CRANE MONITORING SYSTEMS







Boom Truck Crane



Winch Systems



The second second Port

Crane



Wind Speed Systems



Other Heavy Machinery

14500 SERIES



The i4500 series has been developed to meet global regulations and standards. Whether used for a simple or complex application, it maintains simple display of information with userintuitive menus for easy operation.

The i4500 series is one of the first systems in the world capable of utilizing both wired and wireless sensors in the same network.

The i4500 is flexible with unlimited ways to display the information with customized graphics. Ideal for classic or special applications, we would love to hear from you to discuss your project!





TECHNICAL DATA

	1 4500
Display Size	4.3" (16/9 ratio)
Screen Resolution (pixels)	480x272
Display Rating	
Accuracy (of rated capacity)	
Operating Temperature	
Extended Temperature	
Supply Voltage	
CAN bus Protocol	

USER FRIENDLY

- Centralised information on one screen
- Colour screen
- High resolution LCD Screen readable in direct sunlight
- Night mode images
- Operator selected units
- m/te, m/kg, ft/klbs, ft/tons, ft/long tons, ft/lbs
- Camera input ready (only available on 4507 & 4510)

FLEXIBILITY

- Engineered to fit all applications
- Multilingual interface for international use
- Choice of 10 languages
- Tactile button interface with simple intuitive icons

14500

resolution screen

• 4.3" display • 480x272 pixels

- Compatible with many CAN bus sensors
- Compatible with both wireless and wired sensors

DESIGNED FOR SERVICEABILITY

- Load chart, software and calibration file with transfer via USB stick CAN bus communication link
- Utilising top quality Deutsch connectors
- and industry standard M12 5 pin connections Quick and easy to install and calibrate
- Ultra fast calibration using pre-entered weight data for all attachments





• 7" display • 800x480 pixels resolution screen camera display





• 800x600 pixels resolution screen winch line display

6 4507	6 4510				
7" (16/9 ratio)	10.4" (4/3 ratio)				
800x480	800x600				
IP67					
In accordance with SAE J159					
-20°C to 70°C (-4°F to 158°F)					
-40°C to 70°C (-40°F to 158°F)					
11 to 36 vdc					
J1939 (CAN Open also available)					

PERFORMANCE

- Compliant with current international standards
- Self diagnostic mode
- Fault log
- Event recorder
- Optional Datalogger
- Inbuilt operator audible and visual warnings



RAYCOnnect REMOTE ACCESS SERVICE FEATURES

a 🔒

RAYCOnnect provides relevant and accurate information to optimize maintenance and operation of your equipment. **RAYCOnnect**'s customizable dashboard presents critical information to different types of organisations and users to facititate management and efficiency. **RAYCOnnect** is available with all RaycoWylie Systems products.

LIVE VIEW

🛧 НОМЕ	Main > Live view				SC122039	- ± - 0
CUSTOMERS HIERARCHY USER GROUPS × CUSTOMER GROUPS ×	40 60	80	^{Load} 1.9 t	^{A2B} OK	Parts 4	^{Duty}
DASHBOARD GROUPS AII	20 100 120 %MAX		Max load 2.0 t	^{Slew} 107.4 °	Last start 107.4	0
() SCHEDULER			^{Radius} 1.1 m	Length 3.4 m	Last activity 20/01/2020,	
	Geolocation *	System status	Wind speed 20.8 km/h	_{Height} 4.4 m	14:20:	19
	Fault log	ON	System hour indicator 293h 7m 45s	Hour A Oh Om 47s	Hour B 293h 7	′m 45s

• Crane running hours

RaycoWylie 📲 Dashboard groups 🔹 📲 All 🔹 🚆 SC122039

- Safe working load
- Load
- Angle
- Radius

RAYCOnnect event recorder provides a simple

overview of the crane lift usage. Allowing you to

quickly identify if the crane is overused, avoiding

future unnecessary maintenance costs.

Digital I/O

- Extension
- Over hoist input (ATB)
- Boom tip wind speed
- XY chassis angle
- Slew encoder
- Data logger
 - 3500 3000 2500 2000 1500 1000 500





Increase safety

Reduce downtime

Schedule or event based

maintenance notifications · Safety critical alarm notifications

- Continuous maintenance and web application upgrades
- Remote software updates
- Upgrade loadcharts and calibrations



Q

ALARM

NOTIFICATION

X PREVENTIVE MAINTENANCE

SOFTWARE

UPDATE

Engineering Data is critical for the crane manufacturer for longterm product improvement; It also provides sensitive information for long term reliability, analysis and preventive maintenance planning.

- - - Outrigger position Hook height
 - Rope payout

Range limiting data

- - A2B, overload and by pass record





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VALUES AND DESCRIPTION OF STREET	384	COLUMN TANK	1446.010	
10-101-002	1686		436	



AND MORE.

- Remote Diagnostics
- Improved Response Time and Service Cost Reduction

system information (software, OS, texts load chart, S/N

Software: RaycoWy	Detected CAN addresses on canbus network 1 :	B0, E1, D2, D4, D3, D5, A0, A1, 91, 00
LPC: 3.08	Detected CAN addresses on o	anbus network 2:
Texts File: SC145006v0006	i4507 S/N:	18-50-414
Chart 190218 21LC1050 File: SC4R DC8F	Crane S/N:	11111

 Crane information and engine data

- Remote derating
- User management can be done by the OEM or fleet owner
- Branded login page and web application
- API available for fleet management and other management software (CRM, ERP)

14500 MOBILE



resolution screen

14500 CRAWLER



i4500 mobile crane applications can vary massively depending on your specific requirements. From basic kits utilising CAN bus sensors to monitor load, boom angle and boom extension to more complex systems including multiple reeling drums, hydraulic luffing jibs and more. The i4500 series and its software are perfectly suited to mobile cranes and the needs of their owners and operators.

The software has been developed to make operation, calibration and fault finding as fast and simple as practically possible. This is done through listening to the needs and recommendations of our customers, from flexible calibration points, Centre of Gravity calculations for attachments, USB connectivity, the ability to add extra sensors when and if required mean the clean, intuitive software is easy and simple for both operators and engineers to use.



OPTIONS

Load

Anale Relay controller Extension Over hoist input (ATB) Boom tip wind speed XY chassis angle Slew encoder Camera inputs Data logger Virtual wall range limiting Outrigger position monitoring Travel monitoring Hook height monitoring Rope pay-out monitoring CAN bus wireless gateway (868Mhz or 915Mhz)

More options available upon request, please contact RaycoWylie.



Crawler cranes, similar to mobiles, come in all shapes and sizes, whether it is a 5te telescopic, 120te lattice or 50te telescopic with outriggers the i4500 series has a solution. The ability to recondition and reuse existing load sensors to minimise the financial impact of needing a new system coupled with intuitive controls, simple calibration procedures, outstanding functionality and excellent customer system comprising of display, relay controller, boom angle sensor, load fly jibs and more. This leaves the to make operation, calibration and

i4500 series the perfect choice for your machine.

Using centre of gravity calculations for attachments has removed the need to calibrate every attachment and reduce the calibration time required on site. With load calibration interpolation between boom lengths of up to 15m, new easy to use deflection, load and friction compensation calibrations support mean the i4500 series is means the i4500 series calibration can the unit for your crane. From a basic be completed faster and with more accurate results than ever before.

interface and load cell to roped luffing The software has been developed

OPTIONS

Load Anale Relay controller Extension Over hoist input (ATB) Boom tip wind speed XY chassis angle Slew encoder Camera inputs Data logger Virtual wall range limiting Outrigger position monitoring Travel monitoring

- Hook height monitoring
- Rope pay-out monitoring
- CAN bus wireless gateway (868Mhz or 915Mhz)

More options available upon request, please contact RaycoWylie.



resolution screen

fault finding as fast and simple as practically possible. This is done through listening to the needs and recommendations of our customers, from flexible calibration points, Centre of Gravity calculations for attachments, USB connectivity, the ability to add extra sensors when and if required mean the clean, intuitive software is easy and simple for both operators and engineers to use.



14500 TOWER



Raycowyli 24507 Θ 🏊 27.2 km/h 22:11:02 06/06/2016 Ц x02 98 15.4 m-558 12.8 m **♦** Max 0 C

RavcoWvlie have worked extensively with tower crane specialists and invested heavily to develop a truly flexible and versatile system that is perfectly suited to all types of tower The systems have multiple input With clear, easy to read display, cranes and their markets.

The software has been developed to work with a variety of sensors, integrating trolley position, jib angle, hook height, hoisting speed, actual load, working radius, wind speed, data-logging, anti-collision, travel monitoring (rail mounted cranes), systems, 3D work area limitation and remote control interfacing.

and output configurations allowing separate wind speed and overload alarms/warnings, inputs from existing moment sensors, 2/4 parts of line selection, free slew conditions and more.

Systems can be customised to suit your budget and requirements from

boom tip/winch/hook view camera utilising existing sensors to upgrading with CAN bus sensors the i4500 tower crane series can handle it all.

14507

800x480 pixels

resolution screen

7" display

intuitive system controls, step-bystep calibration procedures, state of the art diagnostics, CAN bus communication, USB connectivity and industry competitive pricing, the i4500 tower crane series is the choice of operators and cranes owners worldwide.

3D WORK AREA LIMITATION



The prohibited zone function allows to limit access of the jib or trolley and lifted load to different zones without losing sight of the critical load information. With one zone to determine the job site and up to ten adjustable 3D zones internally.

OPTIONS

Load

- Angle
- Trolley position Relay controller
- Wind speed
- Slew encoder
- Camera input
- Data logger
- 3D work area limitation
- Travel monitoring
- Hook height
- Anti-collision interface
- CAN bus wireless gateway (868Mhz or 915Mhz)

More options available upon request, please contact RaycoWylie.

14508 ANTI COLLISION



The i4508 RaycoWylie tower crane systems, this removes the need for a the ability to exchange service anti-collision system utilises the latest technology and cutting edge innovation in order to assist in the prevention of on-site crane collisions (crane to crane and crane to structure).

Working with industry experts RaycoWylie have produced one of the simplest, most detailed and versatile anti-collision systems on the market, the system is designed to be intuitive for both the operator and installer to use.

The system can simultaneously monitor up to twenty one cranes on the jobsite as well as site obstructions and prohibited working areas.

sensors The RaycoWylie i4508 anti-collision

system is fully compatible with the RaycoWylie i4507 load indicator

The i4508 system boasts wireless service capability offering users

FEATURES

- Supports up to 21 cranes on the same jobsite Crane to crane and crane to structure collision compatible
- User friendly display and controls
- Wireless service capability
- Wind speed sensor options
- Multi language
- Data recording
- Wireless remote viewing capability

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second set of sensors being installed on the crane and reduces installation and setup time significantly. Both the i4507 and i4508 systems are suitable for new and retrofit installations.

When used with the i4507 the anticollision and load indicator information are displayed via the i4507 display, this reduces hardware in the crane cabin and provides the operator with all the information on one clear screen.

The i4508 anti-collision system is also available as a standalone unit (without the need for an existing i4507 system) this system utilises a 10" colour touch screen display and associated

data wirelessly, this can be used to remotely override the AC system of a crane, locate other cranes on the same jobsite, edit settings and share crane configurations.

The i4508 anti-collision system is also viewable on tablet and PC for management and site personnel to view. This feature assists with lift planning and associated site works, as well as highlighting high-risk work areas and possible project choke points.

The RaycoWylie i4508 is the latest top of the range, cost effective, user friendly tower crane anti-collision system available. Get in touch with one of our tower crane specialists for more information.



14500 KNUCKLE BOOM

24507

is one of the newest applications

to the range. The knuckle boom

components and software have been

designed specifically for the offshore

marine and other harsh environments.

The system is designed to be as

flexible as possible incorporating

X/Y (list/trim) sensors, pressure

transducers, hoist load sensors,

multiple angle sensors, boom

extension sensors, slew position sensors, audible and visual warnings

Θ

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RaycoNyli

2.2 m

7.3 m



14500 BARGE/PORT



Port and barge mounted cranes come in a variety of shapes and sizes, the i4500 has been designed with the flexibility to suit almost every application. From the smallest single hoist material handling cranes to multi hoist heavy lift barges the i4500 has the capability. Using the latest in sensor technology and CAN bus communication the systems can be quickly installed and calibrated.

Supporting numerous sensors the i4500 system can be used to monitor load, safe working load, radii, boom angle, over hoist

For more information on the i4500 series please contact RaycoWylie.



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applications).

By using the for mentioned range of sensors the i4500 knuckle boom series is not just limited to being a load indicator system, it can also work as a full virtual wall range limiting system, height limit system and X/Y limit system.

Our R&D department are constantly developing both software and hardware meaning the capability of

OPTIONS

Angle (multiple) Relay controller Extension

Wind speed

Camera input

Data logger

Over hoist input (ATB)

Virtual wall range limiting Rope pay-out monitoring

please contact RaycoWylie.

More options available upon request,

CAN bus wireless gateway (868Mhz or 915Mhz)

XY (List/Trim) angle Slew encoder

Load

The i4500 knuckle boom system and wireless connectivity (custom the i4500 continues to increase.

14507

800x480 pixels

resolution screen

7" display

e

The software has been developed to make operation, calibration and fault finding as fast and simple as practically possible. This is done through listening to the needs and recommendations of our customers. From flexible calibration points, USB connectivity, the ability to add extra sensors when and if required mean the clean, intuitive software is easy and simple for both operators and engineers to use.

OPTIONS

Load

- Angle Relay controller Extension
- Over hoist input (ATB)
- Wind speed
- X/Y (List/Trim) Angle
- Slew encoder
- Camera inputs
- Data Logger
- Virtual wall range limiting
- Hook height monitoring
- Rope pay-out monitoring
- Travel monitoring
 - CAN bus wireless gateway (868Mhz or 915Mhz)





conditions (anti-two blocks), X/Y (list/trim angles), camera inputs, data logging, wind speed, slew position, virtual wall range limiting, hook height and hoist rope pay out monitoring to mention a few.

RaycoWylie also have the ability to customise systems to your exact requirements, with a team of dedicated experienced personnel we are always happy to work to find the perfect solution for your crane.



• 10.4" display • 800x600 pixels resolution screen





14300 SERIES



RaycoWylie are proud to introduce the successor to the W2245. Brought specifically to the market as a cost effective solution the i4300 boasts a 4.3" full colour screen, USB connectivity, on screen calibration and CAN IP67 the i4300 is built to last. bus J1939 communication.

date with a simple clear display, easy to follow calibration procedures and state expensive laptops or specialist programming tools. The calibration is quick and simple, using the centre of gravity data to calibrate For more information on the i4300 please attachments saving time and lengthy

calibration procedures. Although the i4300 is the cost effective solution, RaycoWylie do not hold back on its quality, with all sensors and the display itself being a minimum of

The i4300 crane system supports multiple The i4300 will bring your machine up to sensors including boom angle / length sensor, two load sensors and relay controller. The i4300 system is available for single reel of the art diagnostics. Fully calibrated via telescopic cranes (hoist or total moment the display itself helps reduce the cost of sensing) and Lattice boom cranes (hoist sensing).

contact RaycoWylie.





14300 SIDE BOOM CRANE Hoist sensing application



CRANE

USER FRIENDLY

- Centralised information on one screen
- Colour screen
- High resolution LCD Screen readable in direct sunlight
- Night mode images
- Operator selected units
- m/te, m/kg, ft/klbs, ft/tons, ft/long tons, ft/lbs

FLEXIBILITY

- Engineered to fit standard applications
- Multilingual
- Tactile button interface with simple intuitive icons

resolution screen

pressure sensing

Telescopic

application

FEATURES

- Continuous display of Load, Hoist, Parts of line, Radius, boom length, boom angle and % of maximum capacity.
- Diagnostic menu and continuous error detection and recording
- Audible and visual alarms indicating two-block, load limit conditions
- Operator adjustable low, high angle, length, height and radius limits





14300 **CRAWLER** CRANE

 Hoist sensing application





Telescopic hoist sensing application

- Optional lock-out for load, A2B
- Easy calibration via keypad. No additional programming hardware necessary Quick and easy installation
- USB file transfers
- Multi-language
- Selectable units
- Upgradable to the i4500 LMI Series



14000 WIRELESS/HYBRID/ WIRED MULTI-PURPOSE INDICATOR



TELESCOPIC CRANE MULTI-INDICATOR



LOAD AND A2B



WIND AND GUST

The i400 is a multi-application indicator using different sensors to monitor desired options such as load, angle, length, radius, wind, slew, a2b, X and Y angles. The i4000 system boasts the flexibility of using either wired or wireless sensors or a combination of both!



WIND SPEED DATALOGGER

FEATURES

- Diagnostic menu and continuous error
- detection and recording Inbuilt audible and visual alarms indicating
- two-block, load limit, wind speed conditions
- and range limit conditions
- Easy calibration via keypad. No additional
- programming hardware necessary
- Quick and easy installation USB file transfers
- Multi-language, selectable units
- Upgradable to the i4500 LMI Series Wireless option specification:
- Using 915Mhz or 868Mhz for increased range and signal reliability
- Dipole antenna
- Easy installation and sensor replacement
 One-year plus battery life for wireless sensors
- Wind speed data-logger





RANGE LIMITING AVAILABLE FOR ALL CRANE MODELS



TELEHANDLER INSTABILITY INDICATOR



Wireless wind speed sensor

Wireless anti-two block switch





X AND Y ANGLE





Wireless Load link



R180 WIRELESS WIND SPEED INDICATOR

<u>______</u>

R147 WIRELESS ANTI-TWO BLOCK INDICATOR



The R180 is the cost effective, easy to install and simple to use wireless wind speed indicator.

With an inbuilt relay output to trigger an external alarm, internal audible and visual operator warnings, clear LCD display, low battery warning and the ability to display the speed in various units of measurement. The RaycoWylie R180 is the answer to your wind speed indication needs.



wireless wind speed sensor



The R147 wireless over hoist limit system is an easy to install cost effective solution to monitor an over-hoist situation.

With an inbuilt relay output to trigger a motion cut function, internal audible and visual operator warnings, clear LCD display and low battery warning.

The R147 is suited to those applications where running cables is not desired.

TECHNICAL DATA

	R180
Display Size	4.69"x3.13"x2.13" (11.95cmx 7.90cmx5.55cm)
Display & Sensor Rating	IP67
Supply Voltage	10.2 to 30vdc
Operating Temperature	-30°C to 70°C (-22°F to 158°F)
Relay Output	1 (500mA)
Ассигасу	<0.2 mph for the range 11mph to 55mph
Operating range	100m (environment dependent)

FEATURES

Direct Sequence spread spectrum transmission technology for an enhanced range of operation and better RFI resistance (2.4 GHz transceivers) Internal antenna on sensor, which means low susceptibility to damage Selectable units MPH, KM/H, M/S Display and sensor pre-calibrated Easy installation and sensor replacement Uses lithium 'D' Battery Battery life : up to 1 years (low battery warning) User friendly display Pre-set limits with audible and visual warning CE compliant

FEATURES

- Direct Sequence spread spectrum transmission technology for an enhanced range of operation and better RFI resistance (2.4 GHz transceivers)
- Internal antenna on both the display and sensor, which lowers susceptibility to damage
- Easy installation and sensor replacement Uses lithium 'AA' Battery
- Battery life : up to 1 year (low battery warning) User friendly display Pre-set limits with audible and visual warning
- One display can be used with two sensors for multi hoist applications



wireless anti-two block switch

TECHNICAL DATA

Display Size

Supply Voltage

Relay Output

Operating range

Display & Sensor Rating

Operating Temperature

R147

4.69"x3.13"x2.13" (11.95cmx 7.90cmx5.55cm) IP67

10.2 to 30vdc

-30°C to 70°C (-22°F to 158°F)

1 (500mA)

100m (environment dependent)



CAMERA SYSTEMS

Camera systems are fast becoming a standard sight in looking for a hook view, load view, rear view, or winch view crane cabs. Cameras are used for many different reasons, camera RaycoWylie are ready to help. RaycoWylie have developed the i4507 and i4510 systems to accept multiple camera inputs. This reduces the amount of cab space taken up by screens and allows the operator to view load critical data on the same screen as his camera.

The i4500 systems have the ability to function with please contact RaycoWylie. numerous camera system manufacturers, whether you're

RaycoWylie also offer stand-alone camera systems to suit vour requirements.

For more information on the available camera systems

WINCH VIEW CAMERA



HOOK VIEW CAMERA



BOOM TIP LOAD VIEW CAMERA



HC-180 HOOK VIEW CAMERA



- IP65 enclosure with impact resistant camera housing, magnetic mount, safety lanyard and wireless transmitter
- 2.4Ghz directional antenna
- Supplied with 9.7" display with heavy duty suction cup mounting
- Supplied in heavy duty transport/storage case
- One of the fastest camera systems to install and remove
- Full installation and setup instructions included
- 700 TVL camera for reliable, flicker free. minimal delay feedback
- Rechargeable battery: Estimated battery life 12-20 hours conditions depending
- Battery recharge time: Estimated 3-4 hours conditions depending (additional battery packs available)
- Wireless range 300-450m (1000-1500ft) (line of sight / directional antenna dependent)
- Storage temperatures -40°C to +50°C (-40°F to 122°F)
- Operating temperatures -10°C to +50°C (14°F to 122°F)
- Camera/enclosure size 230x205x180mm (9"x8"x7")
- Approximate camera/enclosure weight 6kg (13lbs)
- CE Compliant

RADAR BLIND SPOT MONITORING





- ADJUSTABLE DETECTION ZONES DECTECTS PEOPLE AND OBJECTS ALL THE WAY TO THE FACE OF THE RADAR

The PreView[®] Sentry[™] is a Frequency Modulated Continuous Waveform radar object detection system designed to alert equipment (vehicle, truck, machine) operators to the presence of obstacles. The sensor detects both moving and stationary objects in a pre-defined coverage area and can report the distance of the closest object via visual range indicators (display) and an audible signal (display or buzzer) to the equipment operator.

PreView radar combined with a RaycoWylie system provides audible and visual alarms to actively warn equipment operators of people or objects in the equipment blind zones, enabling them to safely react and mitigate potential accidents.







880/890 LOAD LINKS & SHACKLES



W 880 LOAD LINKS

At RaycoWylie we have a variety of load links. Both wired and wireless models are available in a range of capacities 6.5te to 500te. All load links are manufactured from high grade aluminium and designed for ease of installation and transportation.

Heavy duty transport cases are available for all load links.

Rayco

Ravcow

W 880 HD LOAD SHACKLES

RaycoWylie now offer a variety of heavy duty load shackles. Both wired and wireless models are available in a range of capacities from 25te to 2000te. Load shackle pins are constructed from 17-4 stainless steel, for strength and reliability.

Heavy duty transport cases are available for shackles up to 55.0te capacity.

SENSORS & SPARES

Sensor options and system configurations are becoming a never ending list for RaycoWylie. Our R&D departments are constantly looking ahead to meet the requirements of the next project whilst ensuring price and quality remain at the forefront of RaycoWylie values.

If you have a bespoke project or specific sensor option you require please contact RaycoWylie.

SENSORS





LOAD PINS

Load pins come in all sizes to suit a full range of applications, from a tiny 1k pin installed to a 4" dynamometer to 100te+ pins custom made to fit your machines existing dimensions.

LOAD LINKS

A full range of load links are also available and again our engineers are ready to find the load link which best suits your machines requirements. From 1te links up to 50+te our engineers are ready to help, we can also supply load tested side plates and pins to ensure your installation goes to plan.





WIND SPEED SENSORS

Knowing an accurate windspeed is considered essential information for many crane manufactures, owners, customers and operators and can be required for the safe use of the crane. RaycoWylie offer a range of windspeed sensors, from the R180 wireless stand alone unit to fully integrated windspeed into the latest of systems, windspeed is now an option on all i4500 series systems.



The 33Y series are available in three sizes 4", 6" and 8", to suit rope sizes from 12-38mm as standard and are available in either mild or Stainless Steel. Dynos can be supplied with amplifiers, junction boxes or CAN bus load interfaces and can be mounted vertically or horizontally on either fixed or pantograph mountings which are all available from RaycoWylie.



W 890 LOAD SHACKLES

Raycowylie offer the W890 range of load shackles, ranging in capacity from 6.5te to 35.0te. The load pins are manufactured from 17-4 stainless steel for strength and reliability, these shackles should be used with the appropriate bobbin to ensure the load is directly applied to the centre of the load pin therefore giving the most accurate results.

All load shackles are available with heavy duty transport cases.

For more information on the W890 load shackles please contact RaycoWylie.









PRESSURE TRANSDUCERS

Pressure transducers are available with a variety of outputs, mV, 4-20 mA or J1939 CAN bus. Transducers can be supplied with a range of different hydraulic fittings to suit your machine.



CAN BUS ENCODERS

Used to monitor any rotation based input the CAN bus encoders consistently provide an accurate measurement. Whether used to monitor slew angle for slew specific load charts, range limiting, work area limitation, hook height and direction, trolley position or hoist rope pay out this new range of encoders is perfect for your application.





ANGLE SENSOR

The voltage based 33A0001 angle sensor is a tried and tested 0-5v non potentiometric angle sensor, this means your old worn out pot can now be replaced by this robust angle sensor.



CAN BUS ANGLE SENSOR

CAN bus angle sensors housed in a IP66 cast aluminium enclosure this means the new angle sensor is ready for anything. Simply set which side of the boom the sensor is fitted and set the zero point and you're ready to work. Sensor calibration has never been easier.



X/Y ANGLE SENSOR

Used for a variety of applications to monitor chassis tilt of the machine, the RaycoWylie X/Y sensor is sturdy yet simple to install.



A2B SWITCH

Available in both aluminium and stainless steel the latest anti-two block / over hoist switches are built to last. Exposed to the harshest of weathers, RaycoWylie switches have been manufactured to the highest of standards and are perfect for new and retrofit applications.



CAN BUS LOAD INTERFACES

CAN bus load interfaces can now be used to convert either mV or mA signals into CAN bus. This has opened the opportunity to reuse sensors and therefore minimise the cost to upgrade or renew your system.



GPIO 33M0106

The general purpose input/output interface is used for a variety of applications. From switch inputs to converting analog signals to CAN bus the GPIO is as flexible as they come.



RADIO REMOTES

Cameras, whether winch view, rear view, boom tip or Remote controls are rapidly becoming a popular option even hook view are becoming a popular tool to aid in the offered by both crane manufacturers and retrofit suppliers, operation of cranes. This is why RaycoWylie now offer an to meet the need for operators to constantly monitor safety integrated camera option on the i4507 and i4510 systems. critical information. RaycoWylie has collaborated with On these larger screens it is possible to clearly view the several of the top radio remote manufactures in the industry camera and all critical load information on one screen. and are always happy to collaborate with new companies Take the chance to save money and cab space by adding and your chosen remote control supplier. the camera option to your new RaycoWylie system.



LIGHTS AND ALARMS

Warning lights and alarms are some of the most important Dataloggers are rapidly becoming a standard requirement components to any system. RaycoWylie utilise a full range for all working in the crane industry. RaycoWylie have of both audible and visual alarms. Taking advantage of the developed the i4500 series logger and its software to be latest LED technology means lights are not only brighter more user friendly than ever before. From the USB download but also last longer than ever before. procedure which removes the need for heavy or specialist equipment to the user friendly software supplied to all who purchase the datalogger option. RaycoWylie are always happy to help interpret any datalogger information.



33R4000 SERIES

With an extension range of up to 12m the 33R4000 series is a high quality compact reeling drum perfectly suited to smaller machines. The CAN bus version can house boom angle sensor, boom extension pot and up to 4 sliprings.



33R6000 SERIES

This is the medium sized reel and has an extension capacity of up to 24m. Available with either CAN bus or voltage based sensors and the ability to house up to 4 sliprings the 33R6000 series is perfect for most applications.



33R2000 SERIES

The 33R2000 drums are the largest of the range, servicing machines with a boom extension of up to 46m and available with voltage based sensors which can be easily converted to CAN bus through a CAN interface and up to 4 slip rings. The 33R2000 series is ready for the bigger machine in your fleet.



WIRELESS GATEWAY

The CAN bus wireless gateway is available in 868Mhz and The tower crane anti-collision system can be added to 915Mhz versions and can be added to the i4500 series of existing i4507 tower crane system or can be provided as systems to enable wireless communication between the a standalone i4508 anti-collision system. Both systems are system and external sensors. This makes the i4500 series suitable for new and retrofit applications, talk to RaycoWylie one of the world's first hybrid crane monitoring systems today to find out more. with almost endless possibilities.





CAMERAS

For boom tip and hook block cameras RaycoWylie have collaborated with some of the biggest names in the industry and are always happy to work with your chosen camera supplier.



DATA LOGGER



ANTI-COLLISION SYSTEM



A HISTORY **OF RELIABLE** MONTORING SYSTEMS

EARLY BEGINNINGS

Rayco Electronic System Limited was founded in 1979 (40 years) following the registration of the newly patented Range Limiting Device (Work area definition or zone access control) for lifting equipment such as lattice and telescopic cranes and excavators.

In 1933, The B&A Engineering Company Limited was founded on the release of the first UK - Factorate Inspectorate Approval Certificate for Cranes in order to commercialize the newly patented Load Moment Indicator (Rated Capacity Indicator/Limiter) invented by Major Hamilton Neil Wylie.

COMING TOGETHER

In 1994, Rayco increased its presence in the Heavy machinery Instrumentation Market by Acquiring B&A. Through the combined expertise, experience and passion of the employees, the Company was able to enhance its state-of-the-art technologies in line with the evolution of the machines and the market expectation.

TODAY'S RAYCOWYLIE

RaycoWylie's corporate headquarters are located in Québec City, Canada where you will find administration, manufacturing, engineering and research & development. All the offices including the head-office and the branch offices in the United Kingdom, United-States and new ones opened in Singapore in 2016 and Cairo, Egypt in 2017, have inventory and offer sales, services and technical support.

RaycoWylie is a world leader in heavy equipment monitoring systems. Its key areas of expertise lie in the development and installation of simple indicators or complex devices, easy to use and made to help our customers get their jobs done safely, efficiently and on time.

Among numerous applications, the company boasts state of the art rated capacity indicators specifically designed for offshore platforms, in compliance with classified zones. RaycoWylie excels in providing custom solutions for the ever demanding offshore industry, a field where they have been a major global provider for decades.

and software development an unceasing priority Whether designing or improving systems for a specific bespoke machine, fully integrated systems with leading manufacturers or focusing on refining the current technology ranges, our R&D engineers work constantly to help improve reliability, reduce cost, and incorporate developments in international standards.

Our development engineers constantly review and evolve the current range, incorporating the best of innovative The complete range of systems is designed for practical technologies into each; further driving the high standards RaycoWylie upholds. From mini-cranes to some of the with calibration and operation performed through the world's largest heavy lift barges, our engineers have display itself. developed monitoring systems which have revolutionised them all. This approach has left us with an ever increasing pool of knowledge to help us to continue driving crane systems into the future.

RaycoWylie are driven by innovation, with product Providing holistic monitoring systems for all categories of cranes, the current product range includes the i4000, R180, R147, i4300 and i4500 series of systems. At the heart of all the current systems are simple, intuitive controls and straight-forward, precise procedures to operate and calibrate systems. Integrating advances in technology, the i4000, i4300 and i4500 series also utilise USB connectivity to make the transfer of calibration files, load charts. software and more, easier than ever before.

use, without the need for specialist hardware or software,

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