## KOBELCO

# 7300 Hydraulic Crawler Crane

# **Specifications**

### **Crawler Crane**

Max. Lifting Capacity: 300 metric ton x 5.0 m

### **Fixed Jib**

Max. Lifting Capacity: 25 metric ton x 34.0 m Luffing Jib

Max. Lifting Capacity: 80 metric ton x 14.0 m

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### **CONFIGURATION & STYLE OF ATTACHMENT**



		Crawle	r Crane				
STYLE	Heavy duty boom		t duty om	Boom for luffing jib	Fixe	d Jib	Luffing Jib
Counter Weight	А	A	В	А	A	В	А
SPECIFICATION		_					
Max. lifting capacity	300 ton x 5.0 m	120 ton x 10.0 m	120 ton x 10.0 m	180 ton x 8.0 m	25 ton x 34.0 m	25 ton x 30.0 m	80 ton x 14.0 m
Max. total length (Boom + Jib)	42.67 m	97.54 m	91.44 m	67.06 m	85.34 m + 36.58m	79.25m +36.58m	60.96 m +54.86 m
COUNTER WEIGHT							
Std. Counter Weight	ideal in						
(75.5 metric ton)	0	0	0	0	0	0	0
Additional counterweight	1941.				-70		
(15.5 metric ton)	0	0		0	0		0
Carbody weight	econo.				1.020		2.08
(22.0 Metric ton)	0	0		0	0	-	0
BASIC BOOM							
12.19m (40') lower boom and mast	0	0	0	0	0	0	0
6.10m (20') heavy duty upper boom	0		-			-	_
9.14m (30') light duty upper boom	-	0	0		0	0	
9.14m (30') upper boom				0			0
for luffing jib	_			0		_	0
BOOM INSERT							
3.05m (10') insert		1	1	1	1	1	1
6.10m (20') insert	2	1	-	1	1	1	
12.19m (40') insert	1	3	3	3	3	3	3
6.10m (20') insert		1	1	8	1	1	
for light duty boom only	1.00						_
12.19m (40') insert		2	2		1	1	
for light duty boom only	( <del></del> )						_
FIXED JIB							1
12.19m (10') basic Jib	-	10-51	1 <del></del>		1	1	_
6.10m (20') insert jib	—	-	-		1	1	_
9.14m (30') insert jib	1.00	-	-	-	2	2	
LUFFING JIB							
24.38m (80') basic jib		<u></u>	_	-	-		1
3.05m (10') insert jib	-		-	-	1. 	-	1
9.14m (30') insert jib	-	-			-		- 3

Note: number of Boom and Jib avobe shown means the numbers for the maximum length respectively,

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 Boom must be errected over front end of crawlers in principle. In case of the following type, idlers must blocked.

Counterweight	Type A	Type B
Standard (75.5 metric ton)		Available
Standard + Additional weight (91.0 metric ton)	Available	
Carboby weight (22.0 metric ton)	Available	882

\*Additional counterweight and carbody weight mustbe used simultaneously.

\*Type B is not available for the crane & luffing jib when upper boom is in use for the heavy duty boom & luffing jib.

19. Rating is not shown for the application of jib at 10 degree of offset angle, boom for luffing jib, Type B weight.

Attachment & Counterweight	Type A	Type B
Light duty boom	97.54 m (320')	91.4 m (300')
Boom + Jib	85.34 m (280') + 12.19 m (40') to 36.58 m (120')	79.25 m (260') + 36.58 m (120') 73.15 m (240') to 30.48 m (100')

### **WORKING RANGES**

#### Crawler Crane



#### Luffing Jib



### **RATING CHART FOR CRAWLER CRANE**

#### **HEAVY-DUTY MAIN BOOM**

Heavy duty upper boom/ with type A counterweight

Boom length Working m(ft) radius (m)	18.29 (60)	24.38 (80)	30.48 (100)	36.58 (120)	42.67 (140)
5	300.0				
6	251.7				
7	213.5	216.4			
8	181.4	190.0	180.0		
9	153.6	162.1	162.1	160.0	
10	132.6	140.0	140.0	140.0	140.0
12	102.1	108.9	108.9	108.9	108.9
14	81.6	87.9	87.9	87.9	87.9
16	62.5	73.0	73.0	73.0	72.9
18		61.6	61.6	61.6	61.5
20		52.5	52.5	52.5	52.5
22		45.0	45.0	45.0	45.0
24			41.4	41.0	40.6
26			36.7	36.6	36.1
28			32.2	32.2	32.4
30				29.8	29.2
34					24.0
38		1			20.4

Note: Ratings inside shown in \_\_\_\_\_ are determined by the strength of the boom or other structual components.

#### Notes :

- 1. Working radius is the horizontal distance from the center of rotation through the center of gravity of load.
- 2. Rartings do not exceed 78% of tipping load on the hard horizontal ground and includes weight of hook block, slings and all other load handling accessories from main boom or jib rating shown.
- 3 Ratings shown are based on freely suspended load and make no allowance for such factors as wind effect on lifted load, out-of-level ground conditions, operating speeds or any other condition that could be deterimental to the safe operation of this equipment. The operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speed accordingly.
- 4. No operation is possible in the range indicated by blank spaces in the chart.
- 5. The actual hoistable loads using main boom must be calculated by deducting the weight of main hook, slings and all other load handling accessories etc. from the ratings shown.
- 6. The actual hoistable loads using jib must be calculated by deducting the weight of jib hook, slings and all other loads handling accessories etc. from the rating shown.
- 7. JIb will be installed on the light duty boom of the 48.77 m (160') to 85.34 m (280') with type A counterweight, and 48.77 m (160') to 79.25 m (260') light duty boom with type B counterweight.
- Configrations of main Boom/Jib inserts and guy cables installations must be arranged as per the instruction of the owner and operator's manual, to be provided with machine.
- 9. Hook block weight and capacity (metric ton).

Capacity of hook	300 ton	180 ton	80 ton	25 ton	12.5 ton (ball -hook)
Weight	5.3	3.0	2.1	1.2	0.55

10. Max. hoisting load

No. of Parts of Line	1	2	3	4	5	6	7	8	9	10
Max. Load (Metric ton)	12.5	25.0	37.5	50.0	62.5	75.0	87.0	98.0	109.0	120.0
No. of Parts of Line	11	12	13	14	16	18	20	22	24	28
Max. Load (Metric ton)	130.0	140.0	150.0	160.0	180.0	200.0	215.0	225.0	250.0	300.0

- 11. Auxilliary sheave will be installed with 30.48 m (100') to 97.54 m (320') length of light duty boom and 24.38 m (80') to 67.06 m (220') length of boom for luffing lib.
- 12. Rating of aux. sheaves is the figure after the weight of aux. sheave (700 kg for light duty boom, 800 kg for boom for lufing jib) and main hook deducted from the rating of boom, but shall not exceed more than 12.5 metric ton.
- 13. Actual hoistable loads using aux. sheave must be calculated by deducting 12.5 metric ton ball-hook, slings and other loads handling accessaries from the rating shown.
- 14. When boom is equipped with aux. sheave, main hook rating shall be determined by deducting the weight of the aux. sheave from the rating of the main hook without aux. sheave.
- 15. Actual hoistable load with main boom being equipped with aux. sheave shall be determined by deducting the weight of hook, sllings and other handling rope etc., from the main boom rating with aux. sheave.
- 16. Maximum working radius with jib or aux. sheave shall not exceed the maximum working radius of the main boom.

17. Type of counterweight

### **RATING CHART FOR LUFFING JIB**

### 36.58 m (120') boom with type A counterweight

Unit : metric ton

Boom Length m(ft)	36.58 (120)														-			
Jib Length m(ft)	1	27.46 (90	)	3	0.48 (100	)	3	3.53 (110	)	31	6.58 (120	))	39	9.62 (130	)	4	2.67 (140	)
Boom angle Working radius (m)	85°	75°	65°	85°	75ª	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°
14																		
16	71.3			69.6														
18	61.5			61.4			61.0			56.8					_	_		
20	53.6			53.5			53.4			53.4			46.5			42.4	_	
22	46.9			46.9			46.9	í		46.9			44.6			40.6		
24	41.2		1	41.2			41.2			41.2			41.2			39.0		
26	36.6	33.7		36.6			36.6			36.6			36.6			36.6		
28	32.7	30.6		32.7	30.5		32.7			32.7			32.7			32.7		
30	29.5	28.1		29.5	27.9		29.5	27.8		29.5	27.7		29.5	-		29.5		
34		24.0			23.8		25.0	23.6		25.0	23.6		25.0	23.4		25.0	23.5	
38			17.8		20.7	17.7		20.5		21.3	20.4	<u> </u>	21.3	20.3		21.3	20.3	
42			15.6			15.5		18.0	15.3		17.9	15.2	18.7	17.8	1	18.6	17.8	
46						13.7			13.5			13.4		15.8	23.3		15.8	13.3
50												12.0	_		11.8		14.2	11.8
54															10.6			10.6
58													-					
62																		
66																	-	
70																		

Boom Length m(ft)	36.58 (120)												
Jib Length m(ft)	4	5.72 (150	))	48	3.77 (160	)	5	1.82 (170	)	5-	4.86 (180	)	
Boom angle Working radius (m)	85°	75°	56°	85°	75°	65°	85°	75°	65°	85°	75°	65°	
14													
16													
18					-								
20													
22	37.3			33.2									
24	35.7			31.9			28.4			25.8			
26	34.2			30.7			27.3			24.7			
28	32.7			20.5			26.2			23.7			
30	29.5	2.3		28.3			25.1			22.7		-	
34	25.0			25.0		1	23.0			20.7			
38	21.3	20.1		21.3	19.9		21.2	20.0		18.9			
42	18.4	17.6		18.3	17.4		18.3	17.5		17.2	17.2		
46	15.9	15.6		15.9	15.5		15.9	15.5		15.7	15.2		
50		13.9	11.5	13.8	13.8	11.4	13.8	13.8		13.8	13.5		
54	1	12.5	10.3		12.4	10.2		12.4	10.2	12.1	12.1	9.9	
58			9.3			9.2		11.2	9.1		10.9	8.9	
62						8.3			8.2		9.9	7.9	
66				- 01					7.4	1		7.0	
70													

### 48.77 m (160') boom with type A counterweight

Unit : metric ton 48.77 (160) Boom Length m(ft) 54.86 (180) 42.67 (140) 45.72 (150) 48.77 (160) 51.82 (170) Jib Length m(ft) 33.53 (110) 36.58 (120) 39.62 (130) 30.48 (100) Boom angle 65° Working 85° 75° 85° 75° 65° 85° 75° 65° 85° 75° 65°  $85^{\circ}$ 75° 65° 85° 75° 65° 85° 75° 65° 85° 75° 65° 85°  $75^{\circ}$ 65° radius (m) 14 16 59.5 18 59.6 20 52.5 52.3 52.1 46.5 46.5 46.3 46.1 44.6 40.6 37.3 22 41.2 41.2 41.1 39.0 35.7 31.9 28.4 41.2 24 30.7 27.3 24.7 26 36.6 36.6 36.6 36.6 36.6 34.2 32.7 32.7 32.7 32.7 32.7 32.7 29.5 26.2 23.7 28 22.7 29.5 29.5 29.5 29.5 28.3 25.1 29.5 30 29.5 25.6 25.5 21.8 25.0 21.6 25.0 21.3 25.0 25.0 25.0 25.0 23.0 20.7 34 18.7 21.3 18.4 21.3 18.2 21.3 18.2 21.3 18.1 21.3 21.2 18.9 18.9 38 18.6 15.9 18.3 15.6 18.3 15.6 17.2 16.4 16.1 18.7 15.9 18.4 15.8 42 16.5 14.5 11.0 14.2 14.1 16.6 14.1 15.9 13.9 15.9 13.7 15.9 13.7 15.6 13.5 11.2 46 9.9 9.6 9.2 12.6 8.9 12.6 12.4 13.8 12.2 13.8 12.2 13.8 12.0 50 11.3 7.8 12.6 10.9 12.1 10.7 8.5 8.0 7.8 11.1 7.4 10.9 54 6.8 6.8 6.5 9.8 6.2 9.8 6.2 9.6 58 6.1 5.6 5.4 8.9 5.4 8.7 5.0 62 66

#### 60.96 m (200') boom with type A counterweight

70

Unit : metric ton

Boom Length m(ft)	60.96 (200)																							
Jib Length m(ft)	33.	53 (11	0)	36.	.58 (1	20)	39.	62 (13	30)	42.	67 (14	0)	45.	72 (15	50)	48.	77 (16	60)	51.	82 (17	0)	54.8	36 (18	0)
Boom angle Working radius (m)	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65°	85°	75°	65
14																								
16																								
18																								
20	50.4			50.2																				
22	45.1			44.9			44.6			40.6													×	
24	40.4			40.1			40.1			39.0	-		35.7		4	31.9								
26	36.5			36.2			36.2			36.2			34.2			30.7			27.3					
28	32.7			32.7			32.7			32.7			32.7			29.5			26.2			23.7		
30	29.5			29.5			29.5			29.5			29.5			28.3			25.1	-		22.7		
34	25.0			25.0			25.0			25.0			25.0			25.0			23.0			20.7		
38	22.5	16.5		21.3	16.2		21.3			21.3			21.3			21.3			21.2			18.9		
42		14.4			14.1		18.7	14.1		18.6	14.1		18.4	13.8		18.3			18.3			17.2		
46		12.7			12.4			12.4		16.6	12.4		15.9	12.1		15.9	11.9		15.6	11.9		15.6	11.7	
50					11.0			11.0			11.0		14.2	10.7		13.8	10.5		13.8	10.5		13.8	10.3	
54								10.0			9.8			9.5			9.3		12.3	9.3		12.1	9.0	
58					-									8,4			8.2			8.2		10.6	7.9	
62																	7.2			7.2			6.9	
66				-																6.5			6.1	
70																								

8

#### NOTES FOR LUFFING JIB:

- 1. Operating radius is the horizontal distance from the centerline of rotation through the center of gravity of the load.
- 2. Rating do not ecxceed 78% tipping load on the hard horizontal ground and includes weight of hook block, slings and all other load handling acessories.
- 3. Rating shown are based on freely suspended loads and make no allowance for such as factors as wind effect of lifted load, out-of-level ground conditions, operating speeds or any other condition that could detrimental to the safe operation of this equipment. The operator, therefore, has the responsibility to judge the existing conditions and reduce lifted loads and operating speed accordingly.
- 4. No operation is possible in the range indicated by blank spaces in the chart.
- 5. The actual hoistable loads using main boom must be calculated by deducting the weight of main hook, slings and all other load handling accessories etc. from the ratings shown.
- 6. Configration of main boom and jib.

Jib length m(ft)	24.38	27.43	30.48	33.53	36.58	39.62	42.67	45.72	48.77	51.82	54.86	
Boom length m(ft)	(80)	(90)	(100)	(110)	(120)	(130)	(140)	(150)	(160)	(170)	(180)	Boom angle
30.48 (100)	0	0	0	0	0	0	0	0	0	0	0	65° ~ 85°
36.58 (120)	<del>8. 18</del>	0	0	0	0	0	0	0	0	0	0	65° ~ 85°
42.67 (140)	<u></u>		0	0	0	0	0	0	0	0	0	65° ~ 85°
48.77 (160)	<u>8. 9</u>	<u>- 21 - 22</u>	0	0	0	0	0	0	0	0	0	65° ~ 85°
54.86 (180)			0	0	0	0	0	0*	0 *	0 *	0 *	65° ~ 85°, * 75° ~ 85°
60.96 (200)	-		-	0	0	0	0	0	0	0	0	75° ~ 85°

7. In case of jib operation, jib must be erected between 20° to 70° at the fixed angle at 85°, 75° or 65°.

8. In case of the main boom operation with jib, jib offset angle must be fixed at 15°, 25° or 35° and main boom shall be erected between 30° to 80°.

- 9. Configrations of main boom/jib inserts and guy cables installations must be arranged as per the instruction of the 'Owner and Operator's Manual', thbe provided with machine.
- 10. Hook block weight and capacity (metric ton)

25 ton 1.2

80 ton

2.1

Capacity

Weight

#### 11. Max. hoisting load

No. of Parts of Line	1	2	3	4	5	6	7
Max. loads (Metric ton)	12.5	25.0	37.5	50.0	62.5	75.0	80.5

12. Auxiliary sheave can be equipped with 30.48 m (100') + 24.38 m (80') jib to 60.96 (200') boom + 54.86 m (180').

- 13. Rating of auxiliary sheave shall be determined by deducting the weight of auxiliary sheave (300 kg) and jib hook from the rating of the luffing jib, but subject to not being exceeded max. 12.5 metric ton.
- Actual hoistable loads using auxiliary sheave must calculated by deducting 12.5 metric ton ball-hook, slings and other loads handling accessories from the rating.
- 15. rating of the luffing jib with auxiliary sheave shall be determined by deduction the weight of the aux. sheave from the rating of the luffing jib without aux. sheave. In case the operation will be done with 12.5 metric ton ball-hook, weight of ball-hook (550 kg) shall further deducted.
- 16. Actual hoistable load with luffing jib with auxiliary sheave shall be determined by deducting thr weight of hook, slings and other handling rope etc., from the luffing jib rating with aux. shieave.
- 17. Maximum working radius with auxiliary sheave shall not be exceeded the maximum radius of the luffing jib.
- Boom must be erected over front of crawlers in principle. In the case boom length exceeds over 54.86 m (180'), idlers must be blocked.

12.5 ton (Ball Hook)

0.55

19. Counterweight shall be Type A.

20. Boom, 30.48m(100') boom, 42.67m (140') boom, 54.86 m (180') boom and boom with luffing jib is not shown in this chart.