

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	75 gallons	Included in analysis, location may vary			
Tool box	48" long	Size may vary, aluminum construction			

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

Minimum section modulus per rail = 17.8 in. <sup>3</sup>
Minimum yield strength = 110 KSI

WEIGHT DISTRIBUTION							
	FRONT	REAR	TOTAL				
Truck	10,960	7,220	18,180				
Crane	2,290	19,200	21,490				
Payload	6,750	7,580	14,330				
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 4055R**

## **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

24 FOOT BOOM							
WORKING RADIUS	BOOM ANGLE	REAR	FRONT				
6	77	45,400	45,400	45,400			
8	72	45,400	45,400	45,400			
10	67	40,200	40,200	40,200			
12	61	35,400	35,400	35,400			
15	52	30,200	30,200	30,200			
18	42	24,900	24,900	24,900			
20	33	22,100	22,100	22,100			
23	0	17,800	17,800	17,800			

39 FOOT BOOM							
WORKING RADIUS	BOOM ANGLE	REAR	FRONT				
10	78	36,000	36,000	36,000			
12	75	31,200	31,200	31,200			
15	70	26,100	26,100	26,100			
18	65	22,700	22,700	22,700			
20	61	20,900	20,900	20,900			
25	52	17,300	17,300	17,300			
30	42	12,900	12,600	13,900			
35	27	9,900	9,600	11,500			
38.5	0	8,300	8,100	9,800			

55 FOOT BOOM						
WORKING RADIUS	BOOM ANGLE	REAR	FRONT			
15	78	22,300	22,300	22,300		
18	74	19,800	19,800	19,800		
20	72	18,200	18,200	18,200		
25	66	14,700	14,700	14,700		
30	60	12,400	12,400	12,400		
35	53	10,000	9,800	10,700		
40	45	8,000	7,800	9,400		
45	37	6,500	6,400	8,100		
50	25	5,400	5,300	7,000		
54	0	4,700	4,600	5,900		

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.

