



Build Package – Liebherr LR 1400– CR4401

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PRELIMINARY

PROJECT:CP Chem

LOCATION:Orange, TX

BUCKNER CONTACT:Dallas Snow, P.E.
DallasS@BucknerHeavyLift.com

LIFT PLAN BY:Dallas Snow, P.E.
DallasS@BucknerHeavyLift.com

DRAWING NOTES:
Title Page

LR1400	
Operating Mode	SL
Main Boom Length	70m (230')
Luffing Jib Length	N/A
Derrick Length	N/A
Superstructure CWT	155t (342k)
Carbody CWT	43t (95k)
Ballast Tray CWT	N/A

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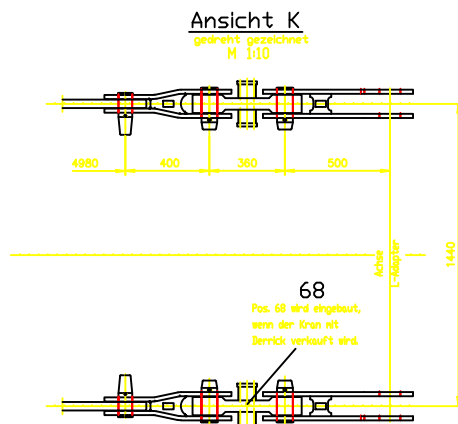
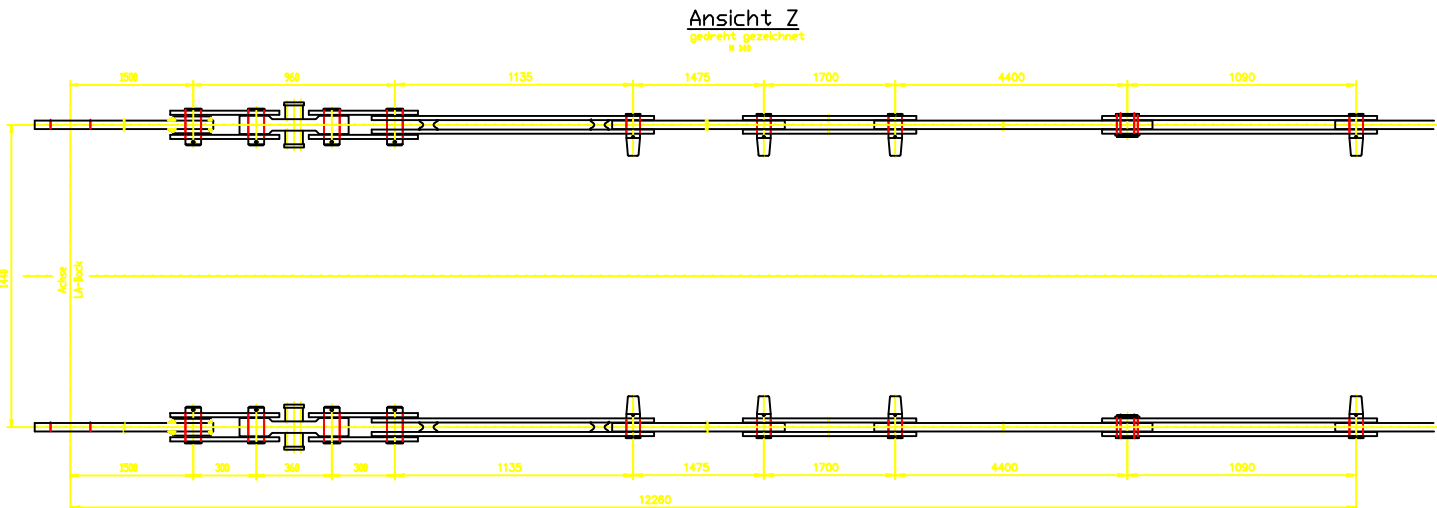
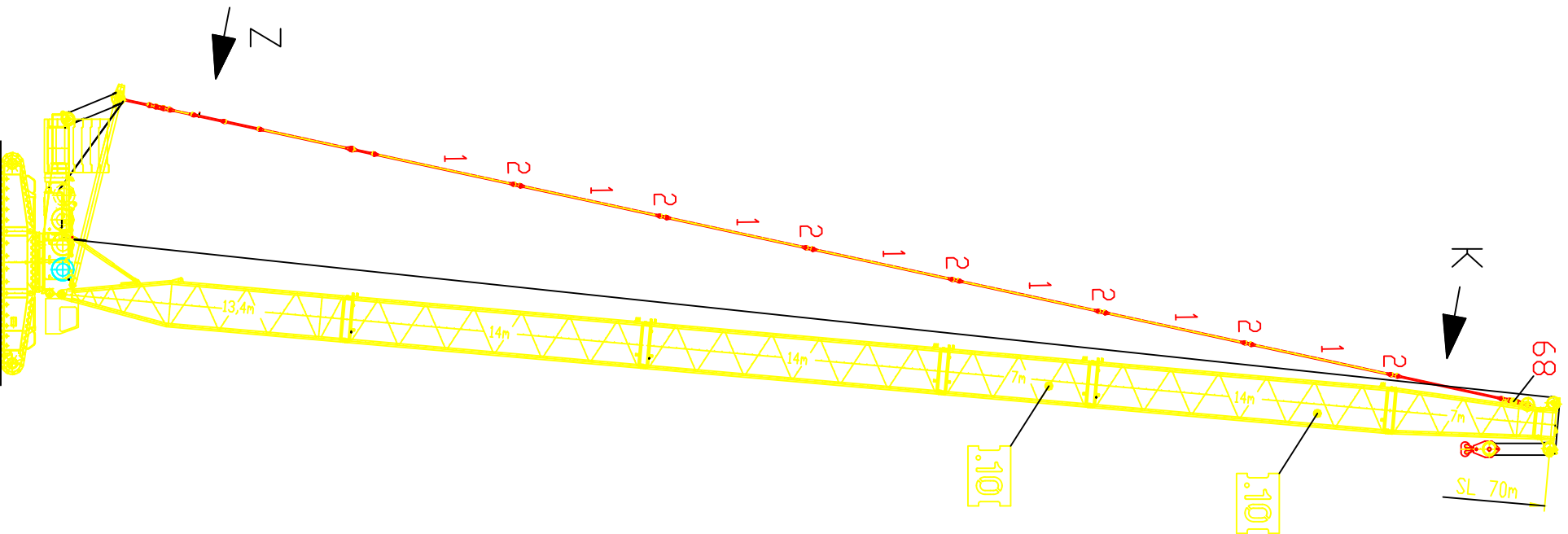
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BUCKNER HEAVYLIFT CRANES



PROJECT: CP Chem
LOCATION: Orange, TX
BUCKNER CONTACT: Dallas Snow, P.E.
DALLAS.S@BUCKNERHEAVYLIFT.COM
LIFT PLAN BY: Dallas Snow, P.E.
DALLAS.S@BUCKNERHEAVYLIFT.COM

DRAWING NOTES:
Build Sheet

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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) STANGEN RODS / PULL RODS	910536008 _ 002 Seite: 12
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Pos.	Artikel	Bezeichnung	Description
106	433010308	SPLINT	SPLIT PIN
1000	983017408	STANGEN	RODS / PULL RODS

27.4.2009	LR 1400/2 (074257) STANGEN RODS / PULL RODS	910536008 _ 002 Seite: 13
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PROJECT: CP Chem

LOCATION: Orange, TX

BUCKNER CONTACT: Dallas Snow, P.E.
DallasS@BucknerHeavylift.com

LIFT PLAN BY: Dallas Snow, P.E.
DallasS@BucknerHeavylift.com

DRAWING NOTES:
Rod Plan

LR1400	
Operating Mode	SL
Main Boom Length	70m (230')
Luffing Jib Length	N/A
Derrick Length	N/A
Superstructure CWT	155t (342k)
Carbody CWT	43t (95k)
Ballast Tray CWT	N/A

PRELIMINARY

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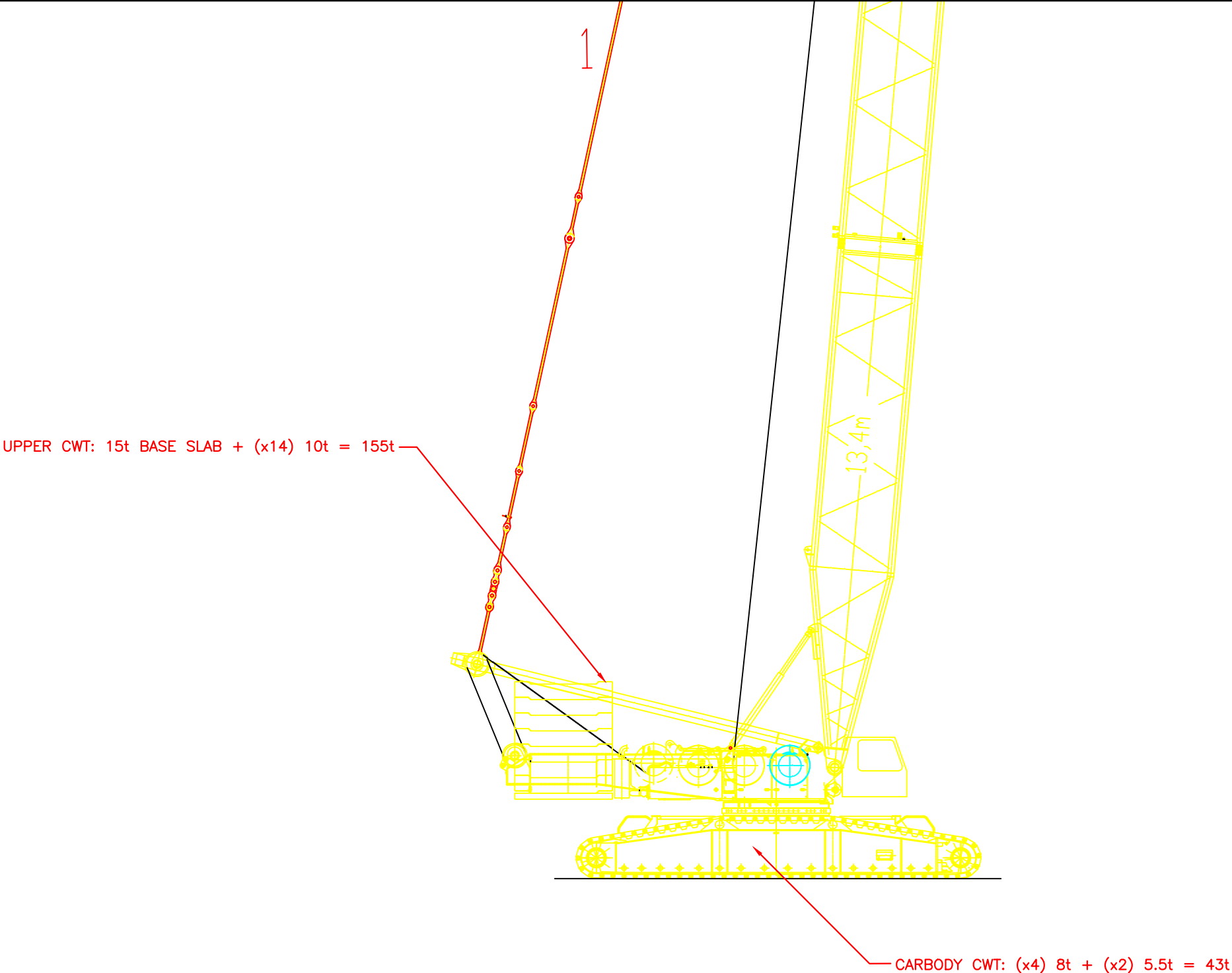
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UPPER CWT: 15t BASE SLAB + (x14) 10t = 155t

CARBODY CWT: (x4) 8t + (x2) 5.5t = 43t

PROJECT:CP Chem

LOCATION:Orange, TX

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LIFT PLAN BY:Dallas Snow, P.E.
DallasS@BucknerHeavylift.com

DRAWING NOTES:
CWT Arrangement

LR1400	
Operating Mode	SL
Main Boom Length	70m (230')
Luffing Jib Length	N/A
Derrick Length	N/A
Superstructure CWT	155t (342k)
Carbody CWT	43t (95k)
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BUCKNER
HEAVYLIFT CRANES

7.3.2 Hook block 36 EM (1 rope pulleys / 79.4 kips (36 t) load)

Number of rope runs	Maximum possible overall jib length [ft] with hook block weight [lbs]			
	3.3 kips			
3	390			
2	551			
1	551			

7.4.3 Hook block 100 DM (3 rope pulleys / 185.2 kips (84.0 t) load)

Number of rope runs	Maximum possible overall jib length [ft] with hook block weight [lbs]			
	4.4 kips without additional weight	5.7 kips with 2 additional weights (0.16 ft wide)	7.1 kips with 2 additional weights (0.32 ft wide)	8.4 kips with 4 additional weights
7	207	253	322	367
6	230	299	390	436

9. Load capacity reductions

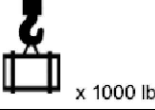
9.1 Load capacity reduction with mounted boom nose

9.1.1 The loads specified in the load charts for crane operation on the lattice boom or on the lattice jib apply for operation without mounted boom nose.

9.1.2 If the boom nose is still mounted on the boom head when carrying out operating modes without boom nose, the possible load for these operating modes are reduced by:

- the weight of the boom nose
- the weight of the hoist rope reeved on the boom nose
- the weight of the load carrying gear used on the boom nose

Max. load capacity of the boom nose/ auxiliary jib [kips]	Number of rope pulleys	For boom head	Weight of the boom nose/ auxiliary jib [kips]
26.5	1	S, L, N	0.474
79.4	2	S, L, W, N	0.926

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

PROJECT:

CP Chem

LOCATION: Orange, TX
BUCKNER CONTACT: Dallas Snow, P.E.
DallasS@BucknerHeavylift.com

LIFT PLAN BY: Dallas Snow, P.E.
DallasS@BucknerHeavylift.com

DRAWING NOTES:

Hookblock

LR1400	
Operating Mode	SL
Main Boom Length	70m (230')
Luffing Jib Length	N/A
Derrick Length	N/A
Superstructure CWT	155t (342k)
Carbody CWT	43t (95k)
Ballast Tray CWT	N/A

PRELIMINARY

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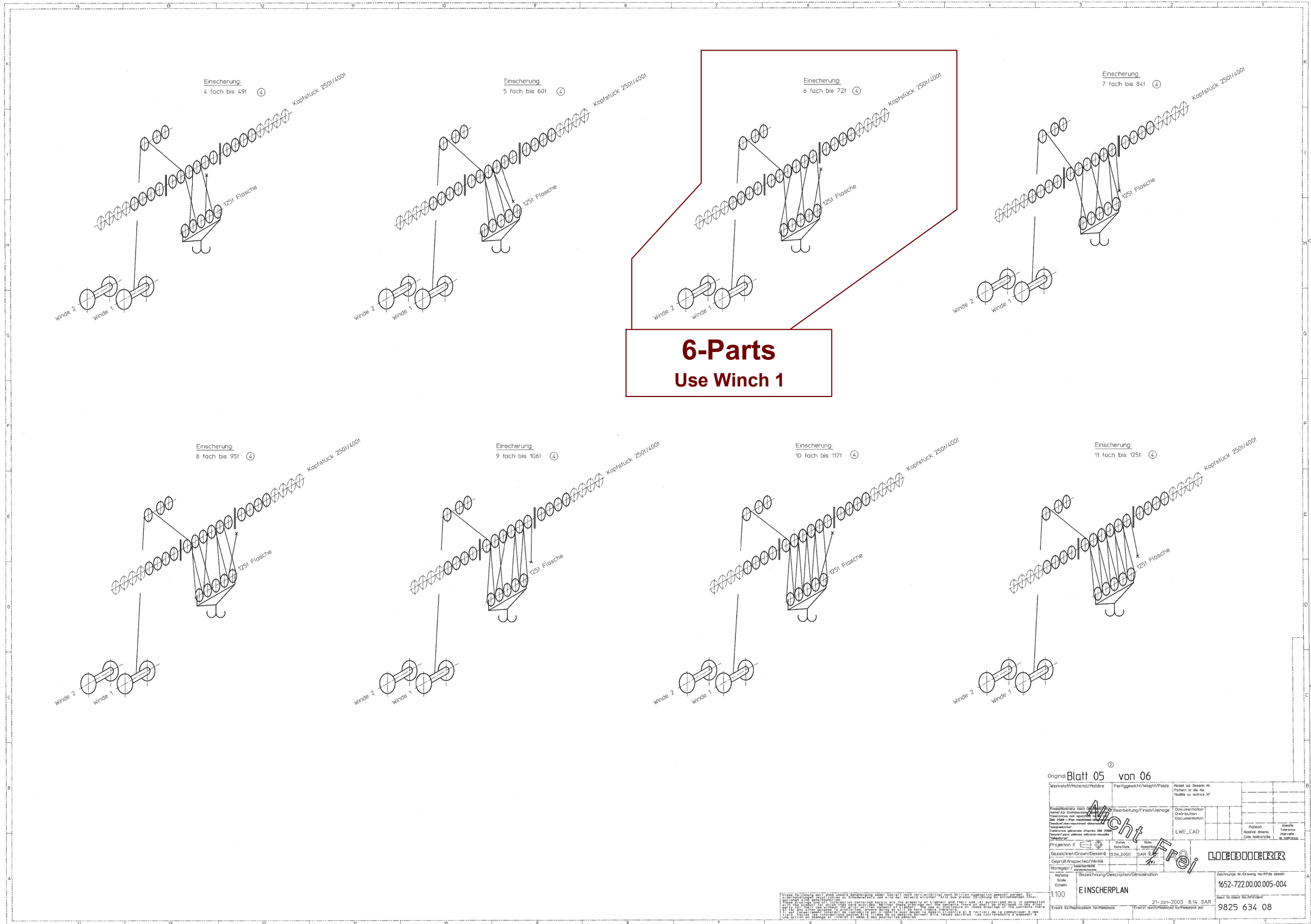
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SHEET: 005 OF 009





PROJECT: CP Chem
LOCATION: Orange, TX
BUCKNER CONTACT: Dallas Snow, P.E.
LIFT PLAN BY: Dallas Snow, P.E.

DRAWING NOTES:
Main Reeving

LR1400	
Operating Mode	SL
Main Boom Length	70m (230')
Luffing Jib Length	N/A
Derrick Length	N/A
Superstructure CWT	155t (342k)
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BUCKNER HEAVYLIFT CRANES

RAISING - AND LOWERING CHARTS

SL -mode
with 350 t head section

TAB: 12400067
System: S 2620.20
L 2620.10

Note: raising, lowering 360°
Supporting base 7,80 m×7,50 m×1,20 m **without** additional supports

Operating mode	Slewing platform- / central ballast	Boom combination	max. permissible hook block weight on main boom
	[t] / [t]	SL (m)	[t]
SL	155 / 43	21 - 70	8,0
		77	6,1
		84	2,7
	135 / 43	21 - 63	8,0
		70	7,0
		77	4,1
		84	0,9
	95 / 43	21 - 56	8,0
		63	5,7
		70	2,6
	55 / 43	21 - 42	8,0
		49	7,3
		56	3,6
	0 / 43	63	0,7
		21 - 28	8,0
		35	4,3
	95 / 11	42	0,9
		21 - 49	8,0
		56	7,5
	55 / 11	63	4,1
		70	1,2
		21 - 42	8,0
		49	5,3
		56	1,9

RAISING - AND LOWERING CHARTS

SL - mode
with 350 t head section

TAB: 12400068
System: S 2620.20
L 2620.10

Note: raising, lowering side ways
Supporting base 7,80 m×7,50 m×1,20 m **with** additional supports
(Supporting point 7.00 m from center of slewing ring)

Operating mode	Slewing platform- / central ballast	Boom combination	max. permissible hook block weight on main boom
	[t] / [t]	SL (m)	[t]
SL	155 / 43	21 - 77	8,0
		84	6,6
		91	3,3
	135 / 43	21 - 77	8,0
		84	6,6
		91	3,3
	95 / 43	21 - 77	8,0
		84	5,6
		91	2,7
	55 / 43	21 - 63	8,0
		70	6,6
		77	3,7
	0 / 43	21 - 42	8,0
		49	7,4
		56	3,7
	95 / 11	21 - 70	8,0
		77	6,9
		84	3,5
	55 / 11	21 - 56	8,0
		63	7,3
		70	4,0
		77	1,4

PROJECT:

CP Chem

LOCATION:	Orange, TX
BUCKNER CONTACT:	Dallas Snow, P.E. DallasS@BucknerHeavylift.com
LIFT PLAN BY:	Dallas Snow, P.E. DallasS@BucknerHeavylift.com

DRAWING NOTES:
Boom Erection

LR1400	
Operating Mode	SL
Main Boom Length	70m (230')
Luffing Jib Length	N/A
Derrick Length	N/A
Superstructure CWT	155t (342k)
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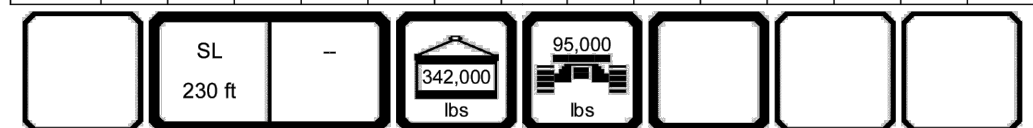
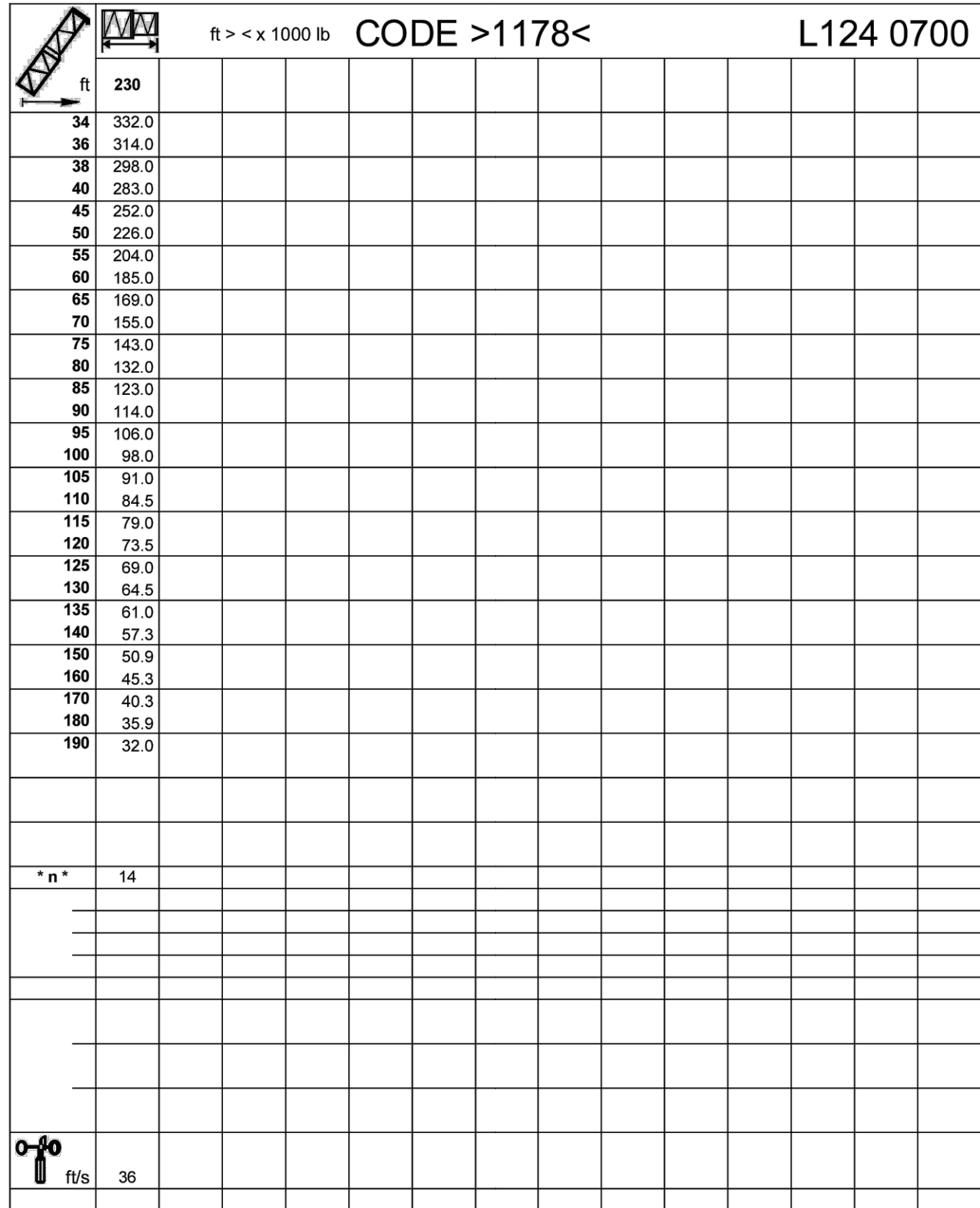
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SL 230 ft	--
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06.01



PROJECT:

CP Chem

LOCATION:	Orange, TX
BUCKNER CONTACT:	Dallas Snow, P.E. DallasS@BucknerHeavyLift.com
LIFT PLAN BY:	Dallas Snow, P.E. DallasS@BucknerHeavyLift.com

Load Charts

LR1400	
Operating Mode	SL
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BUCKNER
HEAVYLIFT CRANES