

BASIS OF DESIGN					
ITEM	DESCRIPTION	REMARKS			
Truck chassis		Per customer			
Driver weight	250 pounds	Included in analysis			
Fuel tank	100 gallons	Included in analysis			
Hydraulic tank	60 gallons	Included in analysis, location may vary			
Tool box	48" long	Size may vary, aluminum construction			

MINIMUM FRAME REQUIREMENTS					
$3\frac{3}{8}$ $10\frac{3}{4}$ $0\frac{3}{8}$					

Minimum section modulus per rail = 17.8 in. ³
Minimum yield strength = 110 KSI

WEIGHT DISTRIBUTION							
	FRONT	REAR	TOTAL				
Truck	10,910	7,210	18,120				
Crane	2,180 17,320		19,500				
Payload	6,910	9,470	16,380				
Totals	20,000	34,000	54,000				

Total axle limits shown are based on Federal D.O.T. regulations bridge formula.

Truck dimensions, weights, payload, and lifting performance representative of design baseline. Variations from information shown (truck weights, wheel base, front axle to back of cab, and more) may be accommodated and may result in adjustment of payload, payload size, and crane lifting capacity. Contact QMC Cranes with your requirements.



QMC 4037R

REAR MOUNT

Red lines indicate transition from structural to tipping limits. Loads above the line are based on structural limits. Loads below the line are based on 85% actual tipping condition per ASME B30.5.

Load Chart

23 FOOT BOOM						
WORKING RADIUS	BOOM ANGLE	RATED LOAD REAR SIDE FRON				
6	76	45,400	45,400	45,400		
8	71	45,400	45,400	45,400		
10	65	40,200	40,200	40,200		
12	59	35,600	35,600	35,600		
15	49	30,500	30,500	30,500		
18	38	25,100	25,300	25,300		
20	27	22,200	22,600	22,600		
22	0	19,300	19,300	19,300		

29 FOOT BOOM						
WORKING RADIUS	BOOM ANGLE	REAR	FRONT			
8	76	44,500	44,500	44,500		
10	72	37,700	37,700	37,200		
12	12 67 33,100		33,100	33,100		
15	61	28,200	28,200	28,200		
18	53	24,700	24,700	24,700		
20	22,300		22,800	22,800		
25	31	17,200	16,700	17,600		
28.5	0	13,500	13,100	14,600		

37 FOOT BOOM						
WORKING RADIUS	BOOM ANGLE	REAR	FRONT			
10	77	34,700	34,700	34,700		
12	73	30,800	30,800	30,800		
15	68	26,300	26,300	26,300		
18	63	23,000	23,000	23,000		
20	59	21,300	21,300	21,300		
25	49	17,300	16,800	17,700		
30	36	12,500	12,200	14,400		
36	0	9,200	8,900	11,300		

Working radius is in feet. Loads are in pounds and boom angles are in degrees. Capacity limits will apply based on the load block selected.

WIRE ROPE CAPACITY								
Parts Line	1	2	3	4	5	6	7	8
Load Limit	9,080	18,160	27,240	36,320	45,400	0	0	0

Do not exceed parts of line ratings.

- 1. Load does not include blocks, slings, and all other equipment used to handle objects being lifted.
- 2. Load ratings are for zero degree list.
- 3. Loads must be freely suspended.
- 4. Rope: Rotation resistant, compacted strand, 9080 lb. capacity.
- 5. This chart is only a guide and should not be used to operate the crane. Individual crane's load chart, operating instructions, and other instructional plates must be read and understood prior to operating crane.

