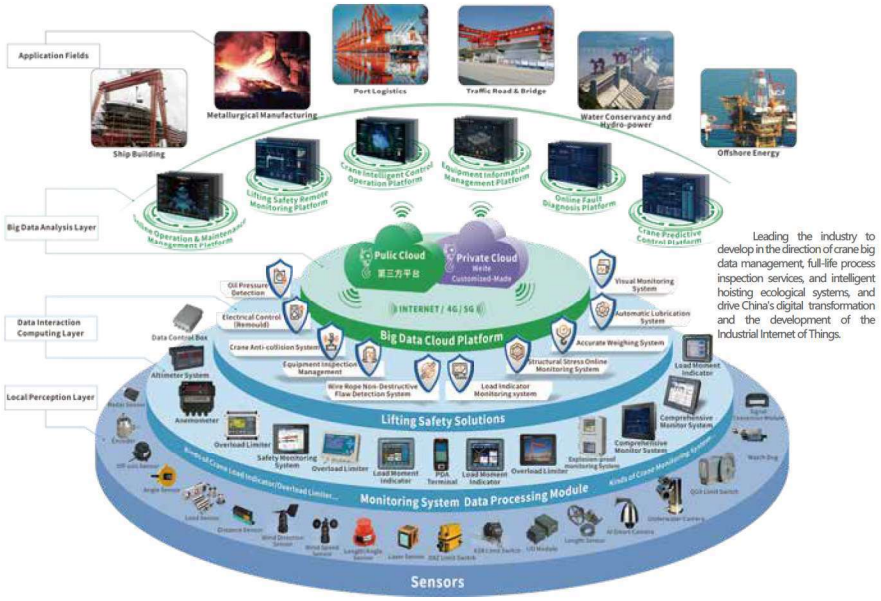
WEITE

Safe Load indicator & Related Solutions

For Worldwide Crane & Lifting Applications

WHAT WE CAN DO



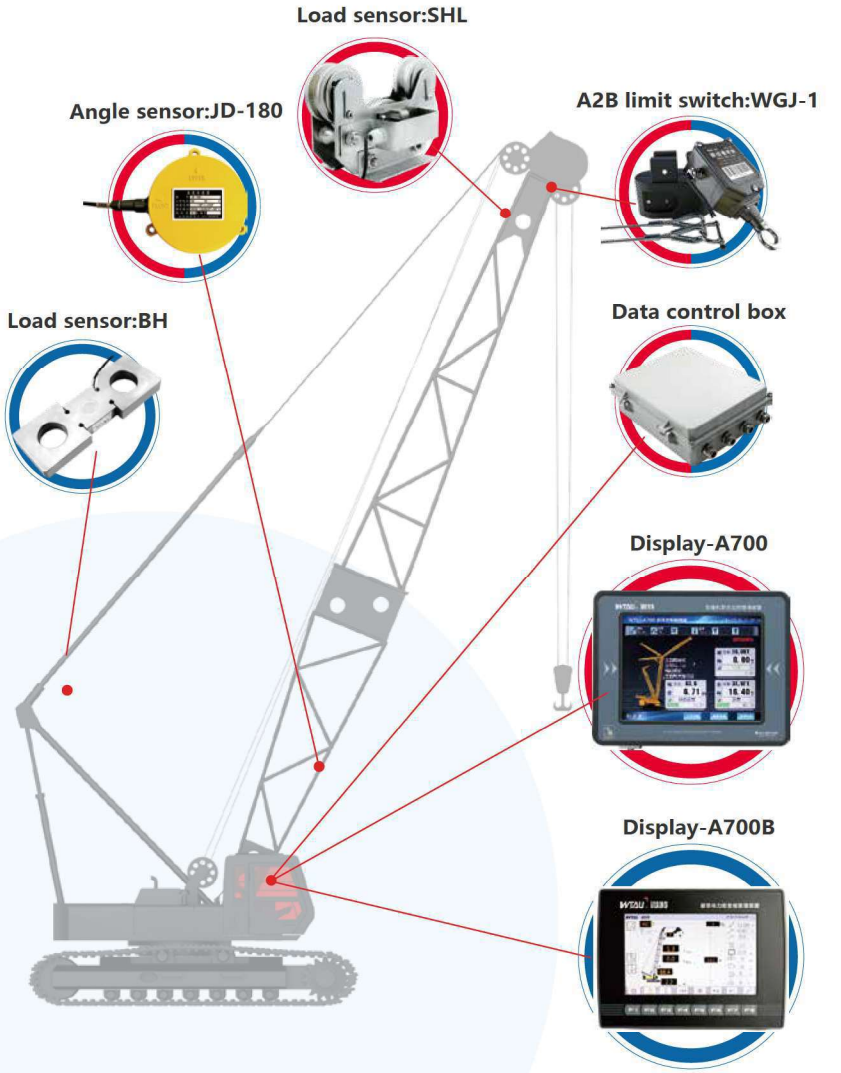
Leading the industry to develop in the direction of crane big data management, full-life process inspection services, and intelligent hoisting ecological systems, and drive China's digital transformation and the development of the Industrial Internet of Things.

Weite has always focused on research in the field of lifting equipment safety management, providing you with valuable security management solutions!

CATALOGUE

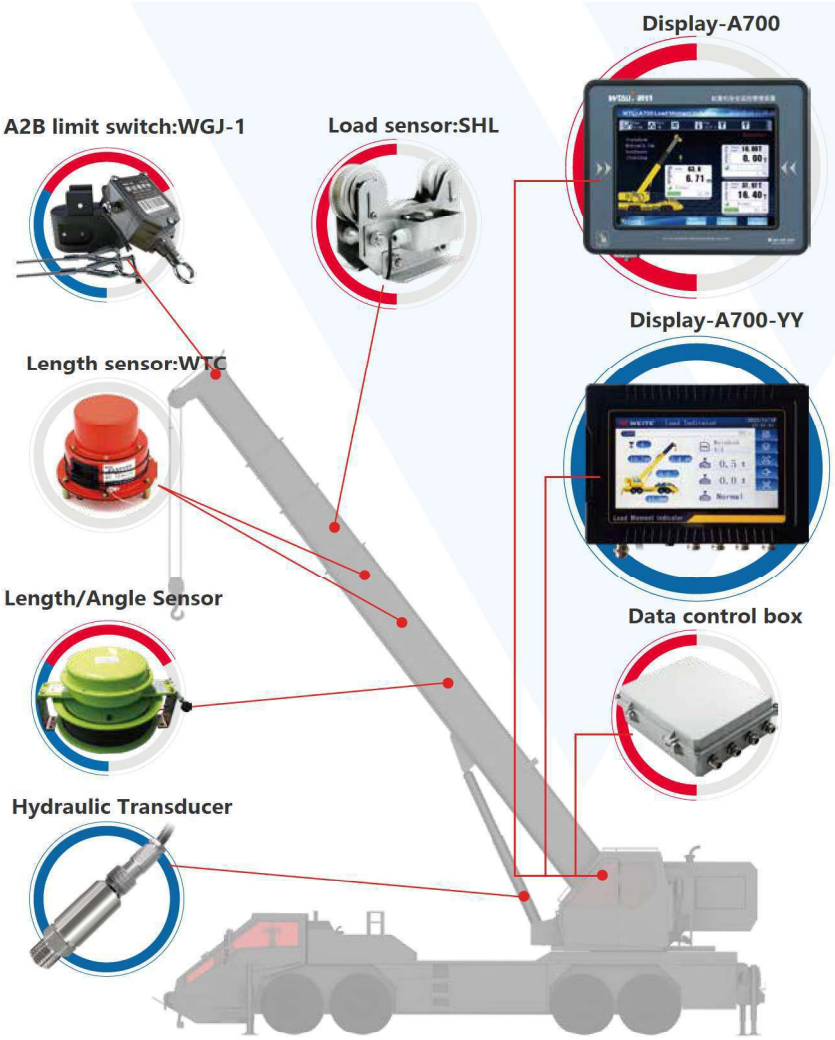
CRAWLER CRANE
LOAD MOMENT INDICATOR SYSTEM

DIRECT FORCE MEASUREMENT [SHL TYPE] 1	INDIRECT FORCE MEASUREMENT [PLATE RING TYPE] 2



MOBILE CRANE
LOAD MOMENT INDICATOR SYSTEM

SHL TYPE 1	HYDRAULIC LOAD SENSOR 2	MUILT-LENGTH SENSOR 3

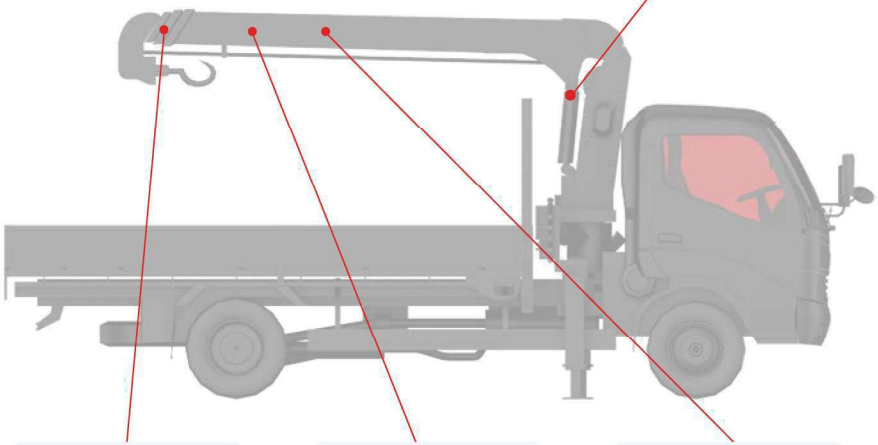


BOOM TRUCK LOAD MOMENT INDICATOR SYSTEM

SHL TYPE

Style No.	A200
Display	240*128
Operating temperature	-20℃~60℃
Operating humidity	95%(25℃)
Signal input	≤5 channels
Control output	Switching value 4~20mA / RS485
System composition error	≤±5%(F.S)
Power consumption	<35W
Alarm volume	>60db
IP grade	IP 64
Power supply	AC220V±10%

Display-A200



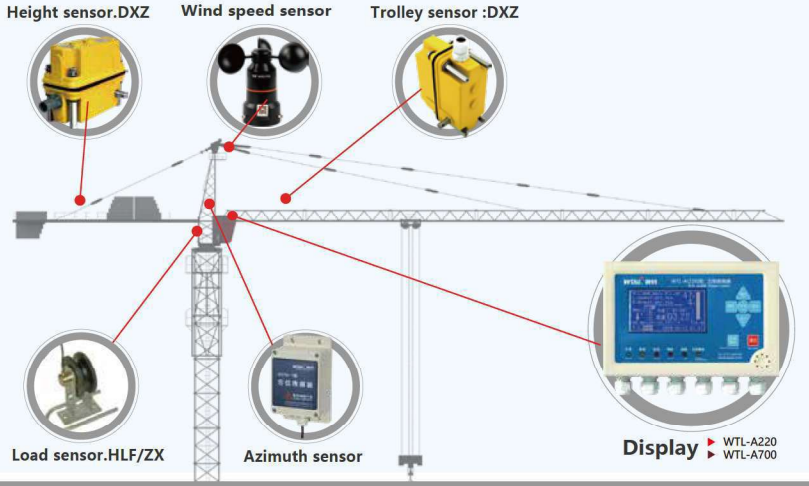
A2B limit switch: WGJ-1

Load sensor:SHL

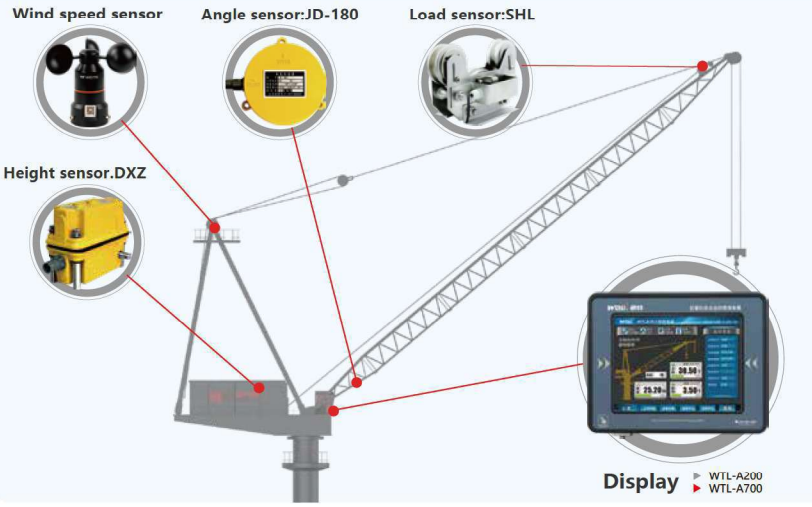
Length/Angle Sensor

TOWER CRANE LOAD MOMENT INDICATOR SYSTEM

HAMMER HEAD

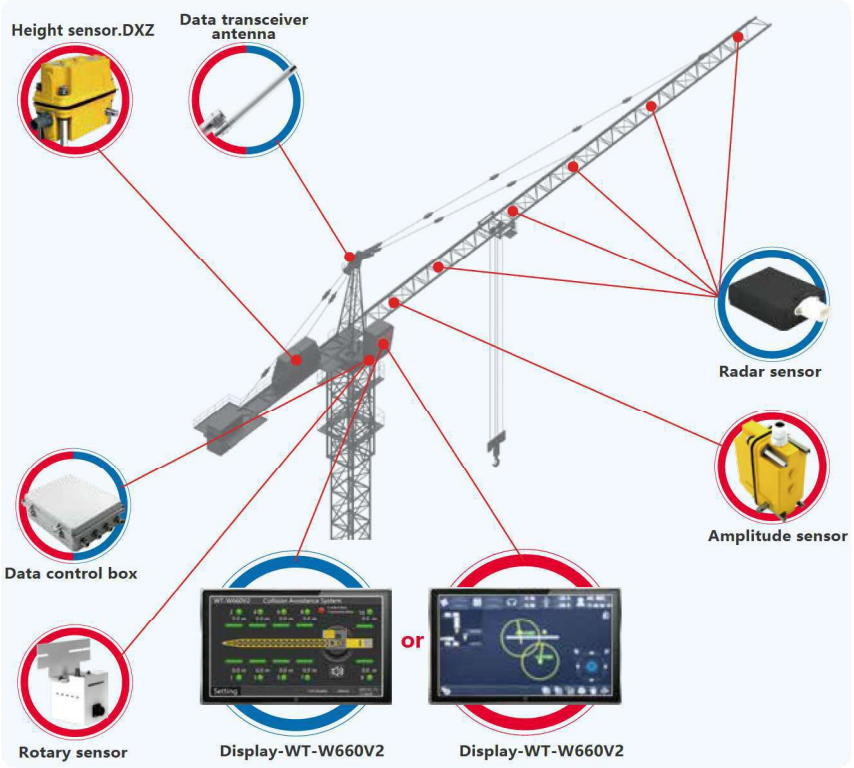


LUFFING BOOM



TOWER CRANE ANTI-COLLISION SYSTEM

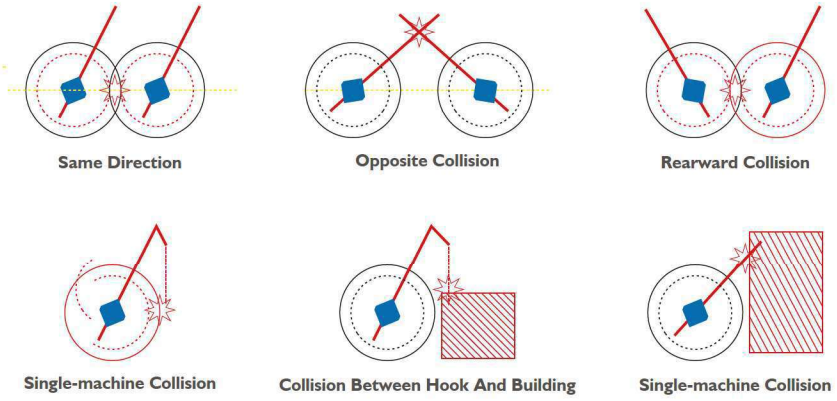
3D coordinate anti-collision 1 | **Radar sensor anti-collision** 2



The WT-W660V2 tower crane anti-collision management system is a comprehensive new instrument that integrates internet technology， sensor technology,embedded technology data acquisition and storage technology database technology and other hightech application technologies.

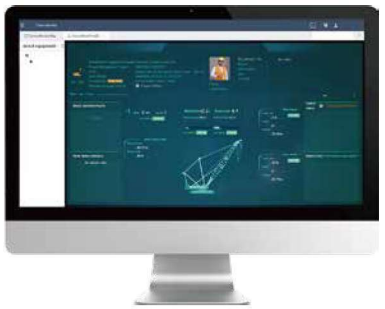
The new system of tower crane equipment's zone protection anti-collision system,adopting with the most advanced millimeter wave radar sensor design, it is the active detection of obstacles entering the detection area, sending alarm information to the cabin, ensure the operators reaction in time to avoid accidents or provide control signals to command the hoisting equipment directly. The data is connected by CAN signal and the data connection is stable. Detect horizonta obstacles and use data feedback to detect obstacles on both sides of the boom horizontally to prevent collisions with buildings and other lifting equipment.

Schematic diagram of collision relationship

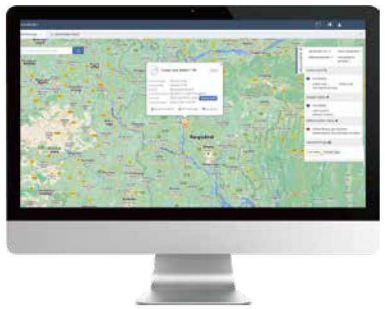


DATA REMOTE TRANSMISSION SYSTEM

Through the GPRS module, the data can be directly sent to the network server by using the mobile network(local SIM card), and the remote network monitoring can be realized for the running state ofthe device. Remotemonitoringis also implemented through the project's wire and wireless network conditional units, further remote transmission, remote monitoring, remote management, remote services, data, video query, data.video analysis,etc.It can be realized according to specific conditions and workneeds.

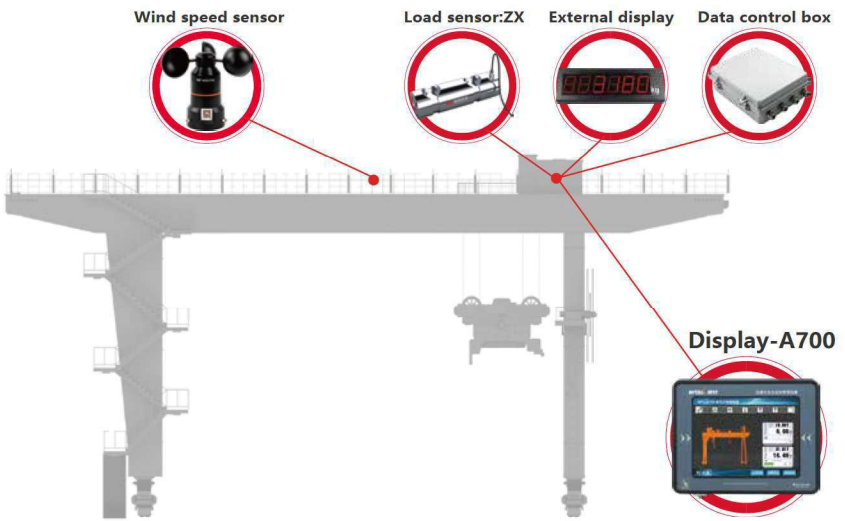


TRANSMISSION SYSTEM

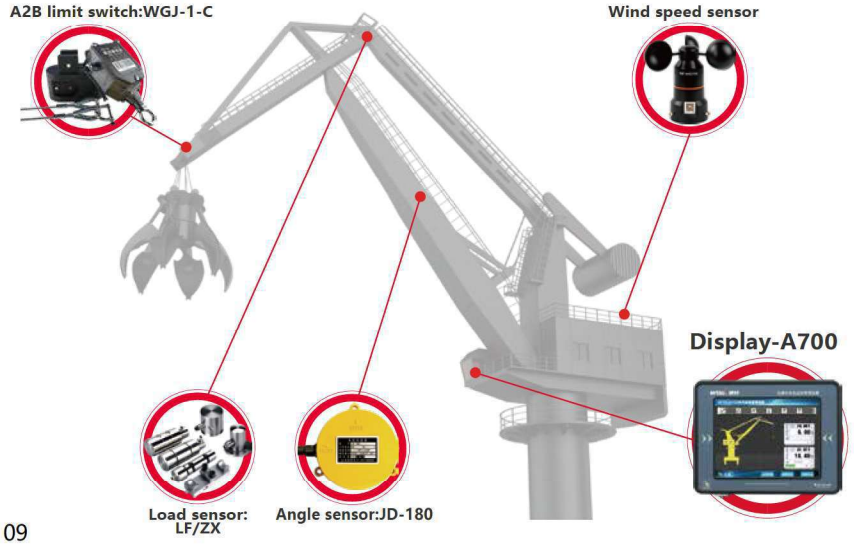


REMOTE GPS POSITIONING

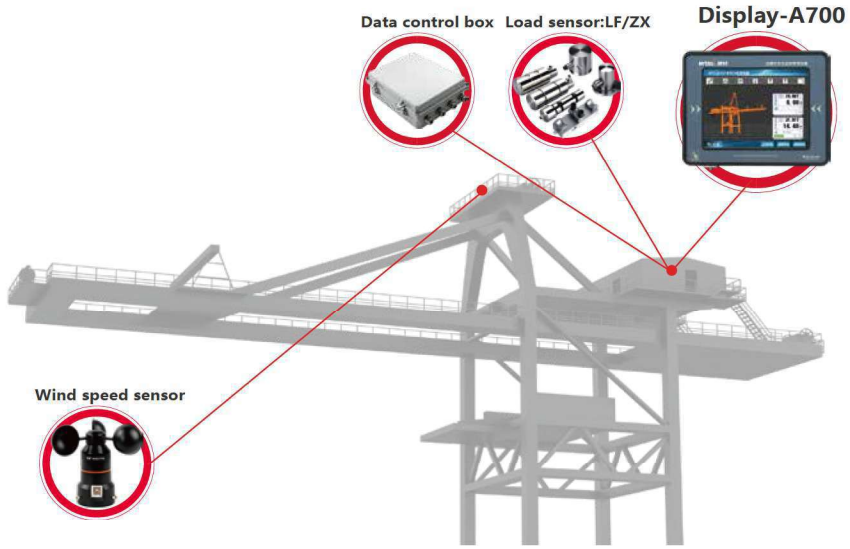
GANTRY CRANE OVERLOAD LIMITER SYSTEM



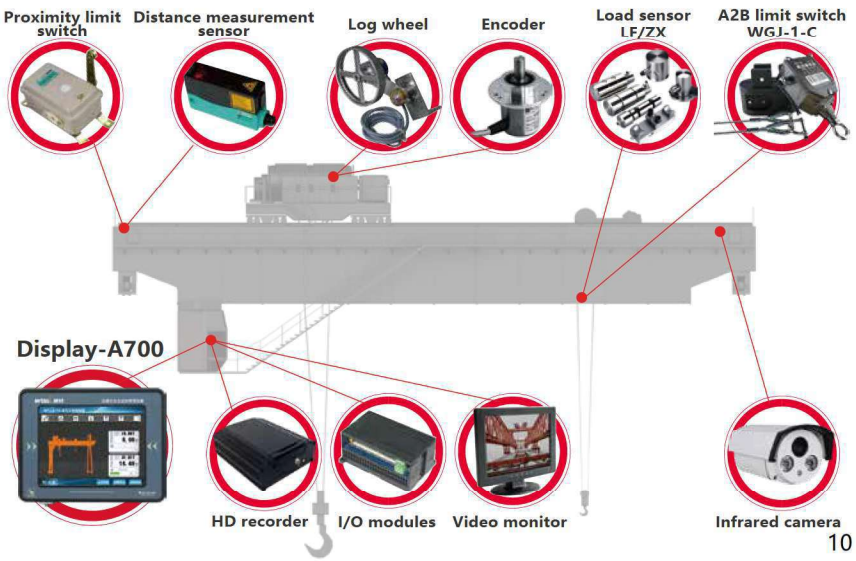
PORTAL CRANE LOAD MOMENT INDICATOR SYSTEM



QUAYSIDE CRANE OVERLOAD LIMITER SYSTEM

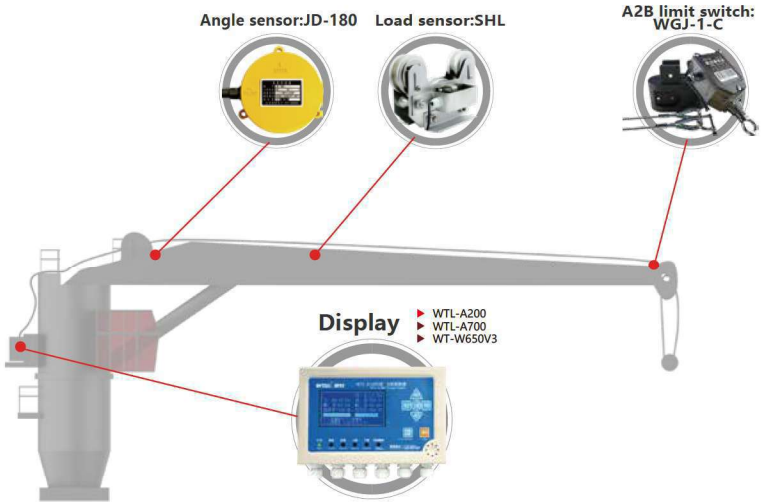


METALLURGICAL CRANE OVERLOAD LIMITER SYSTEM

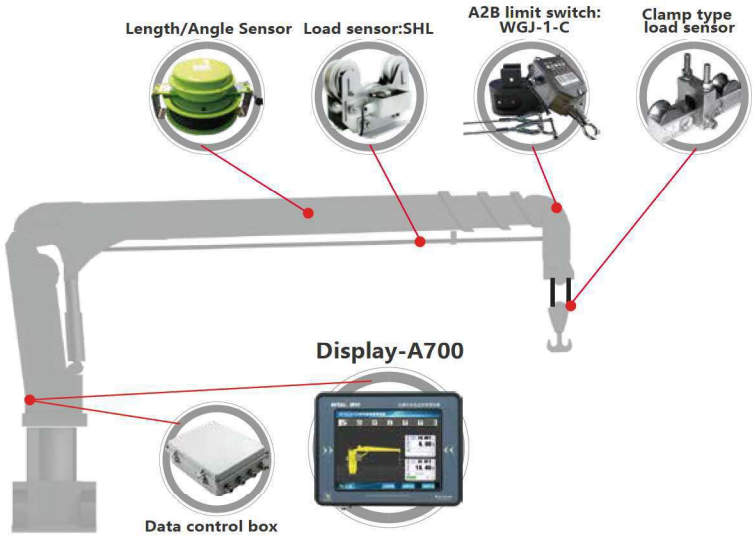


SHIP CRANE LOAD MOMENT INDICATOR SYSTEM

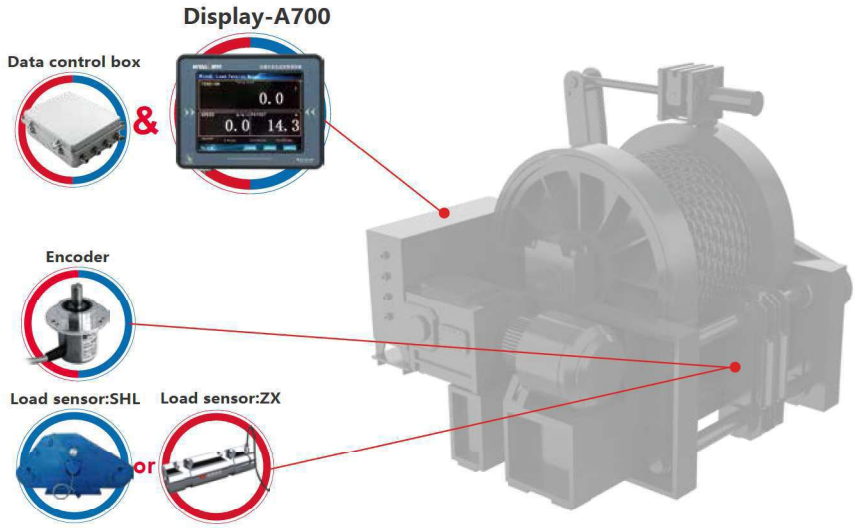
SOLUTION FOR FIXED BOOM TYPE



SOLUTION FOR TELESCOPIC BOOM TYPE



ANCHOR WINCH LOADING SYSTEM



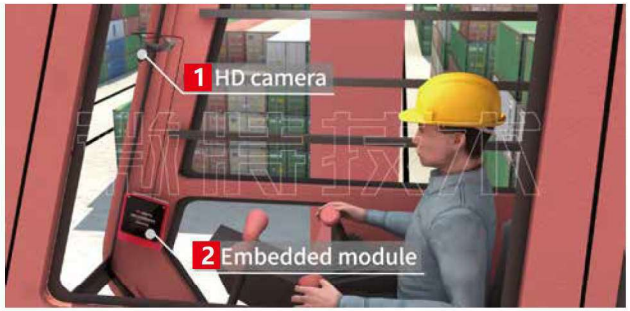
WIRELESS LOAD LINKS

- WS-BH radio signal transfer
- Internal antenna
- Linear construction
- 800 hours battery lifespan

- Simple battery replacement
- Capacity from 2 Tons to 200 Tons or customized ones
- Portable case available for capacity from 2.5 Tons to 50 Tons

Our answer to measurement of Tensile load in heavy industrial applications:
All our load links are manufactured from anodized aerospace grade aluminium, allied with our full O-ring sealing gives ingress protection of Ip67.

SELF-DEVELOPED NEW TECHNOLOGY



HD Camera

Embedded module

CRANE DRIVER FATIGUE & DISTRACTION WARNING SYSTEM

Weite developed a Crane Driver Fatigue and Distraction Warning System based on machine vision technology which can monitor the driver behavior in real time by a non-contact form, and timely alarm reminders.Our system uses smart cameras to monitor drivers in real time.Use graphics algorithm to analyze and process the driver's behavior image frame by recognizing the facial state of driver, body posture, using mobile phones or objects in real time. Through logical judgment and rule algorithm, determine whether the driver is fatigued or having abnormal operations such as making a phone call.

Crane Driver Fatigue and Distraction Warning System has 5 advantages

1.It has strong practicability and does not affect the normal work of the driver. After the device is installed, an alarm will be sent to remind the driver when there is an abnormal behavior,it will be quiet and noiseless in the rest of the time.

2.It has dedicated portrait infrared recognition camera with large view, high precision, reliable performance, etc.

3.High accurancy and fast feedback of the detection result . Using lightweight convolutional neural network to quickly extract driver's face information and body posture information, combined with target detection technology.

4.Modular design, fast restart. It can be used as a single product or connected to the system.

5.Easy to install and operate.

WIRE ROPE ONLINE INSPECTION SYSTEM

Steel wire rope is a key component for crane work. In hoisting accidents, wire rope breakage causes the accidents reach to 40%. The online monitoring system for non-destructive flaw detection of steel wire rope can prevent such accidents very well.

WT-WRNDT Series WIRE ROPE ONLINE INSPECTION SYSTEM is manufactured by Weite. Based on the basic principle of GMI metal magnetic memory effect, recording the distribution of the magnetic field intensity component perpendicular to the surface of the metal component along a certain direction , it can diagnose & evaluate the stress concentration degree of components and whether there are microscopic defects or not, then prevent sudden fatigue damage. It is a new method in the field of nondestructive testing.

Monitor various damage

Magnetic sensor test bench & standard / principle basis and evaluation

* Russian Гостр5 2012-2003 "Nondestructive Testing, Metal Magnetic Memory Method, Definition of Terms and Representative Symbols"
* стрнтсо000-04 "Welding of equipment and structures, metal magnetic memory method (metal magnetic memory detection)"
* стрнтсо000-04 has been suggested by the International Welding Institute as an ISO international standard
* The National Standard of the People's Republic of China GB/T26641-2011 "Nondestructive Testing Magnetic Memory Testing General Rules"

ACCESSORIES SERIES

PY Clamp type
Load sensor

Range: 0.05ton-500ton

Typical Applications: load sensing;

Transfer transportation system; wire rope pull strength measurement

Accuracy of measurement: 1.0±0.005mv/v

Ultimate overload: 250%F.S

IP Code: IP68

Safe overload: 150%F.S

Temperature range: —30℃～+70℃

SHL three pulley type
Load sensor

Range: start from 500KG

Typical Applications:load sensing;

Transfer transportation system; wire rope pull strength measurement

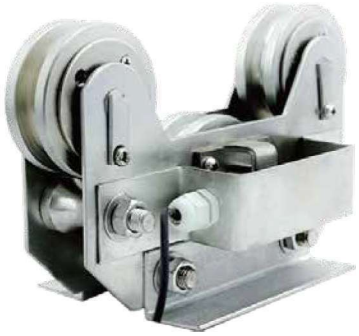
Accuracy of measurement: 1.0±0.005mv/v

Ultimate overload: 250%F.S

IP Code: IP68

Safe overload: 150%F.S

Temperature range: —30℃～+70℃



WFS-2
Wind speed sensor

Working voltage: DC12V~24V

Range: 0.1-60m/s

Accuracy: ＜30m/s±(0.5＋0.05v)

⩾30m/s±5%

Response time: 0.1m/s

Starting wind speed: ＜0.1m/s

Temperature: -20～＋70℃

Response time : ＜0.5s

Signal output : 4~20mA/0~5V/Rs485

WFX
Wind direction sensor

Working voltage: DC12V~24V

Output singal: 4-20mA or Rs485

Starting wind speed: 0.5m/s Range: 16 directions(360 degrees)

Resolution: 22.5°（WFX-2）1°（WFX-4）

Response time ：＜0.5s

Working temperature: -20~+70 °C

ZX pin type
Load sensor

Range: start from 500KG

Typical Applications: Industrial weighing; manufacturing automation; wire rope pull strength measurement

Accuracy of measurement: 1.0±0.005mv/v

Ultimate overload: 250%F.S

IP Code: Ip68

Safe overload: 150%F.S

Temperature range:—30℃～+70℃

BH Plate-ring type
Load sensor

Range: start from 500KG

Typical Applications:load sensing;

Transfer transportation system; wire rope pull strength measurement

Accuracy of measurement: 1.0±0.005mv/v

Ultimate overload: 250%F.S

IP Code: IP68

Safe overload: 150%F.S

Temperature range: —30℃～+70℃

QGX
Height limiter

Working Conditions and Performances:

1. Working temperature: -35℃～+60℃;

2. Rated voltage : AC380V;

3. Rated current : 10A;

4. Rated lifting height:

(1) QGX-A : Effective working cylinder number 0～40 circles;

(2) QGX-B : Effective working cylinder number 0～80 circles;

(3) QGX-C : Effective working cylinder number 0～120 circles;

5. Limit switch: Four limiters of adjustable limit position.

WGJ-1-C
A2B Imit switch

it is a mechanical automatic protection switch used to prevent overwinding of the crane wire rope which is equipped with a heavy hammer of appropriate weight.Lift or lower the hammer with the up and down motion of the hook,which can disconnect or turn on the switch.It realizes the automatic cutting off the power supply of the windlass and prevent the wire rope from overwinding.

Adapter power: DC12V -- AC380V
Rated current: 5A

IP Code: IP65

Weight of the hammer:≥1.7kg

JD-180
Angle sensor

Model No. : JD-180(L/R)

Element: CPP

Working voltage: DC15V

Range: -10°~+110

Impact resistance: 20g 15~20ms

Rated output: DC3~6.9V/0~90°

Humidity requierements: 10-95%

Water resistance: waterproof type, Ip67

Linearity: 0.05、0.1、1%

Temperature requierements: -20~+70℃

DXZ
Limit switch

Working voltage: DC 5-15V

Temperature:-40℃-55℃

Relative humidity : ≤90%

Altitude : ≤2500M

Ration : 1:13-1:960

Repeat positioning accuracy : Memory cams angles＜0.005rad (0.3°)

Contact capacity: AC:380V

Sensor (potentiometer) W Standard resistance5kQ,independentlinearity 0.1% Mechanical angle 360(continuous).

WEITE

WTL-A700
Display

Model No. : WTL-A700

Screen size:8inch LCD

Operating temperature:-20℃~70℃

Operating humidity:95%(25℃)

Signal input:≤6 channels

Control output:≤8 channels

System composition error:≤5%(F.S)

Power consumption:＜30W

Alarm volume:＞60db

IP grade:IP 65

Power supply:AC220V/DC24V

WTL-A700-B
Display

Model No. : WTL-A700B

Screen size:8inch LCD

Operating temperature:-20℃~70℃

Operating humidity:95%(25℃)

Signal input:≤6 channels

Control output:≤6 channels

System composition error:≤5%(F.S)

Power consumption:＜30W

Alarm volume:＞60db

IP grade:IP 65

Power supply:DC24V

WTL-A700-YY
Display

Model No. : WTL-A700-YY

Screen size:7inch LCD

Operating temperature:-20℃~70℃

Operating humidity:95%(25℃)

Signal input:≤5 channels

Control output:≤5 channels

System composition error:≤±5%

Power consumption:＜30W

Alarm volume:＞60db

IP grade:IP 65

Power supply:DC 9-36V

WTL-A100N
Display

Model No. : WTL-A100N

Screen size:0.35 inch high bri-

ghtness digital tube

Operating temperature:-20℃~70℃

Operating humidity:95%(25℃)

Signal input:≤6 channels

Control output:4~20mA/Rs485/
Passive output node

System composition error:≤5%(F.S)

Power consumption:＜30W

Alarm volume:＞60db

IP grade:IP 54

Power supply:AC220V±10%

WTL-A200
Display

Model No. : WTL-A200

Screen size:240*128mm

Operating temperature:-20℃~60℃

Operating humidity:95%(25℃)

Signal input:≤5 channels

Control output:4~20mA/Rs485/
Passive output node

System composition error:≤ ±5%(F.S)

Power consumption:＜35W

Alarm volume:＞60db

IP grade:IP 64

Power supply:AC220V±10%

WT-W660V2
Display

Model No. : WT-W660V2

Screen size:7inch LCD

Operating temperature:-20℃~60℃

Operating humidity:95%(25℃)

Signal input:≤5 channels

Control output:Rs485

System composition error:≤ ±5%(F.S)

Power consumption:＜35W

Alarm volume:＞60db

IP grade:IP 65

Power supply:AC220V ± 10% /DC24V ± 10%

WEITE

Weite has always focused on research in the field of lifting equipment safety management, providing you with valuable security management solutions!