

TRUCK CRANE

TG-3600M

JAPANESE SPECIFICATIONS

TG

These specifications are for the optional luffing jib for the TG-3600M type crane.
Refer to these specifications along with specification control no. TG-3600M-2/MB-80.

Control No. TG-3600M-2/LJ-80

TG-3600M

CRANE SPECIFICATIONS

CRANE CAPACITY

17m	Jib	100,000kg	at 10.0m (9part-line)
23m	Jib	80,000kg	at 12.0m (8part-line)
35m	Jib	51,600kg	at 16.0m (6part-line)
47m	Jib	31,000kg	at 18.0m (4part-line)
*65m	Jib	8,000kg	at 35.0m (1part-line)
*70m	Jib	5,000kg	at 55.0m (1part-line)

For the mark *, luffing jib (47m) + extension jib

Jib

Lattice type

JIB LENGTH

4.8m (fixed part) + 17.0m, 23.0m, 35.0m, 47.0m, *65.0m, *70.0m (elevating part)

For the mark *, luffing jib (47m) + extension jib

MAX.LIFTING HEIGHT

98.0m (9.5t)

119.0m (3.5t) (luffing jib + extension jib)

MAX.WORKING RADIUS

70.0m (3.9t)

90.0m (3.2t) (luffing jib + extension jib)



TOTAL RATED LOADS

1. The total rated loads shown are for the case where the outriggers are set horizontally on firm level ground. The values above the bold lines are based on the crane strength while those below are based on the crane stability.
2. The weights of the slings and hooks are included in the total rated loads shown.
3. The total rated load is based on the actual working radius including the deflection of the boom and jib.
4. The chart below shows the standard hook and number of part lines under each working condition.

Jib length (m)		17	23	35	47	47 + 18	47 + 23
14.2m Boom	M	100.0	80.0	51.6	31.0		
	H	9(4)	8(3)	6(2)	4(2)		
	N	180	180	80	80		
	L	2,400	2,400	1,360	1,360		
22.6m Boom	M	71.0	63.5	45.0	27.0		
	H	7(4)	6(3)	4(2)	4(2)		
	N	180	80	80	80		
	L	2,400	1,360	1,360	1,360		
31.0m Boom	M	60.0	43.7	35.0	20.0	8.0	5.0
	H	6(4)	4(3)	4(2)	2(2)	1	1
	N	180	80	80	25	12.5	12.5
	L	2,400	1,360	1,360	730	490	490
39.4m Boom	M			22.0	14.5	6.5	5.0
	H			2(2)	2(2)	1	1
	N			25	25	12.5	12.5
	L			730	730	490	490
47.8m Boom	M			13.0	9.5	4.5	3.5
	H			2(2)	2(2)	1	1
	N			25	25	12.5	12.5
	L			730	730	490	490

M= Max. total rated loads (t) H= No. of part-lines
 N= Hook lifting capacity (t) L= Hook weight (kg)

- To prevent the jib from toppling over in the over-rear area, operations should be performed with the minimum number of part lines in parentheses or more even if the load is small.

5. Boom length and boom fixing pin
 The boom telescoping order, stroke of each boom, boom length, boom fixing pin condition when the boom and jib are used are as follows.

1) Boom telescoping order and stroke of each boom

- Extend the boom from the base boom side, and then extend the next boom when the boom is extended by the strokes shown in the following table.
- Retract the boom from the top boom side, and then retract the next boom when the boom is retracted by the strokes shown in the following table.

Crane service condition	Boom stroke
Luffing jib	8.4m

2) Boom length and boom fixing pin status

Boom length (m)		Pin condition when the boom fixing pin is used	● Pin inserted
Boom Fully automatic luffing jib	Boom Luffing jib		○ Pin removed
14.2	14.2		● Both pin insertion and removal are available.
23.4	22.6		
32.6	31.0		
41.8	39.4		
51.0	47.8		

- When the boom is operated, when the boom is extended to the middle, and when at least one boom fixing pin condition marked with ● in the above chart is ○, the performance for the case where the boom fixing pin is not used shall apply.
- When operating the jib (fully automatic luffing jib, luffing jib), the boom length and the boom fixing pin condition must be in accordance with the above chart.

6. As shown in the following table, the performance depends on the outrigger installation condition and counterweight combination.

Counterweight Outrigger extension width	100t	85t	65t
	8.8m	S	A

- Both of the front and rear jacks should be used.
- The boom fixing pin should be used.

[4.8m + 17m Luffing jib]
Performance S

A	14.2m										22.6m					31.0m					Unit: ton
	83	77	70	65	60	55	50	83	77	70	65	60	55	50	83	77	70	65	60	55	
E(°)																					
B(m)																					
8	100.0																				
9	94.6																				
10	84.3	100.0						71.0													
12	69.1	83.8						63.1							60.0						
14	53.3	68.7	83.0					54.9	66.8						53.9						
16	36.5	56.8	70.1	73.4				46.2	59.4						47.0	59.7					
18		39.8	59.1	67.1				51.7	64.5						39.2	53.5					
20			46.1	57.0	61.3			41.7	57.9	56.8					47.2						
22				44.3	54.7	54.4			50.6	51.1					39.6	49.6					
24						49.1	47.9			45.9	43.5				44.6	41.3					
26							43.4			41.1	39.5				40.5	37.4					
28											36.0	34.2				34.2					
30												31.4	29.8								
32													27.5								
34																					
																					24.6
																					22.8

A= Boom length B= Working radius
E= Boom angle

[4.8m + 23m Luffing jib]
Performance S

A	14.2m							22.6m							31.0m							Unit: ton
	83	77	70	65	60	55	50	83	77	70	65	60	55	50	83	77	70	65	60	55	50	
E(°)																						
B(m)																						
10	80.0																					
12	70.9	80.0						63.5														
14	59.8	70.5						57.2							43.7							
16	51.6	59.5						51.4	59.8						43.7							
18	42.4	51.4	60.5					45.8	54.4						43.7	43.7						
20	33.4	44.9	52.2	58.3				40.2	49.2	57.5					39.4	43.7						
22	24.0	36.0	45.8	50.5				31.4	44.0	52.9					34.6	43.7						
24		26.5	40.0	44.5	48.7				38.0	48.2	45.5				27.9	39.7	43.7					
26			30.8	39.6	43.0	44.2			27.9	43.4	41.3					35.2	40.2					
28				30.1	38.5	40.4	39.3			37.3	37.8	35.7				28.8	36.7	33.8				
30						37.2	36.2				34.8	32.8				33.8	31.1					
32							33.5				28.5	30.3	28.6			31.2	28.7	26.3				
34												28.1	26.6	25.1			26.6	24.4				
36													24.8	23.4				22.7	20.8			
38														21.8				21.2	19.4			
40																			18.2	16.5		
42																				15.5		

A= Boom length B= Working radius
E= Boom angle

[4.8m + 35m Luffing jib]
Performance S

A	14.2m										22.6m					31.0m					Unit: ton	
	83	77	70	65	60	55	50	83	77	70	65	60	55	50	83	77	70	65	60	55		50
E(°)																						
B(m)	51.6																					
16																						
18	45.2	51.5					45.0															
20	40.0	45.0					43.5								35.0							
22	35.9	39.9					39.0	44.9							35.0							
24	32.5	35.8	40.4				35.0	40.8							34.6	35.0						
26	29.0	32.4	36.2				31.7	36.5	43.0						31.9	35.0						
28	25.0	29.5	32.7	35.3			28.9	33.0	39.0						29.3	34.4						
30	21.2	26.7	29.8	32.0			25.0	30.0	35.0						26.7	31.9	32.7					
32	17.4	22.9	27.3	29.2	31.2		21.0	27.5	31.7	31.4					23.8	29.6	30.2					
34	13.0	19.1	25.2	26.8	28.5		16.8	24.4	29.0	29.1					19.8	27.2	28.0					
36		14.6	21.5	24.7	26.2	27.7		20.5	26.6	27.2	25.5				15.0	24.8	26.1	23.8				
38			17.2	21.9	24.2	25.5	26.4	15.6	24.5	25.4	23.8					20.9	24.4	22.2				
40				17.2	22.0	23.6	24.8		20.8	23.8	22.3	20.9				15.9	22.9	20.8	18.8			
42						21.9	23.0			22.4	21.0	19.7					21.5	19.6	17.7			
44							21.4			16.7	19.8	18.5	17.3				18.6	18.4	16.6			
46											18.7	17.5	16.4					17.4	15.7	14.1		
48												16.5	15.5						14.8	13.3		
50													14.7						14.0	12.6	11.2	
55																					9.8	

A= Boom length B= Working radius
E= Boom angle

[4.8m + 35m Luffing jib]
Performance S

A	39.4m							47.8m					Unit: ton	
	E(°)	83	77	70	65	60	55	50	83	77	70	65		60
B(m)														
20	22.0													
22	22.0								13.0					
24	22.0								13.0					
26	22.0	22.0							13.0					
28	21.4	22.0							13.0	13.0				
30	19.6	22.0							13.0	13.0				
32	17.8	22.0							13.0	13.0				
34	16.0	20.5	22.0						13.0	13.0				
36	13.9	18.9	21.8						11.6	13.0				
38		17.2	20.6						10.0	13.0	12.9			
40		15.4	19.7	17.9						13.0	12.2			
42		13.2	18.8	17.0						11.8	11.7			
44			17.2	16.2						10.2	11.2	9.9		
46			15.5	15.6	13.6						10.8	9.4		
48				14.7	12.8						10.5	9.0		
50				13.9	12.1	10.4					10.4	8.6	7.6	
55						9.0							6.8	6.0
60														5.3

A= Boom length B= Working radius
E= Boom angle

[4.8m + 47m Luffing jib]
Performance S

A	39.4m							47.8m							Unit : ton
	83	77	70	65	60	55	50	83	77	70	65	60	55		
E(°)															
B(m)	14.5							9.5							
24	14.5							9.5							
26	14.5							9.5							
28	14.5							9.5							
30	14.5							9.5							
32	14.5	14.5						9.5							
34	14.5	14.5						9.5	9.5						
36	14.5	14.5						9.5	9.5						
38	14.5	14.5						9.5	9.5						
40	13.4	14.5						9.5	9.5						
42	12.3	14.5	14.5					9.5	9.5						
44	11.1	14.2	14.5					8.6	9.5	9.3					
46	9.9	13.1	14.5					7.7	9.5	8.8					
48	8.5	12.0	14.5	13.4				6.8	9.5	8.4					
50		10.9	14.1	12.8				5.7	8.8	8.1	7.1				
55			11.7	11.2	9.5				6.5	7.4	6.2				
60				9.8	8.3	6.8				7.0	5.6	4.7			
65					7.2	5.9	4.5				5.3	4.1	3.4		
70							3.7					3.9	3.0		

A= Boom length B= Working radius
E= Boom angle

[4.8m + 47m Luffing jib + 18m Extension jib]
Performance S

A	31.0m						39.4m						47.8m						Unit: ton
	83	77	70	65	60	55	50	83	77	70	65	60	55	83	77	70	65	60	
E(°)								6.5						4.5					
B(m)								6.5						4.5					
30								6.5						4.5					
35								6.5						4.5					
40	7.4	7.6						6.5	6.5					4.5					
45	6.9	7.1						6.5	6.5					4.5	4.5				
50	6.5	6.6	6.8					6.5	6.5					4.5	4.5				
55	6.0	6.2	6.4	6.5				6.1	6.3	6.5				4.5	4.5	4.5			
60	5.6	5.8	6.0	6.1				5.7	6.0	6.1	6.3			4.5	4.5	4.5			
65	5.4	5.5	5.7	5.8	5.9			5.4	5.6	5.8	5.9			4.1	4.5	4.5	4.1		
70		5.3	5.4	5.5	5.6	5.7			5.3	5.5	5.6	5.7		4.5	4.5	4.5	3.6		
75				5.2	5.3	5.4	5.1			5.2	5.4	5.4	4.3		4.2	4.2	3.3	2.6	
80					5.1	5.2	4.5				5.1	4.9	3.7		4.0	4.0	3.0	2.3	
85							3.9						3.1					1.9	

A= Boom length B= Working radius
E= Boom angle

[4.8m + 47m Luffing jib + 23m Extension jib]
Performance S

A	31.0m							39.4m					47.8m					Unit: ton	
	83	77	70	65	60	55	50	83	77	70	65	60	55	83	77	70	65		60
E(°)																			
B(m)	5.0							5.0						3.5					
30																			
35								5.0						3.5					
40		5.0						5.0						3.5	3.5				
45		5.0	5.0					4.7	5.0					3.5	3.5				
50		4.9	4.8					4.3	4.6	5.0				3.5	3.5				
55		4.5	4.3	4.5				3.9	4.2	4.5				3.5	3.5	3.5			
60		4.1	4.0	4.1				3.6	3.9	4.1	4.4			3.5	3.5	3.5			
65		3.8	3.7	3.8	3.9			3.4	3.6	3.8	4.0			3.4	3.5	3.5	3.4		
70		3.5	3.4	3.5	3.6	3.7													
75		3.3	3.3	3.4	3.4	3.5	3.6	3.7	3.4	3.5	3.7	3.8			3.4	3.5	3.0		
80				3.3	3.4	3.5	3.6			3.3	3.4	3.5	3.4			3.4	2.7	1.9	
85					3.2	3.3	3.3				3.2	3.3	2.9			3.2	2.5	1.4	
90						3.2							2.4						

A= Boom length B= Working radius
E= Boom angle

[4.8m + 17m Luffing jib]
Performance A

A	14.2m							22.6m							31.0m							Unit: ton
	83	77	70	65	60	55	50	83	77	70	65	60	55	50	83	77	70	65	60	55		
E(°)																						
B(m)																						
8	100.0																					
9	94.6																					
10	84.3	100.0						71.0														
12	69.1	83.8						63.1						60.0								
14	53.3	68.7	83.0					54.9	66.8					53.9								
16	36.5	56.8	70.1	73.4				46.2	59.4					47.0	59.7							
18		39.8	59.1	67.1					51.7	62.9				39.2	53.5							
20			46.1	57.0	57.6				41.7	55.2	52.0			47.2								
22				44.3	51.3	49.8				49.1	46.3			39.6	44.9							
24						44.8	43.5				41.6	39.2		40.3	36.9							
26							39.5				37.7	35.5		36.5	33.5							
28												32.4	30.5	30.6	27.9							
30													28.0	26.4	25.6							
32														24.3	23.6							
34															19.8							

A= Boom length B= Working radius
E= Boom angle

[4.8m + 23m Luffing jib]
Performance A

A	14.2m										22.6m					31.0m					Unit: ton	
	83	77	70	65	60	55	50	83	77	70	65	60	55	50	83	77	70	65	60	55		50
E(°)																						
B(m)	80.0																					
10																						
12	80.0							63.5														
14	70.5							57.2							43.7							
16	59.5							51.4	59.8						43.7							
18	42.4	51.4	60.5					45.8	54.4						43.7	43.7						
20	33.4	44.9	52.2	58.3				40.2	49.2	54.8					39.4	43.7						
22	24.0	36.0	45.8	50.5				31.4	44.0	48.8					34.6	43.7						
24		26.5	40.0	44.5	45.7				38.0	43.9	41.2				27.9	39.7	40.0					
26			30.8	39.6	41.5	40.2			27.9	39.8	37.4					35.2	36.2					
28				30.1	38.0	36.8	35.7		36.4	34.2	32.1					28.8	33.1	30.2				
30						33.9	32.9			31.4	29.5						30.4	27.7				
32							30.4			28.5	27.2	25.5					28.1	25.6	23.2			
34											25.2	23.6	22.2				23.7	21.5				
36												22.0	20.6					20.0	18.0			
38													19.2					18.6	16.8			
40																					14.1	
42																						13.2

A= Boom length B= Working radius
E= Boom angle

[4.8m + 35m Luffing jib]
Performance A

A	14.2m										22.6m					31.0m					Unit: ton	
	83	77	70	65	60	55	50	83	77	70	65	60	55	50	83	77	70	65	60	55		50
E(°)																						
B(m)	51.6																					
16																						
18	45.2	51.5					45.0															
20	40.0	45.0					43.5								35.0							
22	35.9	39.9					39.0	44.9							35.0							
24	32.5	35.8	40.4				35.0	40.8							34.6	35.0						
26	29.0	32.4	36.2				31.7	36.5	39.1						31.9	35.0						
28	25.0	29.5	32.7	35.3			28.9	33.0	35.7						29.3	34.4						
30	21.2	26.7	29.8	32.0			25.0	30.0	32.8						26.7	31.9	29.4					
32	17.4	22.9	27.3	29.2	31.2		21.0	27.5	30.3	28.3					23.8	29.6	27.1					
34	13.0	19.1	25.2	26.8	28.5		16.8	24.4	28.1	26.2					19.8	27.2	25.1					
36		14.6	21.5	24.7	26.2	26.3			20.5	26.2	24.4	22.7			15.0	24.8	23.3	21.0				
38			17.2	21.9	24.2	24.6	23.8		15.6	24.5	22.8	21.2				20.9	21.8	19.6				
40				17.2	22.0	23.1	22.3			20.8	21.4	19.9	18.5			15.9	20.4	18.4	16.4			
42						21.8	21.0				20.1	18.7	17.3				19.2	17.2	15.4			
44							19.8				16.7	17.6	16.3	15.1			18.0	16.2	14.4			
46											16.6	15.4	14.3					15.3	13.6	12.0		
48												14.5	13.5						12.8	11.3		
50													12.7						12.1	10.6	9.3	
52																					8.0	

A= Boom length B= Working radius
E= Boom angle

[4.8m + 35m Luffing jib]
Performance A

A	39.4m							47.8m							Unit : ton
	E(°)	83	77	70	65	60	55	50	83	77	70	65	60	55	
20	22.0														
22	22.0								13.0						
24	22.0								13.0						
26	22.0	22.0							13.0						
28	21.4	22.0							13.0	13.0					
30	19.6	22.0							13.0	13.0					
32	17.8	22.0							13.0	13.0					
34	16.0	20.5	22.0						13.0	13.0					
36	13.9	18.9	21.5						11.6	13.0					
38		17.2	20.0						10.0	13.0	12.9				
40		15.4	18.8	16.3						13.0	12.2				
42		13.2	17.6	15.3						11.8	11.7				
44			16.5	14.4						10.2	11.2	9.9			
46			15.5	13.5	11.5						10.8	9.4			
48				12.7	10.8						10.5	9.0			
50				12.0	10.2		8.5				10.4	8.6	7.6		
55							7.3	5.7					6.8	5.2	
60								4.7						4.3	

A= Boom length B= Working radius
E= Boom angle

[4.8m + 47m Luffing jib]
Performance A

A	14.2m										22.6m						31.0m						Unit: ton
	83	77	70	65	60	55	50	83	77	70	65	60	55	50	83	77	70	65	60	55	50		
E(°)																							
B(m)																							
18	31.0																						
20	30.4																						
22	28.4	30.3					27.0								20.0								
24	26.7	28.4					27.0								20.0								
26	25.2	26.7					26.0	27.0							20.0								
28	23.9	25.2					24.6	26.7							20.0								
30	22.4	23.9	25.3				23.3	25.2							20.0	20.0							
32	20.9	22.3	24.0				21.8	23.8							20.0	20.0							
34	19.4	20.7	22.3	23.5			20.3	22.3	24.6						20.0	20.0							
36	18.2	19.3	20.7	21.8			18.9	20.7	23.1						19.0	20.0							
38	16.2	18.0	19.3	20.3			17.7	19.3	21.4	21.7					17.8	20.0	20.0						
40	14.0	16.9	18.1	18.9	19.8		16.2	18.0	19.9	20.3					16.6	18.6	19.7						
42	11.9	15.4	16.9	17.7	18.5		14.0	16.9	18.6	19.0					15.6	17.4	18.5	16.5					
44	9.8	13.3	15.9	16.6	17.3	18.1	11.9	15.9	17.4	17.9	16.5				14.0	16.3	17.4	15.5					
46	7.1	11.1	15.0	15.6	16.2	16.9	9.4	14.1	16.3	16.8	15.5				11.6	15.3	16.4	14.5					
48		8.3	12.8	14.7	15.3	15.9	16.5	11.9	15.3	15.9	14.6	13.4			8.6	14.4	15.4	13.7	12.0				
50			10.2	13.3	14.4	14.9	15.5	9.0	14.5	15.0	13.8	12.7				12.6	14.6	12.9	11.3				
55						12.1	13.5			12.2	12.1	11.0	10.1				12.7	11.2	9.8	8.4			
60												9.7	8.8				12.7	11.2	9.8	8.4			
65																		8.5	7.3	6.1			
																					5.3		

A= Boom length B= Working radius

E= Boom angle

[4.8m + 47m Luffing jib]
Performance A

A	39.4m							47.8m					Unit : ton	
	E(°)	83	77	70	65	60	55	50	83	77	70	65		60
B(m)														
24	14.5													
26	14.5								9.5					
28	14.5								9.5					
30	14.5								9.5					
32	14.5	14.5							9.5					
34	14.5	14.5							9.5	9.5				
36	14.5	14.5							9.5	9.5				
38	14.5	14.5							9.5	9.5				
40	13.4	14.5							9.5	9.5				
42	12.3	14.5	14.5						9.5	9.5				
44	11.1	14.2	14.5						8.6	9.5	9.3			
46	9.9	13.1	14.5						7.7	9.5	8.8			
48	8.5	12.0	13.7	11.6					6.8	9.5	8.4			
50		10.9	12.9	10.9					5.7	8.8	8.1	7.1		
55			11.3	9.5	7.7					6.5	7.4	6.2		
60				8.2	6.7	5.0					7.0	5.6	4.7	
65					5.7	4.2	2.5					5.3	4.1	2.1
70						1.9							3.3	1.5

A= Boom length B= Working radius
E= Boom angle

[4.8m + 47m Luffing jib + 18m Extension jib]
Performance A

A	31.0m						39.4m				47.8m				Unit: ton				
	83	77	70	65	60	55	50	83	77	70	65	60	55	83		77	70	65	60
E(°)								6.5											
B(m)								6.5											
30								6.5											
35								6.5						4.5					
40		7.6						6.5	6.5					4.5					
45		7.1						6.5	6.5					4.5	4.5				
50		6.6	6.8					6.5	6.5					4.5	4.5				
55		6.2	6.4	6.5				6.1	6.3	6.5				4.5	4.5	4.5			
60		5.8	6.0	6.1				5.7	6.0	6.1	6.3			4.5	4.5	4.5			
65		5.5	5.7	5.8	5.9			5.4	5.6	5.8	5.9			4.1	4.5	4.5	4.1		
70		5.3	5.4	5.5	5.6	5.5			5.3	5.5	5.6	5.0			4.5	4.5	3.6		
75				5.2	5.3	4.8	3.7			5.2	5.4	4.2	2.7			4.2	3.3	2.6	
80					5.1	4.2	3.1				4.9	3.6	2.1			4.0	3.0	2.0	
85						2.5							1.6					1.6	

A= Boom length B= Working radius
E= Boom angle

[4.8m + 47m Luffing jib + 23m Extension jib]
Performance A

A	31.0m							39.4m					47.8m					Unit: ton	
	83	77	70	65	60	55	50	83	77	70	65	60	55	83	77	70	65		60
E(°)																			
B(m)	5.0							5.0											
30																			
35								5.0											
40		5.0						5.0						3.5					
45		5.0	5.0					5.0	5.0					3.5	3.5				
50		4.9	4.9					4.7	5.0					3.5	3.5				
55		4.5	4.8					4.3	4.6	5.0				3.5	3.5				
60		4.1	4.3	4.5				3.9	4.2	4.5				3.5	3.5	3.5			
65		3.8	4.0	4.1				3.6	3.9	4.1	4.4			3.5	3.5	3.5			
70		3.5	3.7	3.8	3.9			3.4	3.6	3.8	4.0			3.4	3.5	3.5	3.4		
75		3.3	3.4	3.5	3.6	3.7			3.4	3.5	3.7	3.8			3.4	3.5	3.0		
80				3.3	3.4	3.5	2.9			3.3	3.4	3.4	1.9			3.4	2.7	1.9	
85					3.2	3.3	2.4				3.2	2.8	1.5			3.2	2.5	1.4	
90							1.9												

A= Boom length B= Working radius
E= Boom angle

