the time when data protection 50000 h,
- 6, 内置不间断时钟功能; 6, Built-in uninterruptible clock function;
- 7, 可外接16只数字传感器; 7. Can be connected to external 16 digital sensors;
- 8, 可设置零点跟踪范围和置零范围; 8, Can be set up and the scope of home Zero;
- 9, 串行通讯接口有电流环,RS232等信号,可同时与大屏幕和PC机连接工作.
- 9, Serial communication interface with current loop, RS232 signal, and at the same time with the big-screen PC connectivity work.

## XK-3190-DS1 Digital Instruments

### XK-3190-DS1 数字式仪表

#### 数字式称重仪表:

作为数字式传感器输出信号接收仪表，具备了静态-动态信号接收功能，配备有交直流两用，方便实用。数字仪表不但时刻监测各个数字传感器的工作情况，而且在发生某个传感器故障时，自动报警，定位故障传感器。另外，数字仪表还可以计算出各点的角差系数，可自动进行角差调整，免去了反复加载砝码的麻烦，提高了效率。

#### Digital Weighing Instruments:

As a digital sensor output signal reception instruments, and with the static – dynamic signal reception, equipped with AC-DC dual-use, convenient and practical. Digital Meters not only time monitoring All digital sensors work, but in the event of a sensor failure, automatic alarm, positioning sensor fault. In addition, the instrument can also calculate the angular deviation coefficient point, since Fixed a bad angle adjustment has repeatedly dismissed from the trouble of loading weight and improve efficiency.

#### 仪表标准技术参数: Instrumentation standard technical parameters:

型号 Model: XK3190-DS1

准确度 Accuracy: III级, n=3000

转换原理 Principle conversion:

双积分式 Double integral A/D

输入信号范围 Input signal range: 0~18mV

转换速度 Conversion rate: 10~15次/秒/ Sec

A/D转换分辨率 Identify code conversion: 50万码

非线性 Nonlinear: < 0.01%F.S

串行通讯接口 Serial Communication Interface:

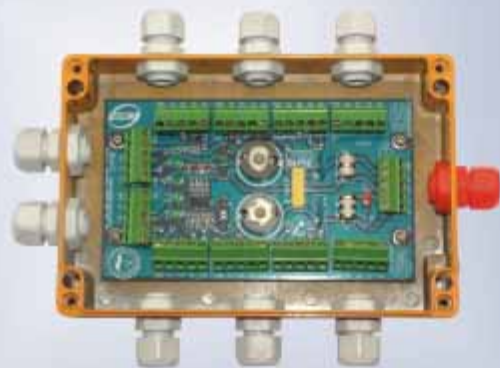
RS232/RS422 (选配 Matching)

零位调整能力 Zero ability to adjust: ±100%F.S

工作温度 Temperature: 0°C~40°C



## 数字式接线盒



## Digital Junction Box

### 防浪涌数字式接线盒

产品详细说明：Product Details:

可以接1-10只数字传感器，能保护传感器避免遭到超过20V以上的强电压、浪涌、核电磁脉冲及射频干扰从而提高了衡器系统的可靠性；

1-10 accessible only digital sensors can protect sensor from more than 20 V over-voltage surge, nuclear Radio frequency interference and electromagnetic pulse to improve the reliability of the weighing system;

产品采用陶瓷气体放电管/压敏电阻/瞬态抑制二极管/防雷电感，能够对电路产生的瞬变过压进行短路、分流、泄放；铝合金铸造外壳，进口密封接头，耐用、密封性好；

Products using ceramic gas discharge tube / Varistor / transient suppression diode / mine inductance, the circuit can blink Changed pressure to short-circuit, diversion, relief; cast aluminum shell was made imports sealed joints, durable, sealing well;

外型尺寸 Shape and size: 180 × 120 × 40

连接方式 Connections: j4\j6\j8\j10

## 电子汽车衡升级



图A:称重管理软件 Figure A: Weighing management software

## Analog-digital workflow upgrade 模拟式升级数字式工作流程

产品升级说明: Description product upgrades:

二台衡器协同工作,二台电脑既是工作机又是服务器,或设为共享一台服务器,也可建立在互联网上,可实现远距离控制和查询。

Two Weighing can work together, two computers are working machine and server also, or set to share a server, can be established on the Internet, can be realized Control and enquiries in distance.

在下图B中:电脑1和电脑2通过交换机联接并通过它连接互联网,这样任何一台能上网的电脑将可通过互联网访问电脑1和电脑2,实现无时间无地域的限制。在联网是应注意如下问题:(明确内部网和互联网)

B figure below: computer 1 and computer 2 through switches and connectivity through its connection to the Internet, so any one can be available, via the Internet, then achieve freely without geographical constraints. Take attention to the following issues about networking: (specification between internal networks and the Internet)

1, 电脑1或电脑2到交换机的联接距离限制为:双胶线120M,光缆理论上无限制(但成本很高)。

1, The distance of connect computer 1 and computers 2 with the switch is limited to: influence of plastic line 120 M lines, fiber optic cable theoretically unlimited (but high cost).

## 模拟式升级

# Analog-digital workflow upgrade

## 模拟式升级数字式工作流程

产品升级说明：Description product upgrades:

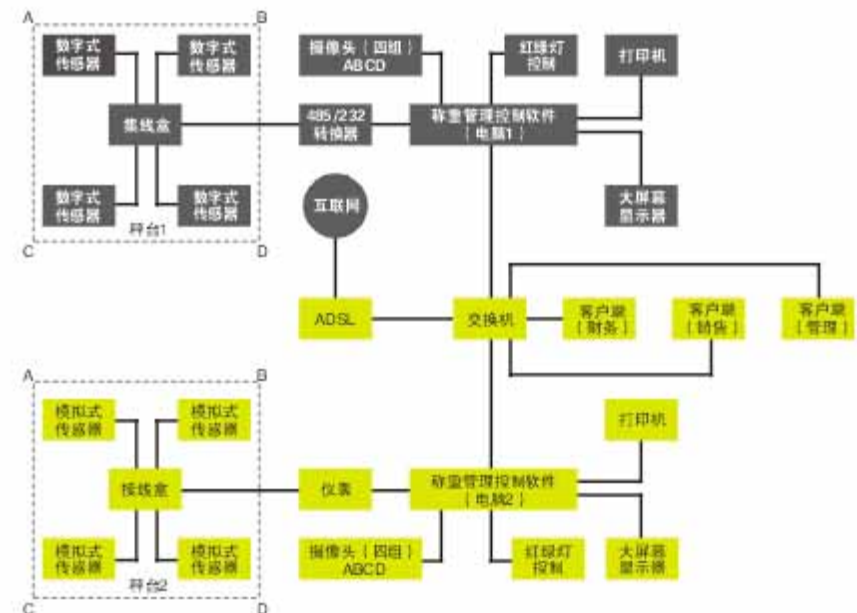
2, 以上均需布线, 或利用用户单位原先的网络。 2, The above require wiring, or using the original network user units.

3, 如因地域限制等原因, 不能采用双胶线, 又担心光缆的成本, 可变通为电脑1和电脑2各自均联接互联网, 它们可以通过电话线, 无线局域网, 无线网卡 (CDMA)。

3, It can not be used influence of plastic line because of geographical constraints and other reasons, it is also worried about the cost of fiber optic cable, computer 1 and computer 2 each have to connect Internet, which can be through telephone lines, wireless LAN, wireless LAN CDMA.

监控系统的储存方式可静态 (称量时自动拍摄) 或动态储存, 动态储存时的储存量由电脑的硬盘大小控制, 如四十天的储存量, 四组摄像头, 硬盘的容量不得小于100G。

Monitoring the storage system can be static (shooting automatically when weighing) or dynamic storage, Dynamic storage is limited to the capacity of computer hard disk, such as the storage of 40 days, four cameras, and the capacity of hard disk not less than 100 G.



图B:模拟式升级数字式工作流程图 Figure B: analog-digital upgrade workflow chart



## 数字式与模拟式对比



## Digital and analog electronic truck scale comparative advantages

### 数字式与模拟式电子汽车衡优点对比

- 1, 可靠性高, 数字内核有保护电路  
High reliability, the digital core can protect circuit:
- 2, 有故障报警提示 A fault alarm Tip:
- 3, 角差容易调整 The angle difficult can be adjust easily:
- 4, 传输距离远, 通信速度快, 防止作弊效果显著  
The transmission distance is long, communication communicate quickly, there is significant effect in prevent from cheating :
- 5, 数字式电子汽车衡综合优势明显  
Digital electronic truck scale integrated obvious advantages: :

## 生产工艺流程:



## Production process

### 生产工艺流程:

工艺介绍: Processing:

#### 一、备料 Preparation

- |  |  |                |
|--|--|----------------|
| A 面板 panel                                 | 材质material GB713-1997                      | 钢板 Steel plate |
| B 支架 stent                                 | 材质material GB707-88, YB164-63A型            | 槽钢 Channel     |
| C 底封板 Closure at the end of plate          | 材质 material GB713-1997                     | 钢板 Steel plate |
| D 焊材 Welding material                      | 量船用的专用焊条 Marine dedicated electrode volume |                |
| E 数字式传感器 Digital Load cell                 |  |                |
| F 数字式仪表 Digital Instruments                |  |                |
| G 数字式电子接线盒 Digital electronic junction box |  |                |
| H 称重管理软件 Weighing management software      |  |                |
| I 大屏幕 big-screen                           |  |                |

# Production process

## 生产工艺流程：

工艺介绍：Processing:

### 二、生产 Production

秤体焊接设备 scale of welding equipment: A 自动金属切割机 metal cutting machine automatically

B 400-500型自动气体保护焊机 400-500 automatic gas welding machine for hoisting equipment

C 专用吊装设备 Hoisting equipment dedicated

D 钢板专用折边成型机 Plate dedicated fold molding machine

秤体油漆设备 Scale of paint equipment

A 0.9自动气泵 0.9 automatic pump B 表面处理专用打磨机 Grinding machines for surface treatment

C 油漆烘干设备 Paint Drying Equipment

### 三、总装 General assembly

根据电子衡器组装技术要求，由专业技术人员进行人工组装。According to technology of assemble electronic weighing requirements, work the manual assemble by professional and technical person.

### 四、检测设备 Testing Equipment

A 标准砝码 Standard Weight

B 专用吊机 Special cranes

### 五、出货前准备 Pre-shipment

根据产品型号，量程配备标准铭牌及使用说明书、合格证书等随货资料及附件。According to the model number, ranging with standard plaque and manual, certificate of competency, such as goods information and annex.



## Success Stories

### 成功案例



镇海天乐煤场 3.5 × 16m 80t



镇海天一煤场 3.5 × 16m 100t



亿利邦铝业 3-16m 100t



骆驼公用计量磅 3.2 × 20m 120t



中国路政 3.2 × 18m 100t



宁波德业科技集团 3 × 16m 80t

## Success Stories

### 成功案例



成业建设 3-12m 80t



三七市镇石料厂 3-12m 80t



上海世纪金缘 3-10m (双层带框) 80t



蓝天物资 3.2-18m 100t



宁波耀盛铝铜合金铸造有限公司 3x16m 100t



鑫远市政 3.5-16.5 120t

## Success Stories 成功案例 (更多案例请阅本样册内页)



永源混凝土 3.5-16.5m 120t



中国中铁 3-16 100t



长荣混凝土 3-16m 150t



慈闽建材 3-18m 150t

宁波精联电子衡器制造有限公司 Ningbo Ginlan Electric Apparatus Manufactor Co., Ltd.

地址: 宁波北仑书院工业园区 Add: Shuyuan Tech park, Beilun, Ningbo

电话Tel: +86-574-86902672 +86-574-86902652 传真Fax: +86-574-86904968 E-mail:sales@ginlan.com

网址Http://www.ginlan.com