Greer Company

MicroGuard-500 Crane Data Sheet - Telescopic cranes

Information & outline of application requirements.

The completion of this application data sheet is required prior to the application of a MicroGuard-500 rated capacity indicator to any specific machine model. The information provided by this document is used to initialize the calibration of the rated capacity indicator in order to ensure minimum on-site calibration effort.
A full capacity chart with detailed notes and range diagrams is required in order to complete the system application.

Machine Outline

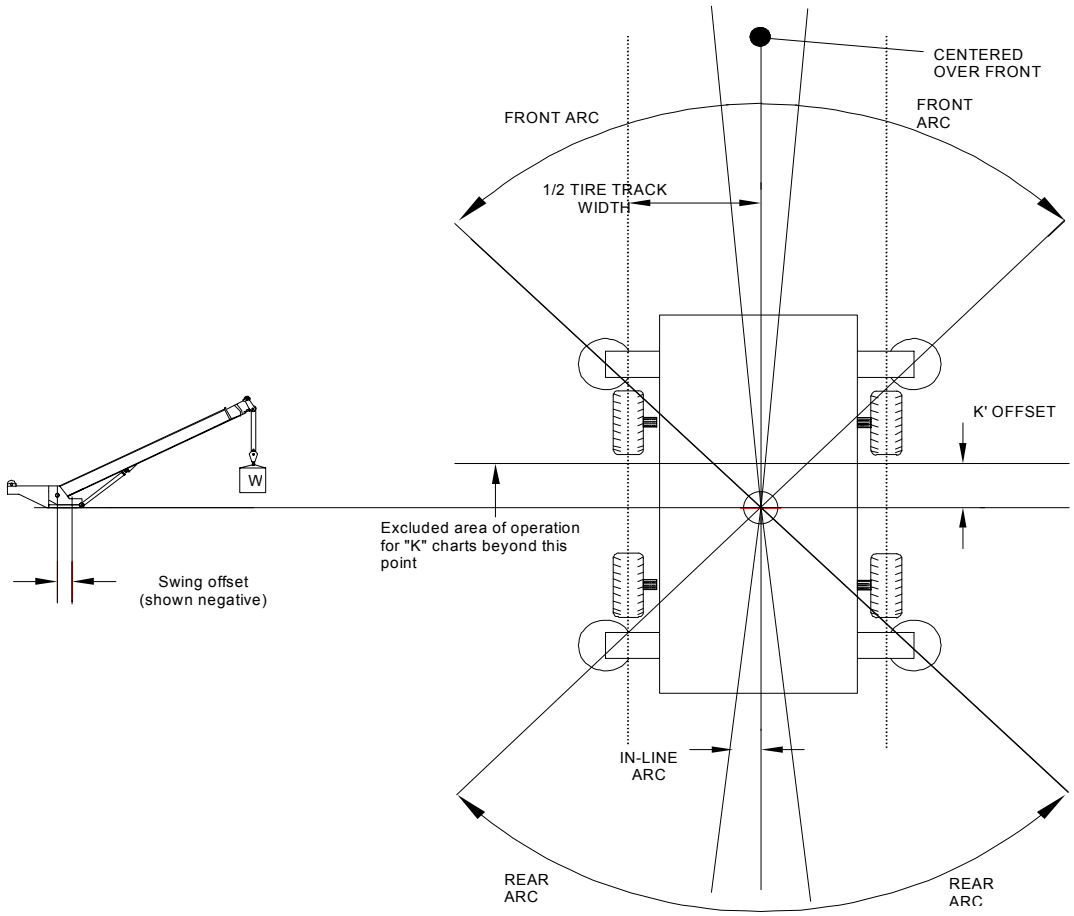
Crane Make & Model _____

Chart Numbers _____

Units of length (Check appropriate box)	**Feet**	**Meters**		
Units of force (Check appropriate box)	**Pounds*1000**	**Tons(US)**	**Tons(UK)**	**Tons(Metric)**

Swing Data

The following dimensions are required when the rated capacity indicator is to be fitted with absolute measurement of swing angle with either a potentiometer or shaft encoder fitted within the center post or to the swing gear.
For machines fitted with swing switch area definition, indicate the appropriate arcs required by the chart.



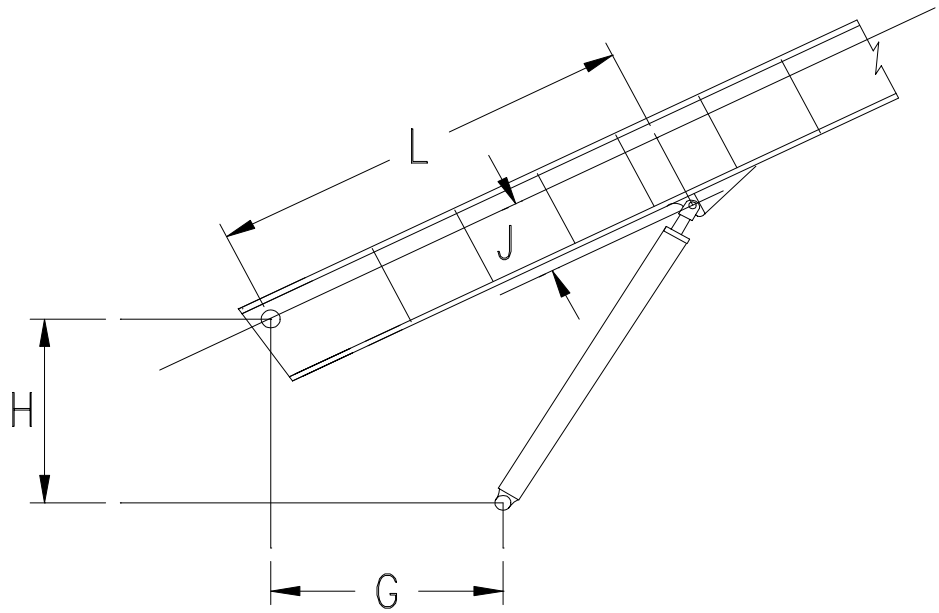
Lengths

Swing Offset		½ Tire Track Width		"K" offset	

Angles

Front Arc		Rear Arc		In-Line Arc	

Boom Hoist Data



Lengths

L - horizontal along boom from boom pivot to upper cylinder pin

J - vertical across boom from boom pivot to upper cylinder pin

Note:
Dimension is negative when boom pivot is above upper cylinder pin

G - horizontal between boom pivot and lower cylinder pin

H - vertical between boom pivot to lower cylinder pin

B - diameter of boom hoist cylinder bore

R - diameter of boom hoist cylinder rod

n – Number of Cylinders (1 or 2)

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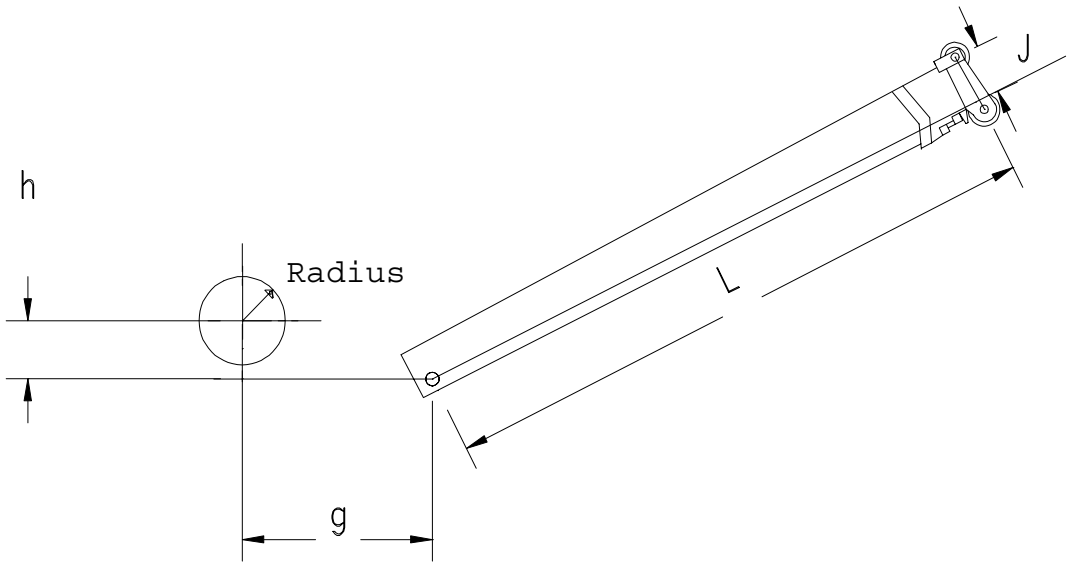
PN W450300 Rev A 09/28/00

Winch Data

Winch dimensions are required to allow for compensation of moment arm created by the winch position. For winches mounted on the boom, dimensions are not required.



	Main/Front winch	Aux/Rear winch
L - horiz'l along boom from boom pivot to top sheave center (boom retracted)		
J - vertical across boom from boom pivot to top sheave center (boom retracted)		
G - horizontal between boom pivot and winch center of rotation		
H - vertical between boom pivot and winch center of rotation		
R - winch radius (include 2 or 3 layers of rope)		
F - maximum rated line pull standard rope		

Note: Dimension is negative when boom pivot is above winch center of rotation

Main Boom Data

Data for up to four main boom modes is allowed. Any configuration of the telescoping boom which is not detachable and will alter the operating length and/or moment will require a separate calibration. This will include: Booms with more than one telescoping sequence or boom + manual or powered telescoping tip extension.

Main boom head sheave radius	
Maximum number of parts of line for main boom	
Height of boom pivot above ground (on outriggers)	

Main Booms cont'd

Describe each main boom configuration required.
Provide a sketch or separate drawing for each mode of operation in space provided.
Include telescoping sequences and manual/powered extensions.

Boom #1

Boom #2

Main Boom Data cont'd

Boom #3

Boom #4

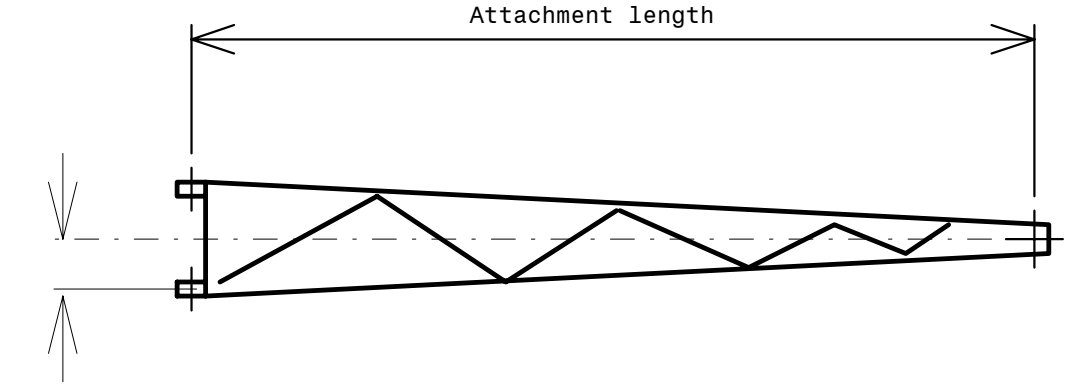
Attachment Data

Attachments are extensions to the boom that are removable. Auxiliary heads should be included as an attachment.
The following attachment data should be specified as accurately as possible to avoid calibration errors.
Use data sheet on page 12 to indicate dimensions copy extra sheets as required.

Attachment length & head offset

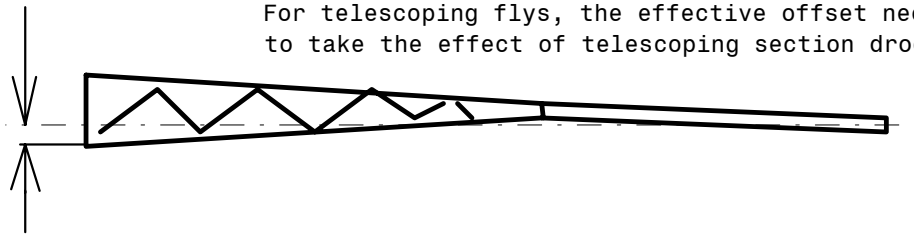
Attachment length: distance along fly center line, between fly attachment lower mounting pin and attachment head sheave center.

Attachment head offset: Distance between attachment head sheave center and center line, perpendicular to center line.



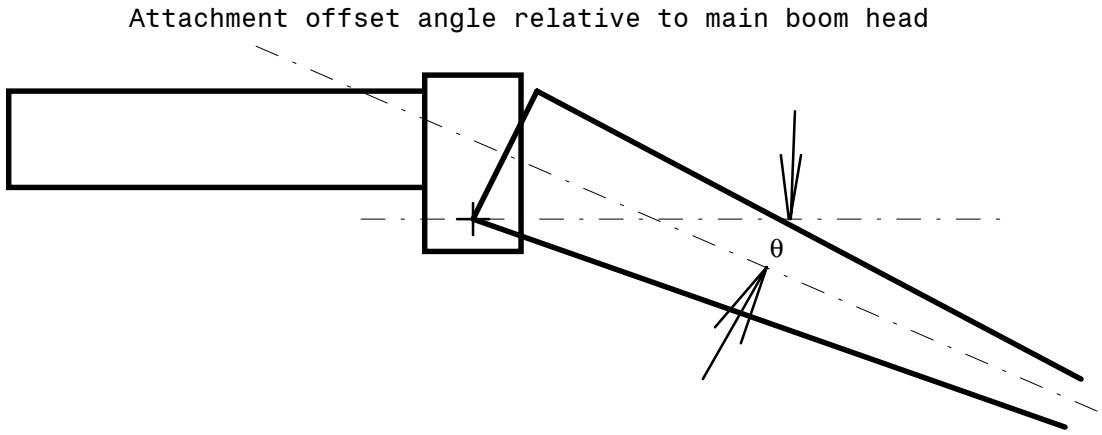
Attachment effective head offset

For telescoping flys, the effective offset needs
to take the effect of telescoping section droop into account



Attachment data cont'd

Attachment offset angle: Offset angle of attachment relative to main boom head (specify to nearest 0.1 degrees)



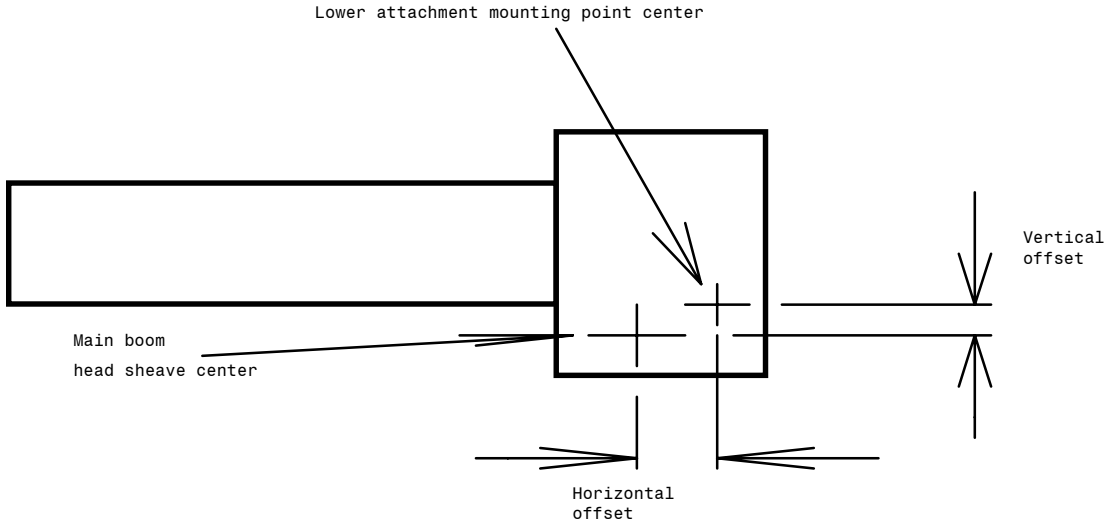
Attachment mounting offset

The following attachment mounting offset dimensions are usually not required, since most attachments are mounted to the main boom head sheave center.

Please indicate dimensions to nearest inch.

Attachment mounting offset (horiz): Distance between main boom head sheave center and center of attachment lower mounting point along boom center line.

Attachment mounting offset (vert): Distance between main boom head sheave center and center of attachment lower mounting point perpendicular to boom center line.



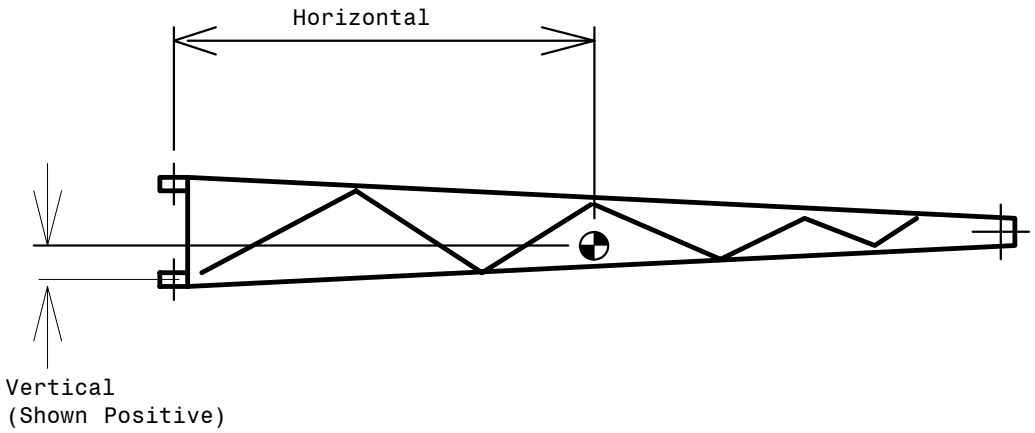
Attachment data cont'd

Attachment center of gravity (Erected)

Please indicate dimensions to nearest inch.

Attachment center of gravity (horiz): Distance between attachment lower mounting point and center of gravity along attachment center line.

Attachment center of gravity (vert): Distance between attachment lower mounting point and center of gravity perpendicular to attachment center line.



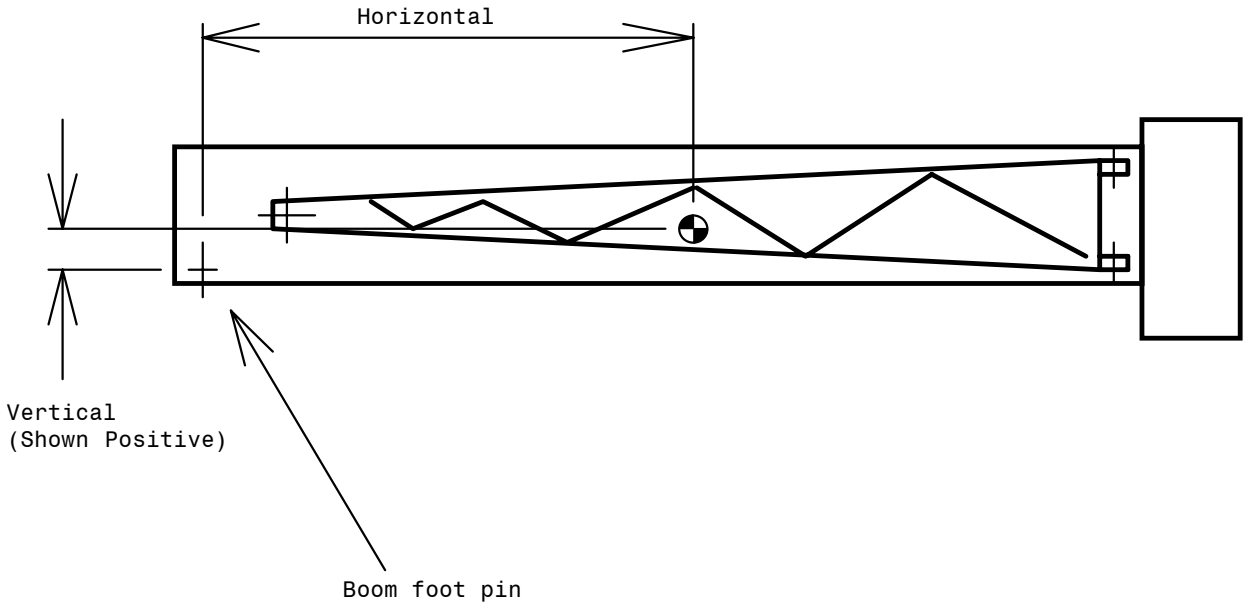
Attachment data cont'd

Attachment center of gravity (Stowed)

Please indicate dimensions to nearest inch.

Stowed attachment center of gravity (horiz): Distance between main boom pivot and center of gravity along main boom center line.

Stowed attachment center of gravity (vert): Distance between main boom pivot and center of gravity perpendicular to main boom center line.



Attachment Data cont'd

	Attachment #1	Attachment #2	Attachment #3	Attachment #4	Attachment #5	Attachment #6
Attachment name						
l - Attachment length						
s - Attachment head offset						
h - Attachment mounting offset - horizontal						
v - Attachment mounting offset - vertical						
a - Attachment offset angles						
g - Attachment center of gravity - horizontal						
t - Attachment center of gravity - vertical						
w - Attachment weight						
r - Head sheave radius						

Stowed attachment

g - Attachment center of gravity - horizontal						
t - Attachment center of gravity - vertical						
Stowed deduct wt.						
Erected deduct wt.						