

Maximum Allowable Travel Specifications

European
Standards

Boom No. 55-79A with 100 ft (30,5 m) Mast No. 56

Jobsite Travel

18000 must be equipped with 276,000 lb (125 190 kg) thru 528,000 lb (239 500 kg) crane counterweight and 56,000 lb (25 400 kg) thru 320,000 lb (145 150 kg) carbody counterweight. Refer to capacity charts for maximum wind speed for various boom lengths. Refer to capacity charts for maximum boom lengths lifted unassisted.

1. Machine Travel With Load

- A. Machine can swing and travel with 360 degree rating.
- B. Grade in any direction must not exceed 1 percent (0,5 degrees). *Travel with 100 percent of rated load prohibited.* Travel restricted to 90 percent of rated capacity with speed not to exceed 0,4 m/s.
- C. Travel surface must be firm, level and uniformly supporting. Capacity charts are based on static conditions; therefore judgment must be used to allow for dynamic effects of traveling with load. Carry load as close to ground as possible. Stabilize load with taglines. Travel slowly and smoothly to avoid shock loading boom and rigging.

2. Machine Travel Without Load

- A. Load blocks and/or hook and weight balls may be suspended beneath lower and upper boom points or tied off to machine. Total combined suspended weight beneath lower and upper boom points must not exceed 25,000 lb (11 340 kg).
- B. Machine to travel on a firm and uniformly supporting surface. Travel allowed with 360 degree swing up to 1 percent (0,5 degrees) grade; crane upperworks must be in-line with crawlers and grade when grade exceeds 1 percent. Grade in direction of travel should not exceed 30 percent (16,7 degrees); side-to-side grade must not exceed 2 percent (1,1 degrees) measured at boom hinge pins.
- C. Refer to tables 1 thru 4 on pages 2 and 3 for boom angles, boom lengths and direction for various grades. Adjust boom within boom angle range shown in table with machine in a level position before traveling onto grade. Do not change boom angle after crane has been traveled onto grade. Boom angle is angle between horizontal and centerline of boom butt and inserts. Refer to table below for grade vs. angle when traveling.
- D. Do not exceed 2 percent (1,1 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).
- E. **Warning:** Travel prohibited for boom angle range not shown in tables 1 thru 4 on pages 2 and 3. *Crane could tip.*

Percent Grade Vs. Angle In Degrees	
Percent Grade	Angle
1	0,5
10	5,7
20	11,3
30	16,7

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Table 1: Boom No. 55-79A
528,000 lb (239 500 kg) Crane Counterweight
320,000 lb (145 150 kg) Carbody Counterweight

MACHINE TRAVEL WITHOUT LOAD					
Boom Length (not including jib)		Boom Angle Range in Degrees			
		Percent Grade			
Feet	Meters	0 - 1%	2 - 10%	11 - 20%	21 - 30%
BOOM FACING DOWNHILL OR UPHILL					
120	36,6	30 - 72	30 - 66	30 - 40	—
140	42,7	30 - 72	30 - 66	30 - 50	—
160	48,8	30 - 72	30 - 66	30 - 50	30 - 40
180	54,9	30 - 72	30 - 66	30 - 60	30 - 40
200	61,0	30 - 72	30 - 66	30 - 60	30 - 40
220	67,1	30 - 72	30 - 66	30 - 60	30 - 50
240	73,2	30 - 72	30 - 66	30 - 60	40 - 55
260	79,2	30 - 72	30 - 66	30 - 60	50 - 55
280	85,3	30 - 72	30 - 66	40 - 60	—
300	91,4	30 - 72	40 - 66	50 - 60	—
320	97,5	40 - 72	50 - 66	—	—
340	103,6	40 - 72	50 - 66	—	—
360	109,7	50 - 72	55 - 66	—	—
380	115,8	50 - 72	60 - 66	—	—
400	121,9	55 - 72	60 - 66	—	—

Table 2: Boom No. 55-79A
456,000 lb (206 840 kg) Crane Counterweight
232,000 lb (105 230 kg) Carbody Counterweight

MACHINE TRAVEL WITHOUT LOAD					
Boom Length (not including jib)		Boom Angle Range in Degrees			
		Percent Grade			
Feet	Meters	0 - 1%	2 - 10%	11 - 20%	21 - 30%
BOOM FACING DOWNHILL OR UPHILL					
120	36,6	30 - 72	30 - 66	30 - 45	—
140	42,7	30 - 72	30 - 66	30 - 50	—
160	48,8	30 - 72	30 - 66	30 - 55	30 - 40
180	54,9	30 - 72	30 - 66	30 - 60	30 - 40
200	61,0	30 - 72	30 - 66	30 - 60	—
220	67,1	30 - 72	30 - 66	30 - 60	—
240	73,2	30 - 72	30 - 66	35 - 60	—
260	79,2	30 - 72	30 - 66	45 - 60	—
280	85,3	30 - 72	40 - 66	55 - 60	—
300	91,4	40 - 72	50 - 66	—	—
320	97,5	45 - 72	55 - 66	—	—
340	103,6	50 - 72	60 - 66	—	—
360	109,7	55 - 72	60 - 66	—	—

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Table 3: Boom No. 55-79A
384,000 lb (174 180 kg) Crane Counterweight
144,000 lb (65 320 kg) Carbody Counterweight

MACHINE TRAVEL WITHOUT LOAD					
Boom Length (not including jib)		Boom Angle Range in Degrees			
		Percent Grade			
Feet	Meters	0 - 1%	2 - 10%	11 - 20%	21 - 30%
BOOM FACING DOWNHILL OR UPHILL					
120	36,6	30 - 72	30 - 66	30 - 50	—
140	42,7	30 - 72	30 - 66	30 - 55	—
160	48,8	30 - 72	30 - 66	30 - 60	30 - 40
180	54,9	30 - 72	30 - 66	30 - 60	30 - 40
200	61,0	30 - 72	30 - 66	30 - 60	—
220	67,1	30 - 72	30 - 66	40 - 60	—
240	73,2	30 - 72	35 - 66	50 - 60	—
260	79,2	35 - 72	45 - 66	55 - 60	—
280	85,3	40 - 72	50 - 66	—	—
300	91,4	50 - 72	55 - 66	—	—
320	97,5	50 - 72	60 - 66	—	—
340	103,6	55 - 72	—	—	—

Table 4: Boom No. 55-79A
276,000 lb (125 190 kg) Crane Counterweight
56,000 lb (25 400 kg) Carbody Counterweight

MACHINE TRAVEL WITHOUT LOAD					
Boom Length (not including jib)		Boom Angle Range in Degrees			
		Percent Grade			
Feet	Meters	0 - 1%	2 - 10%	11 - 20%	21 - 30%
BOOM FACING DOWNHILL OR UPHILL					
120	36,6	30 - 72	30 - 66	30 - 60	30 - 40
140	42,7	30 - 72	30 - 66	30 - 60	30 - 50
160	48,8	30 - 72	30 - 66	30 - 60	45 - 50
180	54,9	30 - 72	30 - 66	45 - 60	—
200	61,0	30 - 72	40 - 66	50 - 60	—
220	67,1	35 - 72	50 - 66	—	—
240	73,2	45 - 72	55 - 66	—	—
260	79,2	50 - 72	60 - 66	—	—
280	85,3	55 - 72	60 - 66	—	—
300	91,4	60 - 72	—	—	—