# QUESTIONNAIRES

## Questionnaires

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## **System Questionnaire**

System/Application Description
Goals for Weighing System
Scale Type
Scale/System Capacity
# of Load Cells
Required System Accuracy %
Legal for Trade? ☐ Yes ☐ No
Transmitter Power (at Load Cells)
Receiver Power
Check any Desired Output Options (If Applicable):
mV output ☐ Yes ☐ No
Analog output ☐ Yes ☐ No
Relays
Do you require a serial cable? ☐ Yes ☐ 9pin ☐ 25pin ☐ No
Remote Control Required?
Remote Display Required?
If Remote Display is not Required:
Are Zero, Tare, On/Off Capabilities Required? ☐ Yes ☐ No
If Remote Display is Required:
Are Zero, Tare, On/Off Capabilities Required from the Remote Display? $\Box$ Yes $\Box$ No
Does the Remote Display need to be Handheld or Mounted?
Is the Remote Display Wireless or Hardwired?

#### **Note for SendIt Applications:**

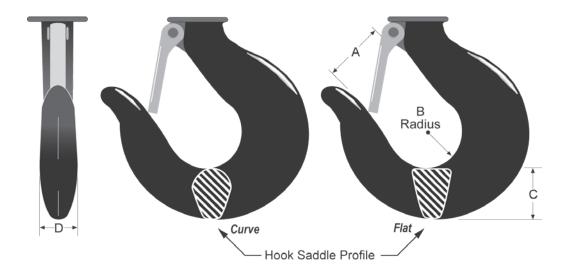
Every SendIt needs to be calibrated using a laptop/pc with a serial port (or a USB adapter). The calibration of the SendIt pair must be done during the installation.

# **System Questionnaire**

Transmission Distance	RF						
Obstructions (list any)  Potential Sources of RF Interference  Other RF Systems Present Yes No  Indoor Outdoor  Sketch of RF Field  This sketch will be used by our technicians to help find the optimal antenna types and locations for this application.  Include all transmitters and receivers that are part of this weighing system Include any other transmitters or receivers operating at 2.4 GHz  Include any RF barriers, such as concrete walls, large steel equipment, cages Include sources of interference, such as high-power electrical motors and generators	Trans	smission Distand	ce		🗆 ft	$\square$ m	
Potential Sources of RF Interference  Other RF Systems Present Yes No Indoor Outdoor Sketch of RF Field  This sketch will be used by our technicians to help find the optimal antenna types and locations for this application.  Include all transmitters and receivers that are part of this weighing system Include any other transmitters or receivers operating at 2.4 GHz Include any RF barriers, such as concrete walls, large steel equipment, cages Include sources of interference, such as high-power electrical motors and generators.	Line	of Sight	Yes	□No			
Other RF Systems Present Yes No Indoor Outdoor Sketch of RF Field  This sketch will be used by our technicians to help find the optimal antenna types and locations for this application.  Include all transmitters and receivers that are part of this weighing system Include any other transmitters or receivers operating at 2.4 GHz Include any RF barriers, such as concrete walls, large steel equipment, cages Include sources of interference, such as high-power electrical motors and generators.	Obst	ructions (list any	/)				
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This sketch will be used by our technicians to help find the optimal antenna types and locations for this application.  Include all transmitters and receivers that are part of this weighing system Include any other transmitters or receivers operating at 2.4 GHz Include any RF barriers, such as concrete walls, large steel equipment, cages Include sources of interference, such as high-power electrical motors and generators	Indo	or 🗌 Out	door $\square$				
antenna types and locations for this application.  Include all transmitters and receivers that are part of this weighing system Include any other transmitters or receivers operating at 2.4 GHz Include any RF barriers, such as concrete walls, large steel equipment, cages Include sources of interference, such as high-power electrical motors and generators			Sk	cetch of	RF Field		
Include any other transmitters or receivers operating at 2.4 GHz Include any RF barriers, such as concrete walls, large steel equipment, cages Include sources of interference, such as high-power electrical motors and generators							otimal
Include any RF barriers, such as concrete walls, large steel equipment, cages Include sources of interference, such as high-power electrical motors and generators	Include a	II transmitters a	nd receive	ers that are	part of this v	veighing syste	em
Include sources of interference, such as high-power electrical motors and generators				_	_		
					_		_
Include dimensions so we can understand the range and antenna gain requirements				_			_
	Include o	limensions so w	e can und	lerstand the	e range and a	antenna gain r	equirements



### Dimensions from crane's existing hook



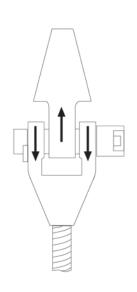
## **Required Dimensions** A= \_\_\_\_\_in/mm B= \_\_\_\_\_in/mm

C= \_\_\_\_\_in/mm

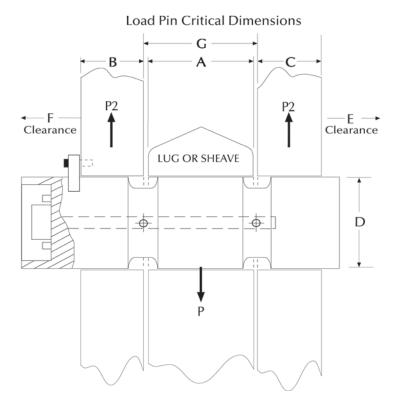
D=\_\_\_\_in/mm

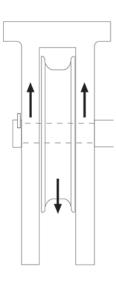
Profile: □Curve □Flat Hook Capacity \_\_\_\_\_

### **Load Pin Questionnaire**



Standard Load Sensing Clevis Pin for Wire Rope Sockets Dead-Ends





Sheave/Pulley **Load Pins** Equalizer/Idler

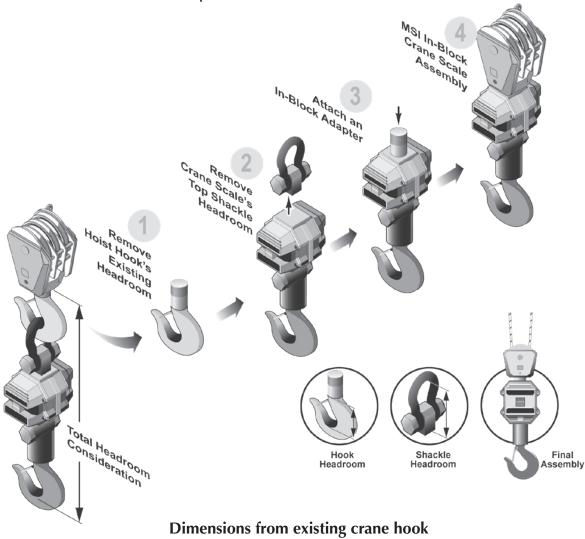
#### Load Pin Data A=Width \_\_\_ \_\_\_\_ Inch B=Width \_\_\_\_\_ Inch C=Width \_\_\_\_\_ Inch D=Pin Diameter\_\_\_\_\_ Inch E=Clearance \_\_\_\_\_ Inch F=Clearance \_\_\_\_\_ Inch G=Width \_\_\_\_\_ Inch Lube Port □No □Yes \_\_\_\_\_ # of exits \_\_\_\_ Tons Hoist Capacity \_\_\_\_\_ Parts of Wire Rope \_\_\_\_\_\_Sensor Capacity\_\_\_\_\_ Sensor Capacity\_\_\_\_ Tons Factor of Safety □3:1 □5:1 □7:1 □10:1 Application \_\_\_ Accuracy Requirement \_\_\_\_\_ Temperature Requirement \_\_\_\_\_ Required Output \_\_ Material Testing Requirement \_\_\_\_\_ Load Vector Orientation/Alignment □← □→ □↓ □↑ Name Company\_\_\_\_ Phone Note: Minimum clearance between "A" and "G" = 0.0625 inch.

Cable Connections			
End-Mounted Cable			
End-Mounted Connector (standard)			
Side-Mounted Cable			
Side-Mounted Connector			
Recessed Connector			
Sensor's Cable Length_	Feet		
Comments			

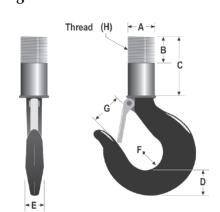
## **Low Headroom Weighing Consideration**

Concern: Customer wants MSI crane scale accuracy, but has vertical headroom concerns

Solution: Consider an in-block adapter



<b>Required Dimensions</b>		
A=	_ in/mm	
B=	_in/mm	
C=	_in/mm	
D=	_in/mm	
E=	_in/mm	
F=	_in/mm	
G=	_in/mm	
H=	_UNC	
Hook Capacity_		



# QUESTIONNAIRES

# Weighing System Questionnaire

Company					
Project Name					
System Objective System Description					
System Description					
		LICATION PA			
Basic System Design:		☐ Equalizer She			
	☐ Spreader Bar	<b>■</b> Coil Grab	☐ Coil Lifter	☐ Rotating Crane Hook/Grab	
System Capacity:		□lb □kg	□tons □ metric to	ns Other	
System Accuracy:		%	☐ Applied Load	☐ Rated Capacity	
	Legal for Trade	□Yes	□No		
Crane Type:	□ Bridge	☐ Mobile Fix	ed Boom 🗖 Mobile E	xt. Boom Gantry	
	☐ Container	☐ Lattice Boo	om 🖵 Jib	☐ Other	
Reeving:	Parts of Wire-Rop	e	_ At Bottom Load Block	At Load Sensor	
_	□ N/A				
Power Supply:	□DC □AC	Voltage			
Number of Sensors:	<b>1 2</b>	<b>3 4</b>	□Other		
Load Sensor Design:	☐ Tension Link ☐ Clevis/Sheave Load Pin ☐ Single End Shear ☐ Compression				
			·		
Load Sensor Capacity:		<b>U</b> Ib <b>U</b> kg	□ tons □ metric to	ns Other	
Load Sensor Location:	□ BTH* □ Other	□ Equalizer/I	Idler Sheave	☐ Dead End	
Environment:	□Indoor	□ Outdoor	☐ Other		
Other Requirements:					
- man many many many many many many many		NICTRI IN AFRIT			

#### INSTRUMENTATION

## **Dyna-Clamp Questionnaire**

Industry Dyna-Clamp will be used in:				
Is protective case required:				
Wire Rope Pre-Calibration:				
1. Rope/Cable Diameter: Inch / mm Strand Arrangement:				
Rope/Cable Material				
Minimum Breaking Load (MBL) if known:				
Working Load Limit (WLL) if known:				
2. Rope/Cable Diameter: Inch / mm Strand Arrangement:				
Rope/Cable Material				
Minimum Breaking Load (MBL) if known:				
Working Load Limit (WLL) if known:				
3. Rope/Cable Diameter: Inch / mm Strand Arrangement:				
Rope/Cable Material				
Minimum Breaking Load (MBL) if known:				
Working Load Limit (WLL) if known:				
4. Rope/Cable Diameter: Inch / mm Strand Arrangement:				
Rope/Cable Material				
Minimum Breaking Load (MBL) if known:				
Working Load Limit (WLL) if known:				
5. Rope/Cable Diameter: Inch / mm Strand Arrangement:				
Rope/Cable Material				
Minimum Breaking Load (MBL) if known:				
Working Load Limit (WLL) if known:				
6. Rope/Cable Diameter: Inch / mm Strand Arrangement:				
Rope/Cable Material				
Minimum Breaking Load (MBL) if known:				
Working Load Limit (WLL) if known:				
7. Rope/Cable Diameter: Inch / mm Strand Arrangement:				
Rope/Cable Material				
Minimum Breaking Load (MBL) if known:				
Working Load Limit (WLL) if known:				
8. Rope/Cable Diameter: Inch / mm Strand Arrangement:				
Rope/Cable Material				
Minimum Breaking Load (MBL) if known:				
Working Load Limit (WLL) if known:				
If working load limit is not known, we will calculate it as a maximum of 20% of the MBL.				

## WiFi Information Request

IN ORDE	R TO CUSTO	MIZEA WI-FI MO	DULE, THE FOLLOWING INFORMATION IS REQUIRED:
Product: _			Bectronics Serial Number:
Network 7		☐ Server	☐ Client
	r ( <b>Soft AP) -</b> User me in this mode.	• •	connecting directly to the scale. Only one module may be connected
Client once.	- The scale conr	nects to an existing ro	outer. This allows a laptop or tablet to connect to multiple scales at
Server Mo	ode		
•	SSID:		
	• The nam	ne for the network tha	at the laptop/tablet is connecting to.
•	Security Mode	e: 🚨 Open	□ WPA2
	• Open - A	Allow anyone to conn	ect to the scale
	• WPA2 - I	Require a password to	connect to the scale
•	Password:		
	• Only ne	cessary if security mo	de is set to WPA2.
•	DHCP:	□ On	□ Off
		sign a dynamic IP to th c IP ( <b>RECOMMENDED</b>	ne scale. The laptop/tablet connecting to the scale may have a
	Off - Ass static IP.		scale. The laptop/tablet connecting to the scale must also have a
	• IP	Address-Static IP of tl	he scale:
	• Ne	et Mask/Gateway to as	ssign to the scale:
	• Port - Po	ort used to connect to	the scale (default 2000):
Client Mo	de		
•	SSID - The SSI	D of the router the so	cale will connect to:
•	Security Mode	e - the security mode	of the router: ☐ Open ☐ WPA2
		d - If the security mod	de of the router is WPA2, this is the password used to connect to the
•	DHCP:	□ On	□ Off
	• On - Allo	ow the router to assig	n a dynamic IP to the scale ( <b>RECOMMENDED</b> )
	• Off - Ass	sign a static IP to the s	scale. This IP must be added to the static IP list in the router.
	• IP	Address - Static IP of	the scale:
	• Ne	et Mask/Gateway to as	ssign to the scale:
•	Port:		

Port used to connect to the scale. Must be accessible from the router.