Questionnaires

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System Questionnaire

System/Application Description _____

Goals for Weighing System_____

Scale Type_____

Scale/System Capacity _____ ☐ lb ☐ kg ☐ Ton ☐ Metric Ton ☐ Other

# of Load Cells _____

Required System Accuracy _____ % ☐ of Capacity ☐ of Applied Load

Legal for Trade? ☐ Yes ☐ No

Transmitter Power (at Load Cells) ☐ AC ☐ DC _____ Voltage ☐ Battery

Receiver Power ☐ AC ☐ DC _____ Voltage ☐ Battery

Check any Desired Output Options (If Applicable):

mV output ☐ Yes ☐ No

Analog output ☐ Yes ☐ No

Relays ☐ Yes ☐ No

Do you require a serial cable? ☐ Yes ☐ 9pin ☐ 25pin ☐ No

Remote Control Required? ☐ Yes ☐ No

Remote Display Required? ☐ Yes ☐ No

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? ☐ Yes ☐ No

Does the Remote Display need to be Handheld or Mounted? ☐ Handheld ☐ Mounted

Is the Remote Display Wireless or Hardwired? ☐ Wireless ☐ 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.

RF

Transmission Distance _____ ☐ ft ☐ m

Line of Sight ☐ Yes ☐ No

Obstructions (list any) _____

Potential Sources of RF Interference _____

Other RF Systems Present ☐ Yes _____ ☐ No

Indoor ☐ Outdoor ☐

Sketch of RF Field

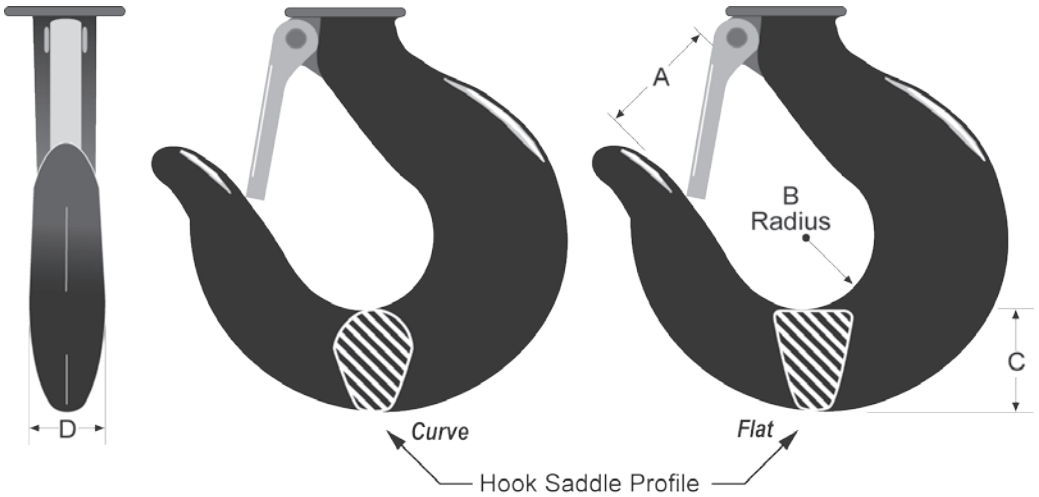
This sketch will be used by our technicians to help find the optimal antenna types and locations for this application.

- 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
- Include dimensions so we can understand the range and antenna gain requirements

Rev. 4 10/2021

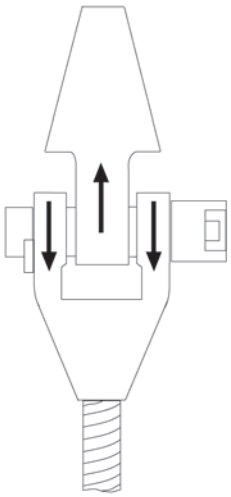
Hook Questionnaire

Dimensions from crane's existing hook



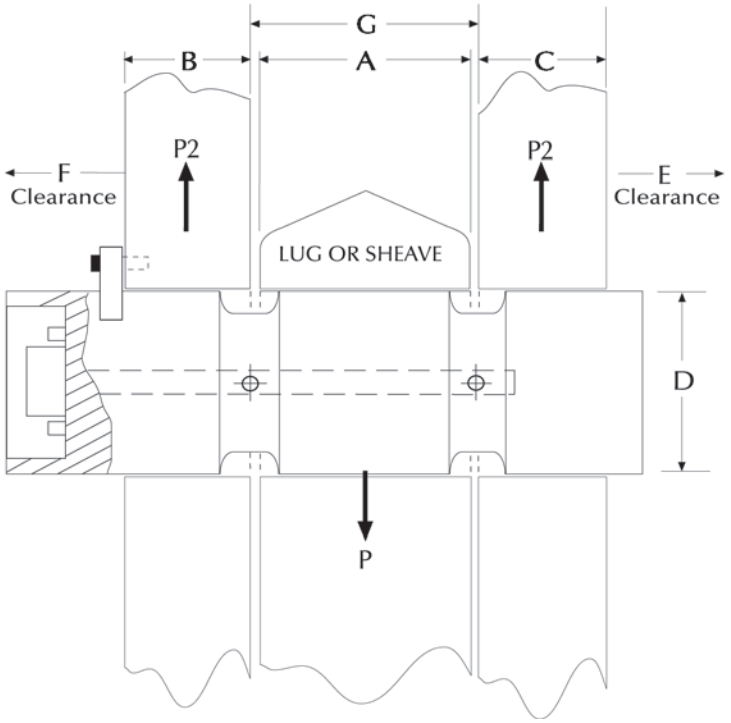
Required Dimensions
A= _____in/mm
B= _____in/mm
C= _____in/mm
D= _____in/mm
Profile: ❑Curve ❑Flat
Hook Capacity _____

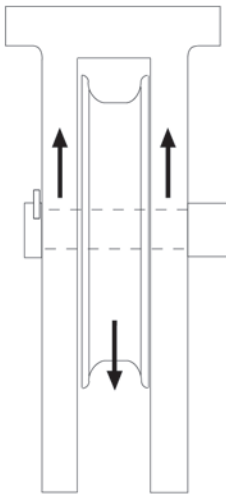
Load Pin Questionnaire



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

Load Pin Critical Dimensions





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
Hoist Capacity _____ Tons
Parts of Wire Rope _____
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

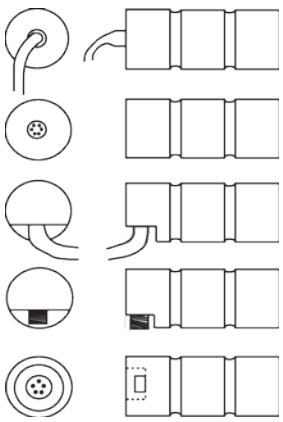
End-Mounted Cable

End-Mounted Connector (standard)

Side-Mounted Cable

Side-Mounted Connector

Recessed Connector



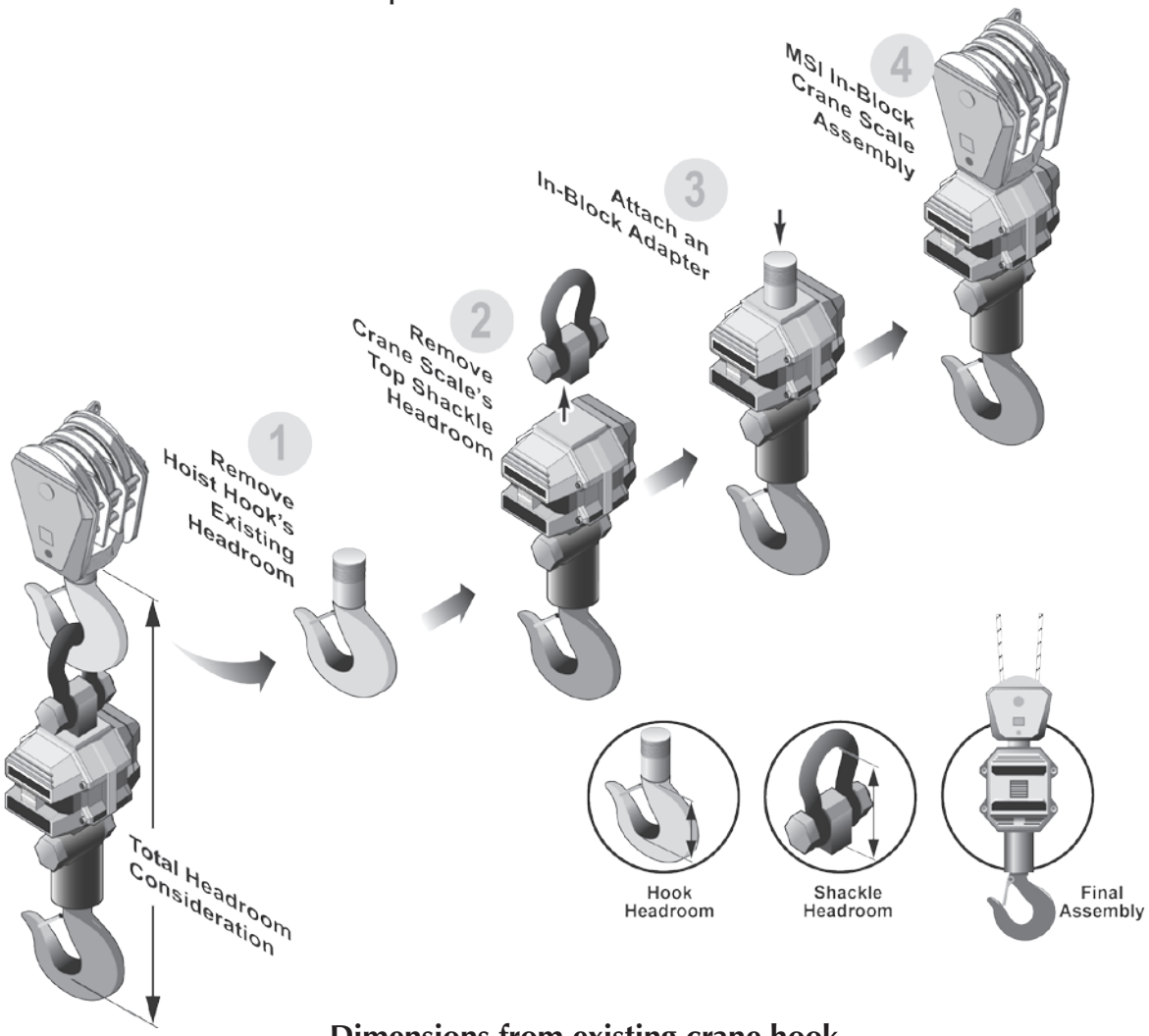
Sensor's Cable Length _____ Feet

Comments _____

_____

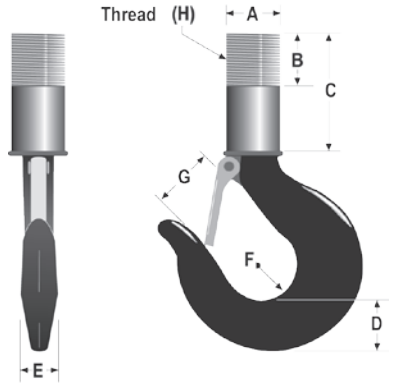
Low Headroom Weighing Consideration

Concern: Customer wants MSI crane scale accuracy, but has vertical headroom concerns
Solution: Consider an in-block adapter



Dimensions from existing crane hook

Required Dimensions
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_____



Weighing System Questionnaire

Company _____
Name _____ Date _____
Phone _____ Fax _____ Email _____
Project Name _____
System Objective _____
System Description _____
_____

APPLICATION PARAMETERS

Basic System Design: ❑ BTH* ❑ Equalizer Sheave ❑ Dead-End ❑ C-Hook
❑ Spreader Bar ❑ Coil Grab ❑ Coil Lifter ❑ Rotating Crane Hook/Grab

System Capacity: _____ ❑ lb ❑ kg ❑ tons ❑ metric tons ❑ Other _____

System Accuracy: _____ % ❑ Applied Load ❑ Rated Capacity
Legal for Trade ❑ Yes ❑ No

Crane Type: ❑ Bridge ❑ Mobile Fixed Boom ❑ Mobile Ext. Boom Gantry
❑ Container ❑ Lattice Boom ❑ Jib ❑ Other _____

Reeving: _____ Parts of Wire-Rope _____ At Bottom Load Block _____ At Load Sensor
❑ N/A

Power Supply: ❑ DC ❑ AC Voltage _____

LOAD SENSOR(S)

Number of Sensors: ❑ 1 ❑ 2 ❑ 3 ❑ 4 ❑ Other _____

Load Sensor Design: ❑ Tension Link ❑ Clevis/Sheave Load Pin ❑ Single End Shear
❑ Double Ended Shear ❑ Compression

Load Sensor Capacity: _____ ❑ lb ❑ kg ❑ tons ❑ metric tons ❑ Other _____

Load Sensor Location: ❑ BTH* ❑ Equalizer/Idler Sheave ❑ Dead End
❑ Other _____

Environment: ❑ Indoor ❑ Outdoor ❑ Other _____

Other Requirements: _____

INSTRUMENTATION

Dyna-Clamp Questionnaire

Industry Dyna-Clamp will be used in: _____

Is protective case required: ☐ YES ☐ NO

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.