



## Build Package – Liebherr LR 1400/2 – CR4402

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Note: Crane technician **MUST** verify all information contained in this document matches what is provided by the manufacturer for the specific crane being used.

PROJECT:  
LR 1400 42m + 49m (138' + 161')  
LOCATION: Washington, DC  
BUCKNER CONTACT: Andy Moore  
andyM@BucknerHeavylift.com  
LIFT PLAN BY: Andy Moore  
andyM@BucknerHeavylift.com

DRAWING NOTES:  
Title Page

LR 1400/2	
Operating Mode	SLN
Main Boom Length	42m (138')
Luffing Jib Length	49m (161')
Derrick Length	N/A
Superstructure CWT	155t (342k)
Carbody CWT	43t (95k)
Ballast Tray CWT	N/A

**PRELIMINARY**

FILE: D:\Andy Moore\OneDrive – Buckner Heavylift Cranes\Documents – Engineering\Drawings\BHL\Buckner\Build Sheets\LR 1400\LR 1400 – SLN 42m + 49m (138' + 161') 155t + 43t.dwg

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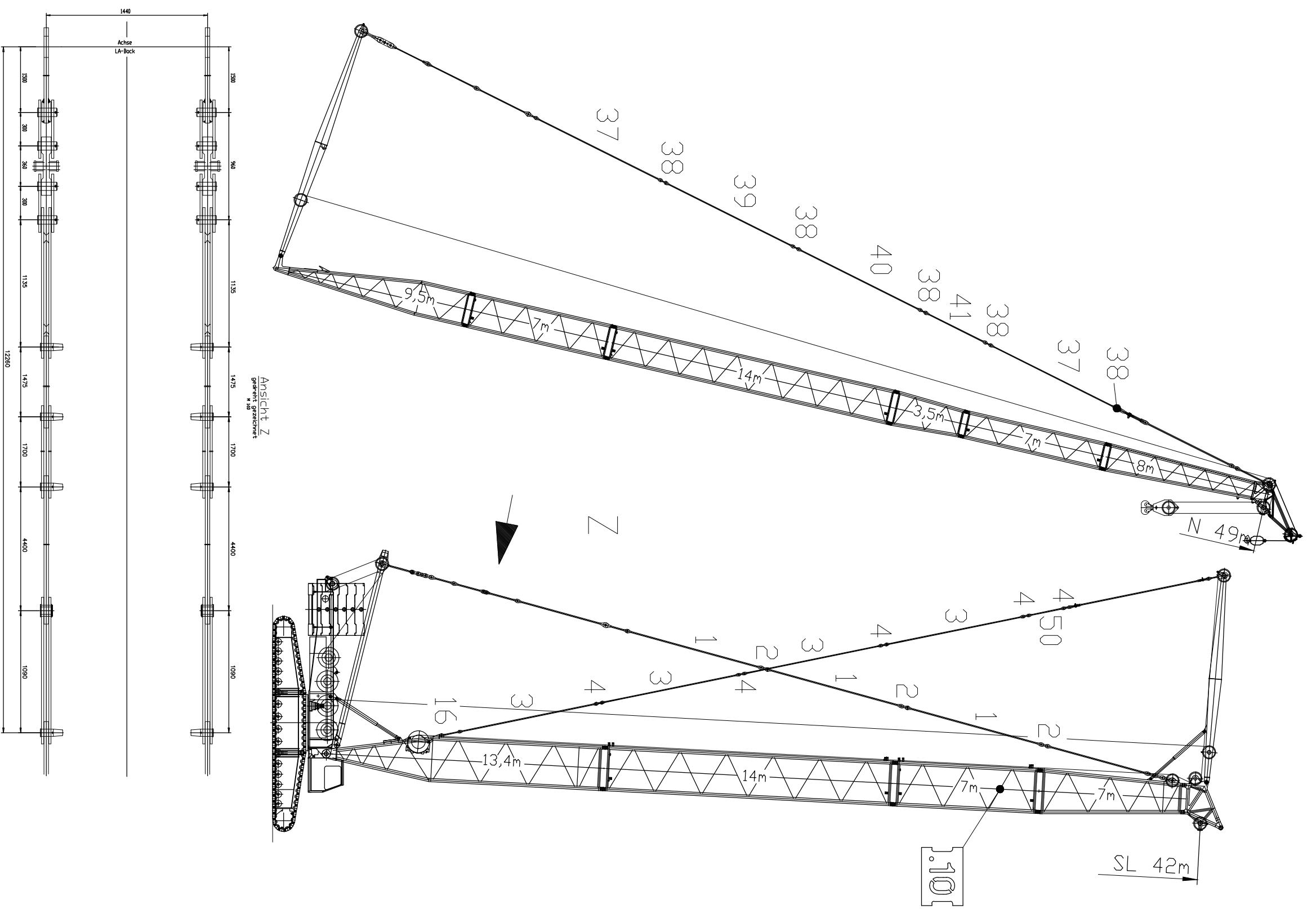
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**BUCKNER**  
HEAVYLIFT CRANES



## PROJECT:

LR 1400 42m + 49m (138' + 161')

**LOCATION:** Washington, DC

BUCKNER CONTACT: Andy Moore  
ADMOR, Inc., USA

AndyM@BucknerHeavylift.com

LIFT PLAN BY: Andy Moore  
AndyM@BucknerHeavyLift.com

[andy@bucknercreatives.com](mailto:andy@bucknercreatives.com)

## Build Sheet

LR 1400/2	
Operating Mode	SLN
Main Boom Length	42m (138')
Luffing Jib Length	49m (161')
Derrick Length	N/A
Superstructure CWT	155t (342k)
Carbody CWT	43t (95k)
Ballast Tray CWT	N/A

**PRELIMINARY**

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# **BUCKNER** HEAVY LIFT CRANES

PROJECT:  
LR 1400 42m + 49m (138' + 161')  
LOCATION: Washington, DC  
BUCKNER CONTACT: Andy Moore  
andyM@BucknerHeavylift.com  
LIFT PLAN BY: Andy Moore  
andyM@BucknerHeavylift.com

DRAWING NOTES:  
Rod Plan

LR 1400/2

Operating Mode	SLN
Main Boom Length	42m (138')
Luffing Jib Length	49m (161')
Derrick Length	N/A
Superstructure CWT	155t (342k)
Carbody CWT	43t (95k)
Ballast Tray CWT	N/A

**PRELIMINARY**

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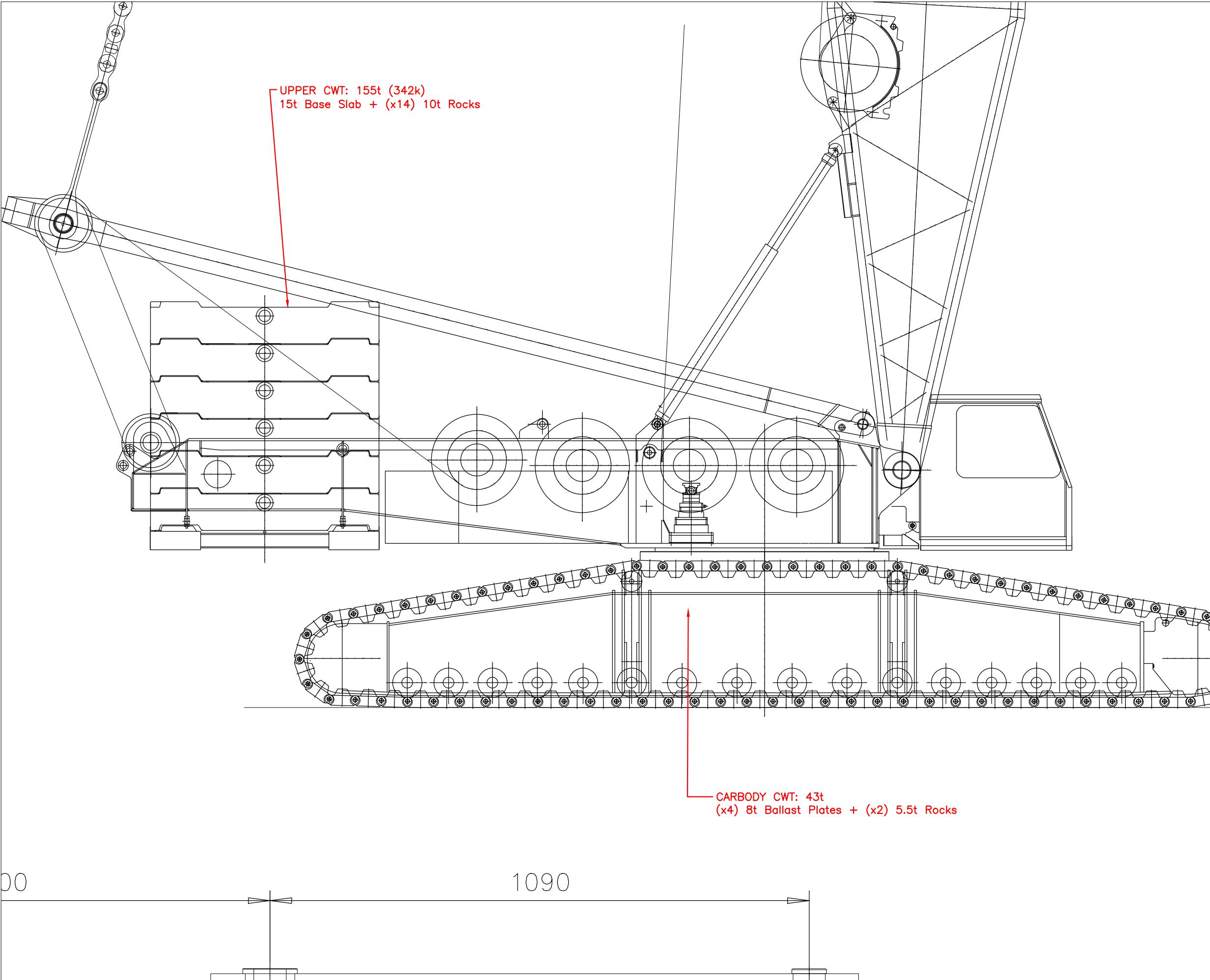
**BUCKNER**  
HEAVYLIFT CRANES

Pos. Artikel	Bezeichnung	Description
1 963497808	STANGE MIT SCHILD	ROD WITH BOARD
2 925173308	LASCHE KPL.	BRACKET COMPL.
3 963493508	STANGE	ROD
4 925173008	LASCHE KPL.	BRACKET COMPL.
9 925184408	SCHWINGE SCHWK.	ROCKER WELDED
16 921344408	STANGE KPL.	ROD CPL.
23 773424508	SEIL	ROPE
25 954383508	BOLZEN	PIN
27 921137508	STANGE KPL.	ROD CPL.
28 954385708	BOLZEN	PIN
29 433105008	SICHERUNGSFEDER	RETAINING SPRING
32 921129608	STANGE KPL.	ROD CPL.
35 948638308	BOLZEN	PIN
36 773386108	SEIL	ROPE
44 948359608	BOLZEN	PIN
51 529001508	AUFSTELLWAGEN	SET-UP CARRIAGE
52 963490108	STANGE MIT SCHILD	ROD WITH BOARD
68 692307908	ZUGMESSLASCHE	TENSION DYNAMOMETER
76 921406808	STANGE KPL.	ROD CPL.
77 921406908	LASCHE KPL.	BRACKET COMPL.
78 921407008	STANGE KPL.	ROD CPL.
79 921407208	STANGE KPL.	ROD CPL.
80 921407308	SCHWINGE SCHWK.	ROCKER WELDED
82 921425408	STANGE MIT SCHILD	ROD WITH BOARD
83 921425508	STANGE KPL.	ROD CPL.
86 923626908	LASCHE SCHWK.	CONNECTING LINK WELDED
87 923627008	LASCHE SCHWK.	CONNECTING LINK WELDED
88 923627108	LASCHE SCHWK.	CONNECTING LINK WELDED
89 773433908	SEIL	ROPE
90 773434008	SEIL	ROPE
91 956097408	BOLZEN	PIN
92 421202408	SCHEIBE	WASHER
93 955998208	BOLZEN	PIN
94 421102808	SCHEIBE	WASHER
95 433102508	SICHERUNGSFEDER	RETAINING SPRING
96 740023808	KETTE	CHAIN
98 921125208	TRAVERSE SCHWK.	CROSS-MEMBER
99 921129208	STANGE KPL.	ROD CPL.
103 970079008	BOLZEN	PIN
104 921137308	STANGE KPL.	ROD CPL.

27.4.2009	LR 1400/2 (074257)	910536008_002
LIEBHERR	STANGEN RODS / PULL RODS	Seite: 12

12.3.2008	etk_en_de_074340 LR 1400/2	400 (4/4)
LIEBHERR	RODS / PULL RODS STANGEN	3 561 91 52 552 08

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PROJECT:  
LR 1400 42m + 49m (138' + 161')  
LOCATION: Washington, DC  
BUCKNER CONTACT: Andy Moore  
andyM@BucknerHeavylift.com  
LIFT PLAN BY: Andy Moore  
andyM@BucknerHeavylift.com  
DRAWING NOTES: CWT Arrangement

LR 1400/2	
Operating Mode	SLN
Main Boom Length	42m (138')
Luffing Jib Length	49m (161')
Derrick Length	N/A
Superstructure CWT	155t (342k)
Carbody CWT	43t (95k)
Ballast Tray CWT	N/A

**PRELIMINARY**

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**BUCKNER**  
HEAVYLIFT CRANES

Aux. Hook Block (Winch 2)	
Hook Block 12EM (0 Sheave) 25mmØ	
Parts of Line	1
Reeving Cap. (EN 13000)	27 800 lb
Block Wt.	1 300 lb

#### 7.3.1 Load hook 12 E (0 rope pulleys / 26.5 kips (12 t) load)

Number of rope runs	Maximum possible overall jib length [ft] with hook block weight [lbs]
1	1.3 kips
1	482

#### 1 Distance between the hook and roller set in the boom head

To determine the hook height, the lifting height must be reduced by the distance between the hook and the center of the roller set in the boom head.

The distances for the hook block used can be taken from the following charts.

Hook block	Distance H Valid for the end section
Load hook 12 E	10.5 ft
Hook block 36 EM	13.1 ft
Hook block 80 DM	13.8 ft
Hook block 160 DM	14.8 ft
Double hook block 250 / 125 DM	15.1 ft
Double hook block 400 / 200 DMZ	17.4 ft

Main Hook Block (Winch 1)	
Hook Block 80DM (3 sheave) 25mmØ	
Parts of Line	4
Reeving Cap. (EN 13000)	108 300 lb
Block Wt.	5 700 lb

#### 7.3.3 Hook block 80 DM (3 rope pulleys / 176.4 kips (80 t) load)

Number of rope runs	Maximum possible overall jib length [ft] with hook block weight [lbs]
7	5.7 kips
6	253
5	299
4	390
3	482

	
1x	x 1000 lb
2x	27.8
3x	54.9
4x	81.8
5x	108.3
6x	134.3
7x	159.8
8x	185.2
9x	210.1
10x	234.6
11x	258.8
12x	282.6
13x	306.0
14x	329.2
15x	351.9
16x	374.1
17x	396.2
18x	418.0
19x	439.4
20x	460.6
21x	481.3
22x	501.6
23x	521.9
24x	541.7
25x	561.3
26x	580.5
27x	599.5
28x	618.2
29x	636.5
30x	654.6
31x	672.4
32x	690.1
33x	707.5
34x	726.0
35x	741.2
36x	757.8
	771.6

PROJECT:  
LR 1400 42m + 49m (138' + 161')  
LOCATION: Washington, DC  
BUCKNER CONTACT: Andy Moore AndyM@BucknerHeavylift.com  
LIFT PLAN BY: Andy Moore AndyM@BucknerHeavylift.com  
DRAWING NOTES: Hookblock

LR 1400/2	
Operating Mode	SLN
Main Boom Length	42m (138')
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**BUCKNER**  
HEAVYLIFT CRANES

PROJECT:  
LR 1400 42m + 49m (138' + 161')  
LOCATION: Washington, DC  
BUCKNER CONTACT: Andy Moore  
andyM@BucknerHeavylift.com

LIFT PLAN BY: Andy Moore  
andyM@BucknerHeavylift.com

DRAWING NOTES: Main Reaving

## LR 1400/2

Operating Mode	SLN
Main Boom Length	42m (138')
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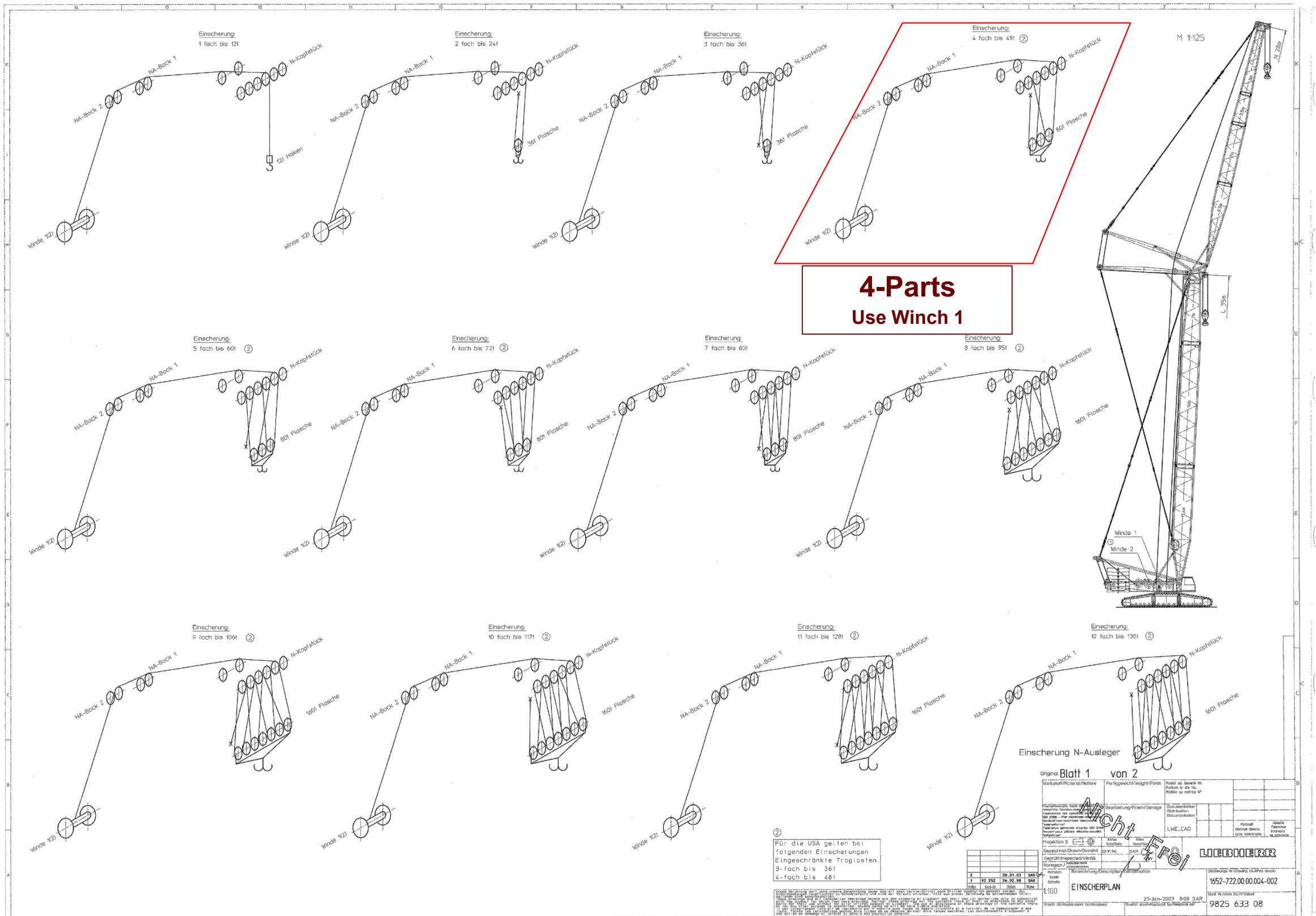
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**BUCKNER**  
HEAVYLIFT CRANES





## RAISING - AND LOWERING CHARTS

**SLN - mode**

TAB: 12400081  
System: S 2620.20  
N 2115.10  
1812.10

**Note:** The SL-boom must be set to 87° to the horizontal before luffing up the N-fly jib

Slewing platform- / central ballast [t]	Erection of boom, sideways / over rear		max. permissible hook block weight on main boom [t]
	Additional mechanical support not required [m]	Additional mechanical support required [m]	
155 / 43	SL 21 / N 21 - 91		3,8
	SL 28 / N 21 - 91		3,8
	SL 35 / N 21 - 91		3,8
	SL 42 / N 21 - 91		3,8
	SL 49 / N 21 - 91		3,8
	SL 56 / N 21 - 91		3,8
	SL 63 / N 21 - 63	SL 63 / N 21 - 84	2,6
		SL 63 / N 91	3,8
		SL 70 / N 28 - 77	2,6
			3,8
135 / 43	SL 21 / N 21 - 91		3,8
	SL 28 / N 21 - 91		3,8
	SL 35 / N 21 - 91		3,8
	SL 42 / N 21 - 91		3,8
	SL 49 / N 21 - 91		3,8
	SL 56 / N 21 - 91		3,8
		SL 63 / N 21 - 84	3,8
		SL 63 / N 91	2,6
		SL 70 / N 28 - 77	2,6

PROJECT:  
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LOCATION: Washington, DC  
BUCKNER CONTACT: Andy Moore  
andyM@BucknerHeavylift.com  
LIFT PLAN BY: Andy Moore  
andyM@BucknerHeavylift.com

DRAWING NOTES:  
Erection & Take Down

LR 1400/2	
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**BUCKNER**  
HEAVYLIFT CRANES

