
Manual # 99905498

40/275 Technical Specifications

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CHAPTER 1

Technical Data

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40/275 Technical Specifications

40/275	2 - Hydraulic	3 - Hydraulic	4 - Hydraulic	5 - Hydraulic	6 - Hydraulic	7 - Hydraulic	8 - Hydraulic
Crane Rating*	274,855 ft lb (38 tm)	267,620 ft lb (37 tm)	259,665 ft lb (35.9 tm)	252,430 ft lb (34.9 tm)	250,985 ft lb (34.7 tm)	245,200 ft lb (33.9 tm)	243,750 ft lb (33.7 tm)
Maximum Horizontal Reach	26' 3" (8.0 m)	33' 2" (10.1 m)	40' 0" (12.2 m)	47' 3" (14.4 m)	54' 6" (16.6 m)	62' 4" (19.0 m)	69' 11" (21.3 m)
Maximum Vertical Reach	35' 4" (10.8 m)	42'-3" (12.9 m)	49' (15 m)	56' 3" (17.1 m)	63' 3" (19.3 m)	71' 1" (21.7 m)	79' (24.1 m)
Maximum Capacity	19,025 lb (8630 kg)	18,145 lb (8230 kg)	17,570 lb (7970 kg)	17,065 lb (7740 kg)	16,665 lb (7560 kg)	16,225 lb (7360 kg)	15,830 lb (7180 kg)
Max Cap @ Max Reach	10,230 lb (4640 kg)	7630 lb (3460 kg)	5885 lb (2670 kg)	4585 lb (2080 kg)	3615 lb (1640 kg)	2845 lb (1290 kg)	2225 lb (1010 kg)
Crane Weight **	7165 lb (3250 kg)	7740 lb (3510 kg)	8290 lb (3760 kg)	8820 lb (4000 kg)	9215 lb (4180 kg)	9570 lb (4340 kg)	9920 lb (4500 kg)
Hook Approach							
Vertical	9' 4" (2.84 m)	9' 0" (2.74 m)	8' 10" (2.68 m)	8' 8" (2.63 m)	8' 5" (2.57 m)	8' 3" (2.52 m)	8' 1" (2.47 m)
Horizontal	3' 11" (1.19 m)	4' 1" (1.24 m)	4' 3" (1.29 m)	4' 5" (1.35 m)	4' 7" (1.40 m)	4' 9" (1.45 m)	4' 11" (1.5 m)
Center of Gravity - Stored							
Vertical	2' 10" (870 mm)	2' 11" (890 mm)	3' 0" (910 mm)	3' 0" (925 mm)	3' 1" (940 mm)	3' 2" (955 mm)	3' 2" (970 mm)
Horizontal (C/L RotTo Bridge)	12.6" (320 mm)	12.6" (320 mm)	12.2" (310 mm)	11.8" (300 mm)	11.6" (295 mm)	11.4" (290 mm)	11.2" (285 mm)

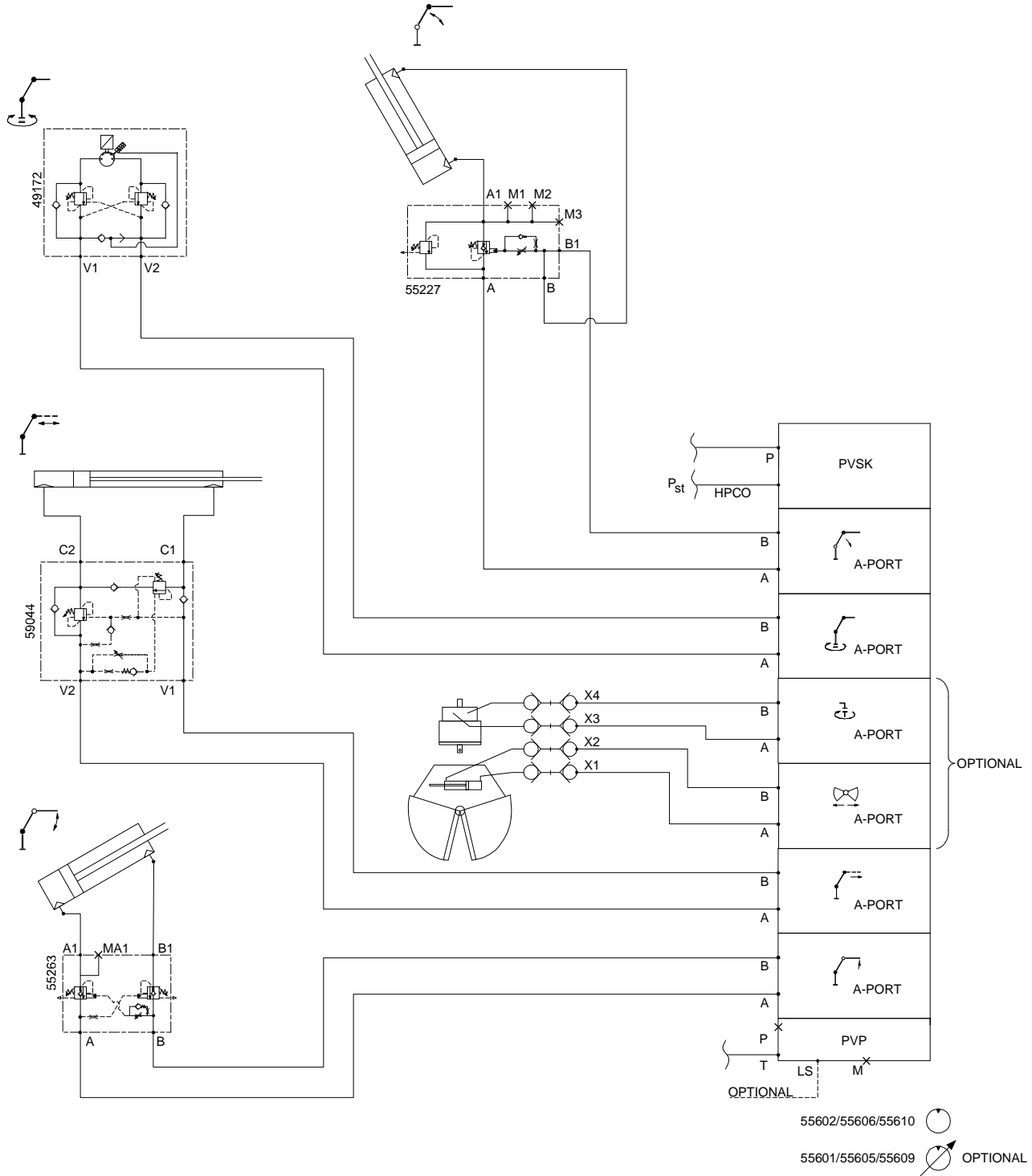
* Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from centerline of rotation with all extensions retracted and the inner and outer booms in a horizontal position, per ANSI B30.22. ** Crane weight is for standard crane with tank & 8-bolt long mounting kit. Does not include stabilizers, tank, or oil.

40/275 Specifications	
Stabilizer Pad Diameter	8" (200 mm)
Crane Storage Height	7' 10" (2384 mm)
Mounting Space ***	3' 9" (1148 mm)
Rotational Torque	29,500 ft lb (4.1 tm)
Rotation	Infinite
Optimum Pump Performance	21.1 gpm (80 L/min)
System Pressure	5295 psi (365 Bar)
Stabilizer Extension Span	
Minimum (2 beams - 64" (1625 mm) long)	18' 3" (5550 mm)
Maximum (2 beams - 108" (2735 mm) long)	25' 6" (7770 mm)
Stabilizer Weights	
Stabilizer Beam 64" (1625 mm)	375 lb (170 kg)
Stabilizer Beam 81" (2065 mm)	585 lb (265 kg)
Stabilizer Beam 108" (2735 mm)	640 lb (290 kg)
Stabilizer Cylinder, 1x swing-up	145 lb (65 kg)
Stabilizer Cylinder, 1x hydr swing-up	160 lb (72 kg)
*** Maximum swing clearance radius required is 29" (737 mm) at 8' 6" (2582 mm) from top of chassis frame.	
Minimum Chassis Specifications	
Front Axle Rating (GAWR)	16,000 lb (7260 kg)
Rear Axle Rating (GAWR)	40,000 lb (18,145 kg)
Resistance To Bending Moment	4,125,000 in-lb (475,250 kg-m)

40/275 Pressure Settings

WORKING PRESSURE ON MAIN-RELIEF VALVE & PORT RELIEF VALVES				
Main-relief valve				5655 psi (390 bar)
FUNCTION	DIRECTION	PORT	PORT-RELIEF VALVES	LS-PRESSURE ADJUSTMENT
Slewing system	Right	A	P	2175 psi (150 bar)
	Left	B	P	2175 psi (150 bar)
Boom cylinder	Up	A	5510 psi (380 bar)	5295 psi (365 bar)
	Down	B	1815 psi (125 bar)	1450 psi (100 bar)
Jib cylinder	Up	A	5510 psi (380 bar)	5295 psi (365 bar)
	Down	B	2900 psi (200 bar)	2540 psi (175 bar)
Extension cylinders	Extend	A	P	4350 psi (300 bar)
	Retract	B	P	4350 psi (300 bar)
Rotator	Right	A	P	725-4350 psi (50-300 bar)
	Left	B	P	725-4350 psi (50-300 bar)
Grab	Open	A	4350 psi (300 bar)	725-4350 psi (50-300 bar)
	Close	B	4350 psi (300 bar)	725-4350 psi (50-300 bar)
Winch 3.2T	Lift	A	P	3045 psi (210 bar)
	Lower	B	P	3045 psi (210 bar)
Winch 2.5T	Lift	A	P	2685 psi (185 bar)
	Lower	B	P	2685 psi (185 bar)
Separate stabilizer valve		All	2175 psi (150 bar)	2175 psi (150 bar)
WORKING PRESSURE ON LOAD-HOLDING VALVES				
Function	Direction	Port	Opening Pressure	
Slewing system	Right		2320 psi (160 bar)	
	Left		2320 psi (160 bar)	
Boom cylinder	Up		5510 psi (380 bar)	
	Down		-	
Jib cylinder	Up		5510 psi (380 bar)	
	Down		3045 psi (210 bar)	
Extension cylinders	Retract		6235 psi (430 bar)	
	Extend		3045 psi (210 bar)	
PRESSURE SETTING FOR LOAD MOMENT LIMITATION (LMB)				
Load moment limitation (LMB)			5075 psi (350 bar)	
HDL			4060 psi (280 bar)	
MAXIMUM PUMP PERFORMANCE				
Pump performance (1 x fixed)			21.1 gpm (80 l/min)	

Hydraulic Diagram



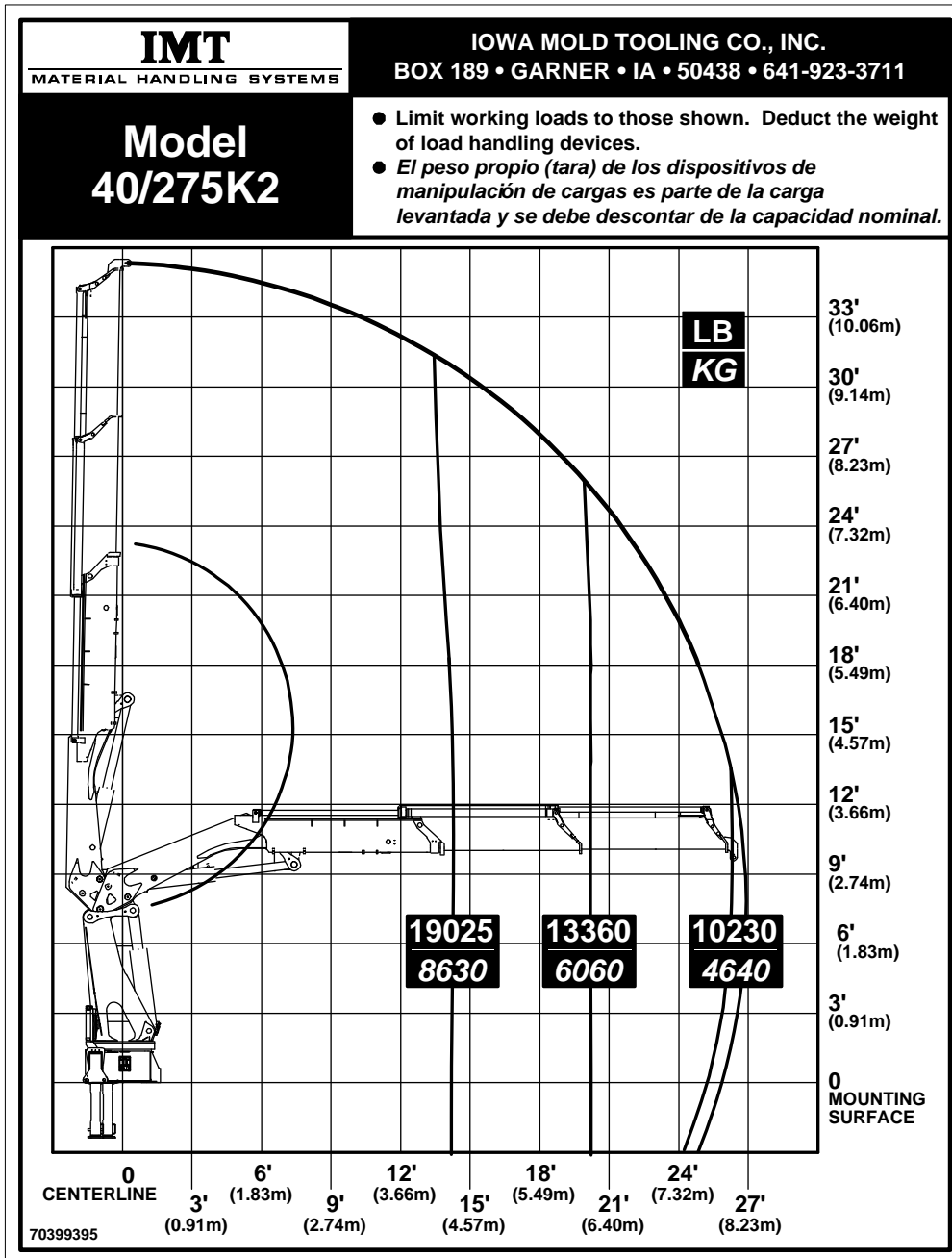
CHAPTER 2

Capacity Charts

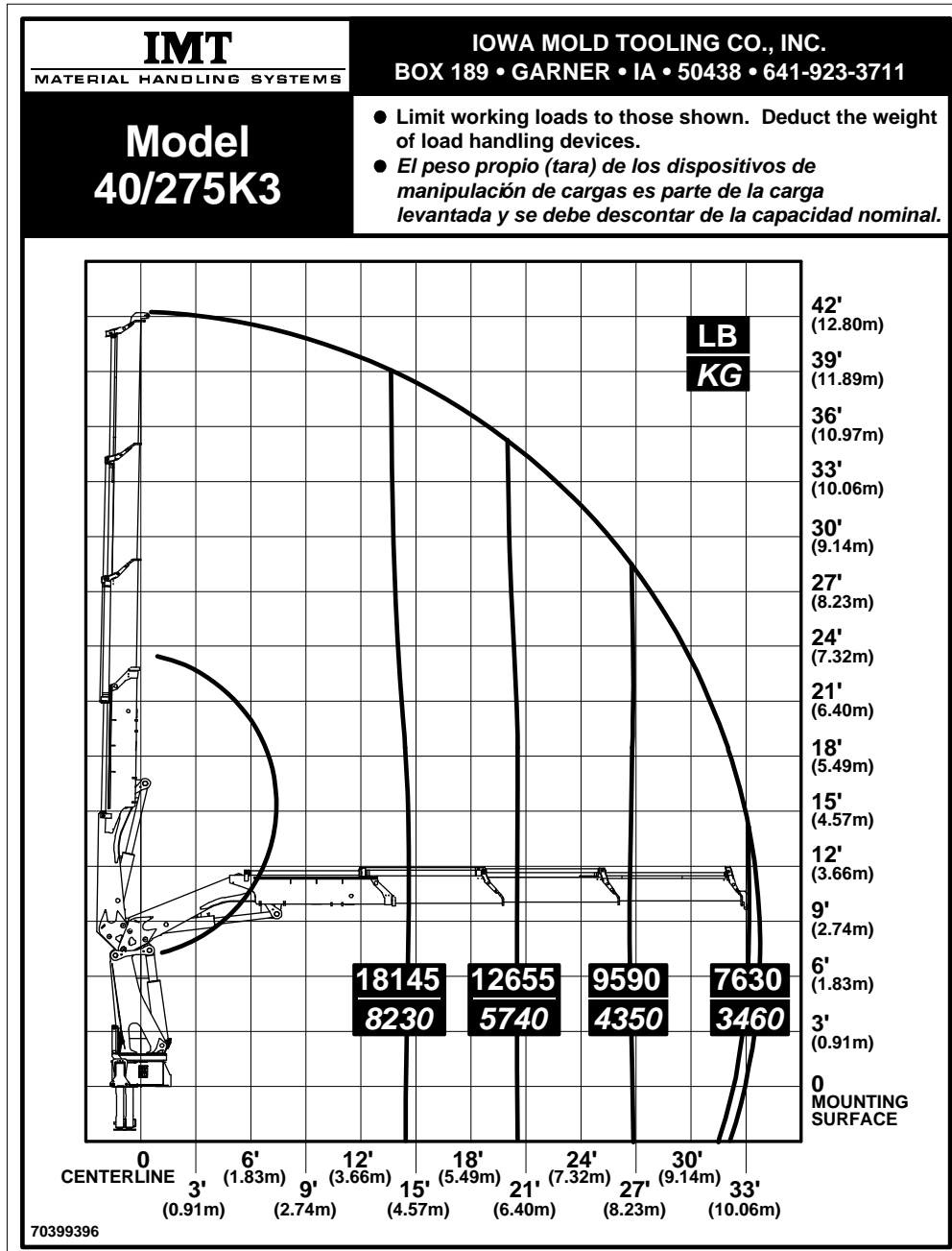
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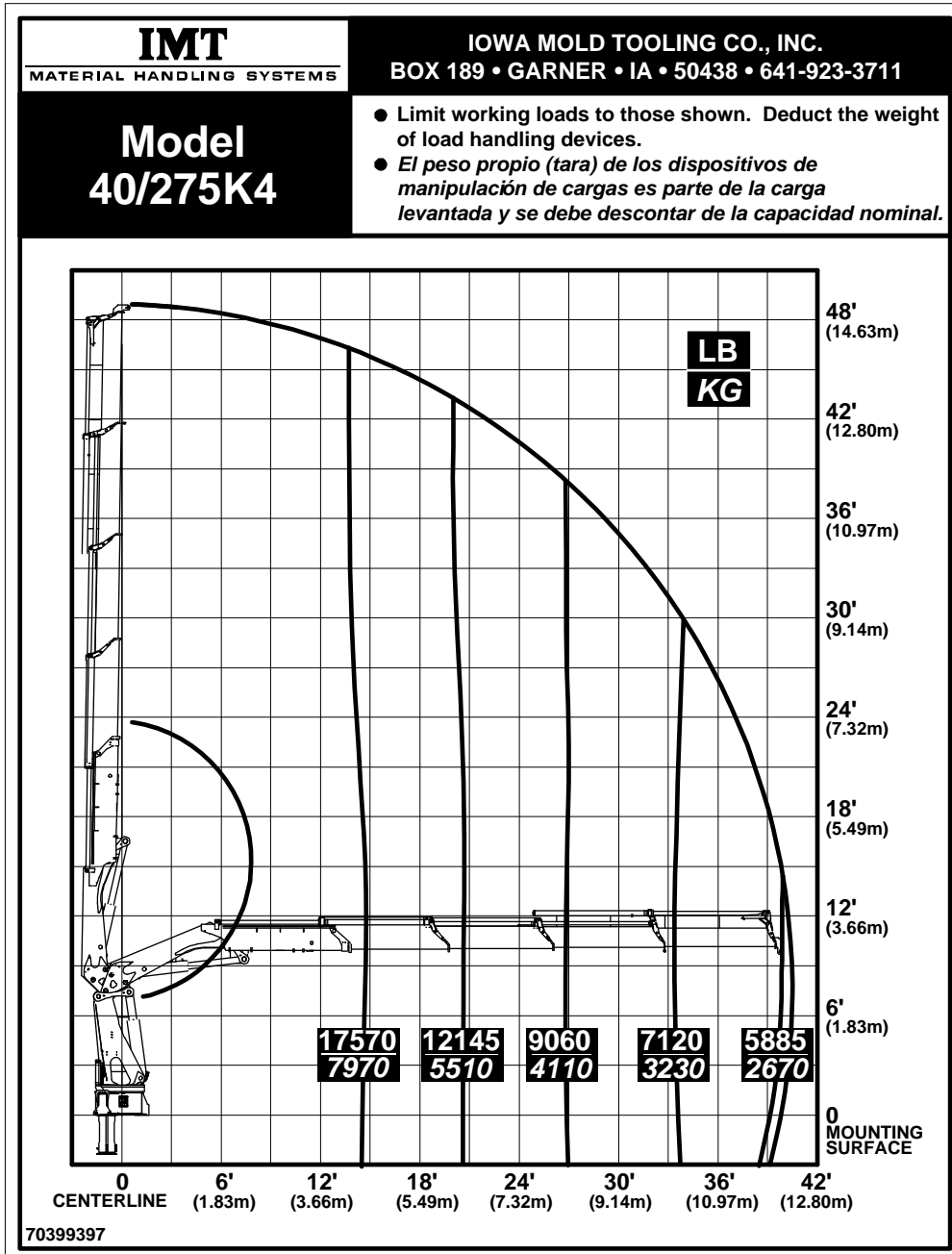
40/275 K2 Capacity Chart



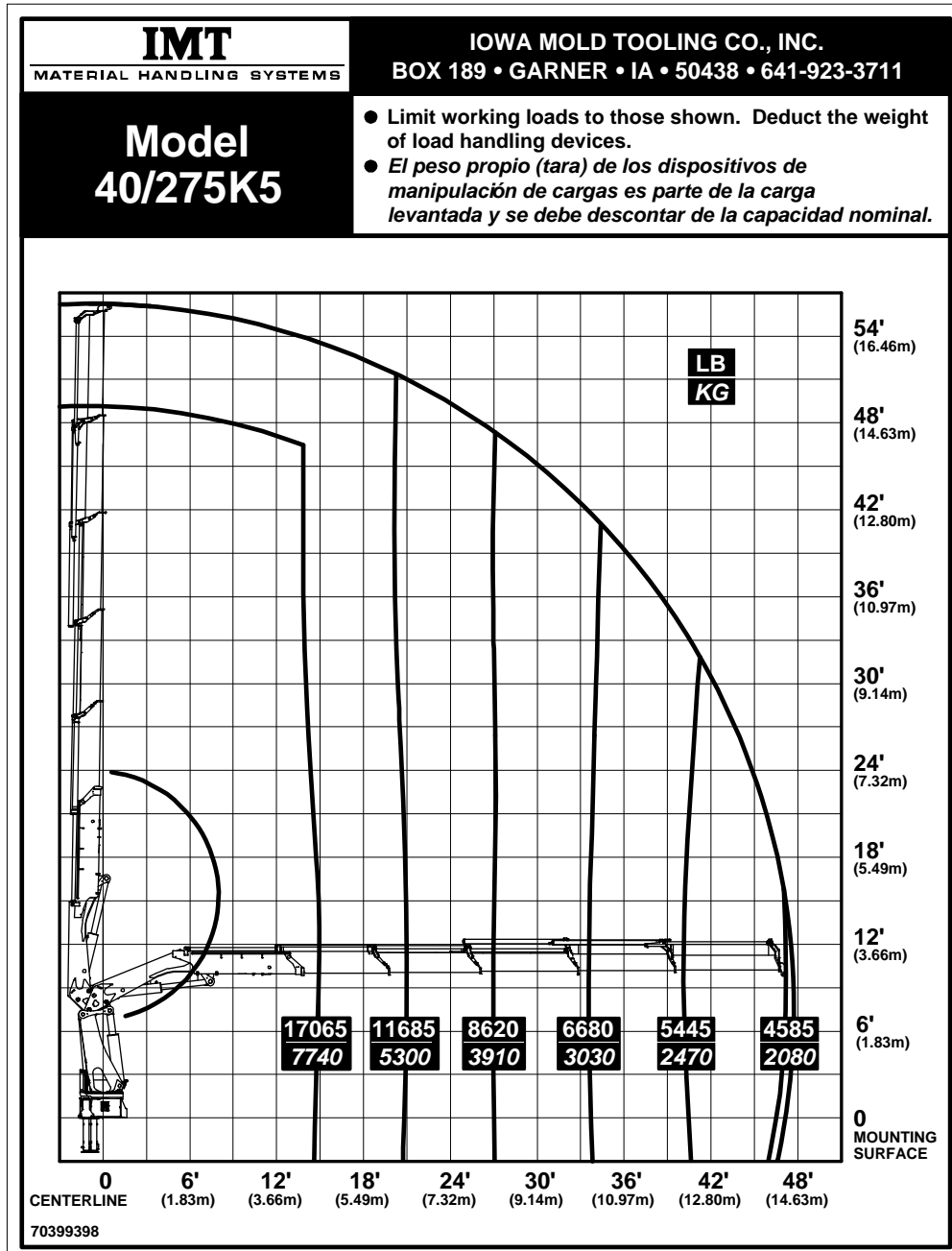
40/275 K3 Capacity Chart



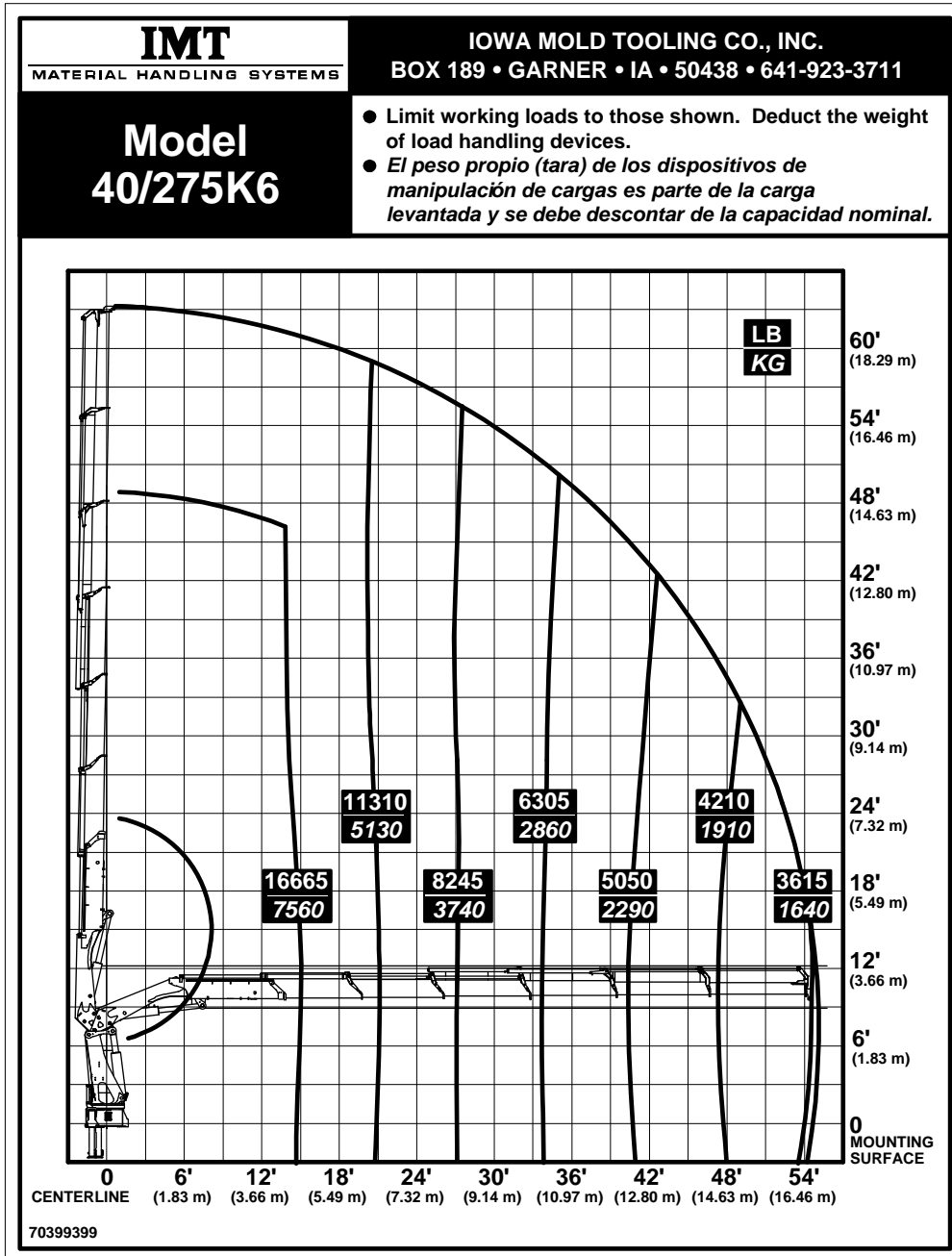
40/275 K4 Capacity Chart



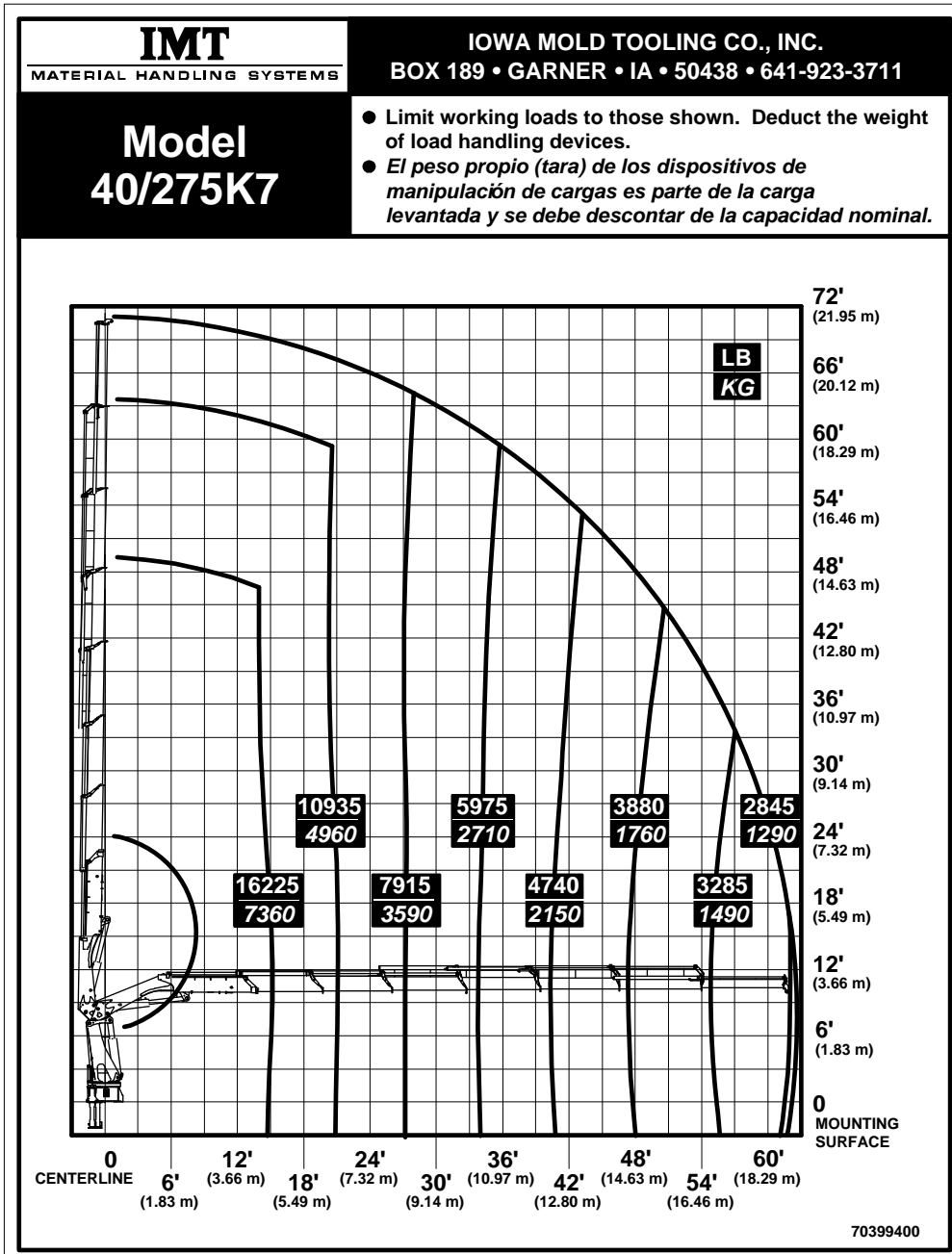
40/275 K5 Capacity Chart



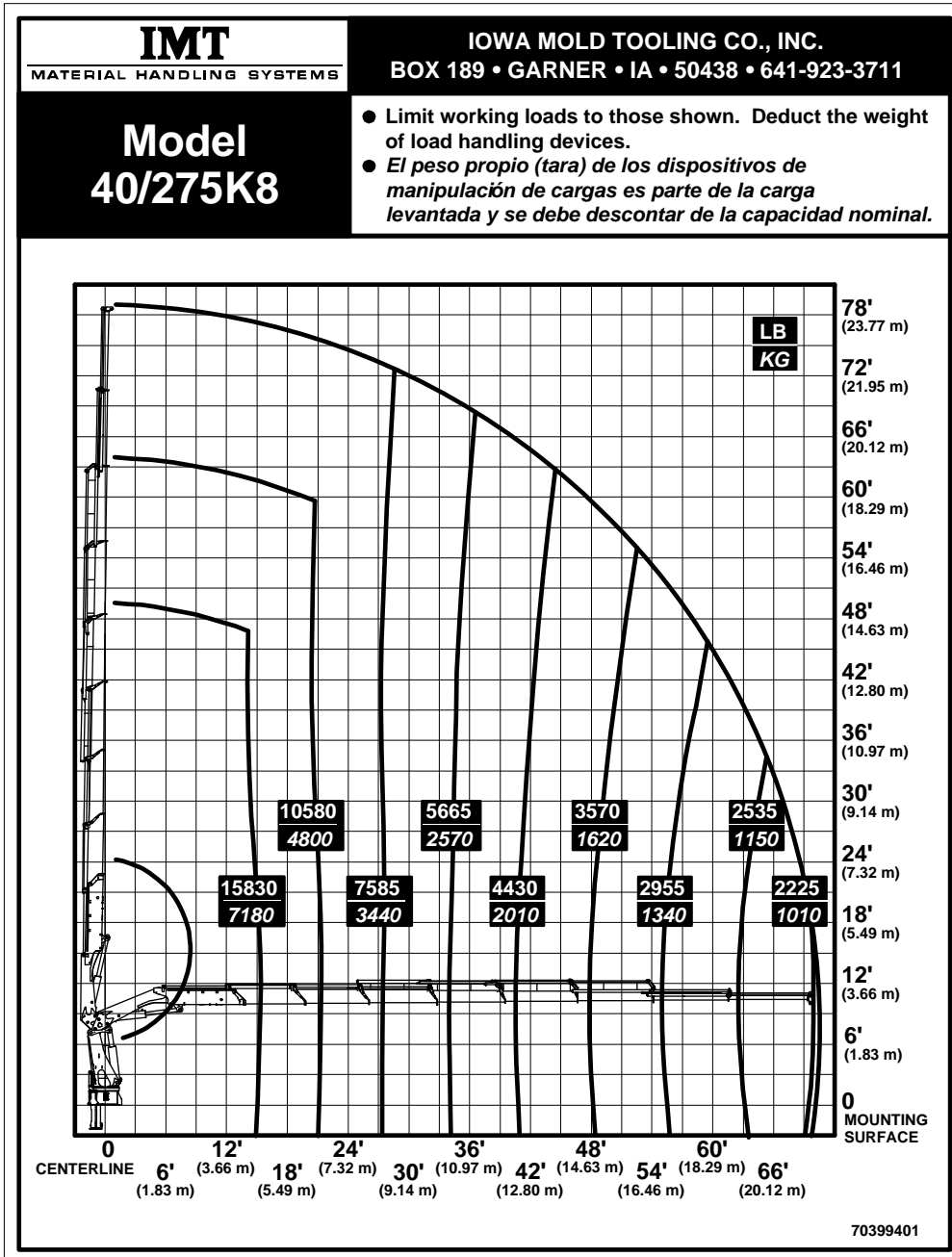
40/275 K6 Capacity Chart



40/275 K7 Capacity Chart



40/275 K8 Capacity Chart



CHAPTER 3

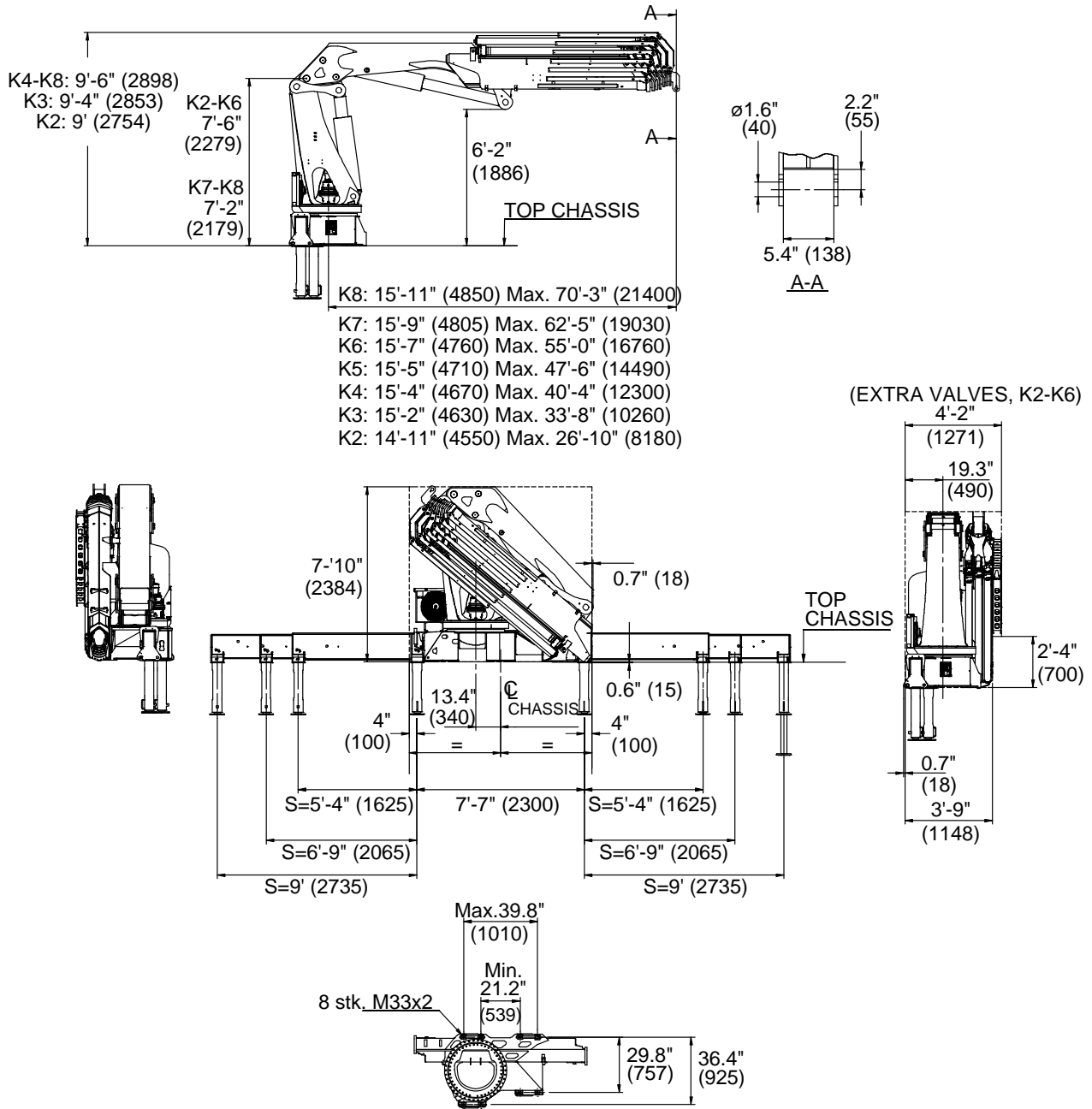
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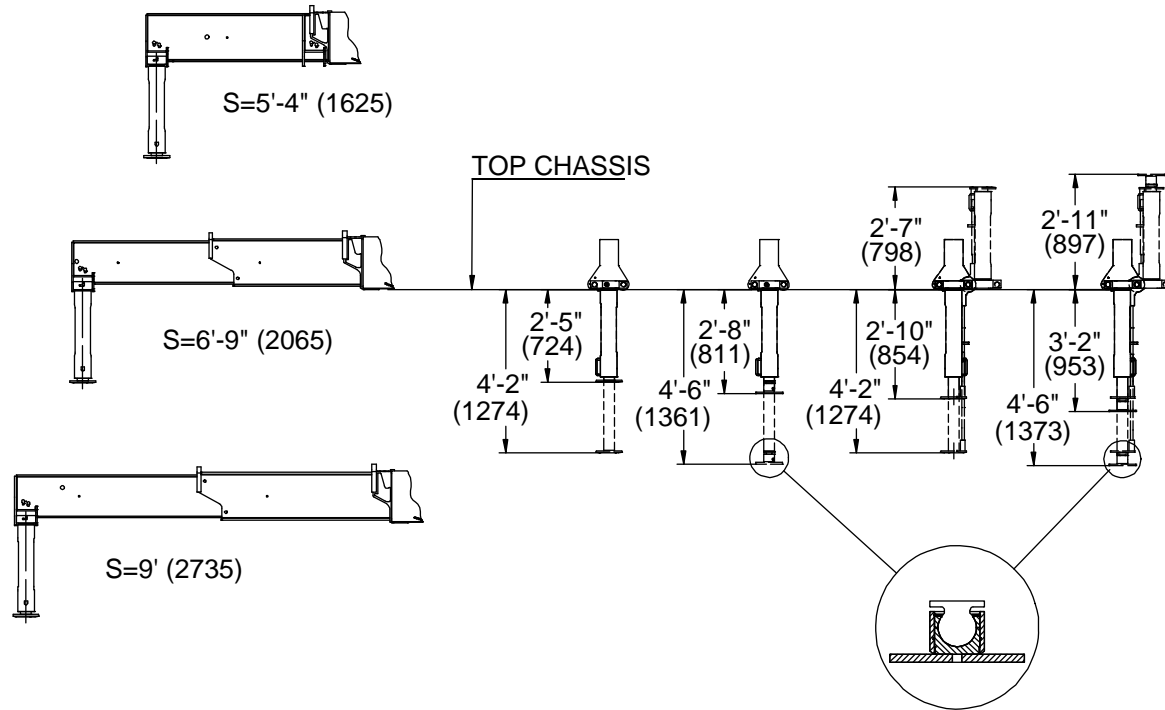
40/275 Dimensional Drawing

Dimensions in ft-inches (mm).



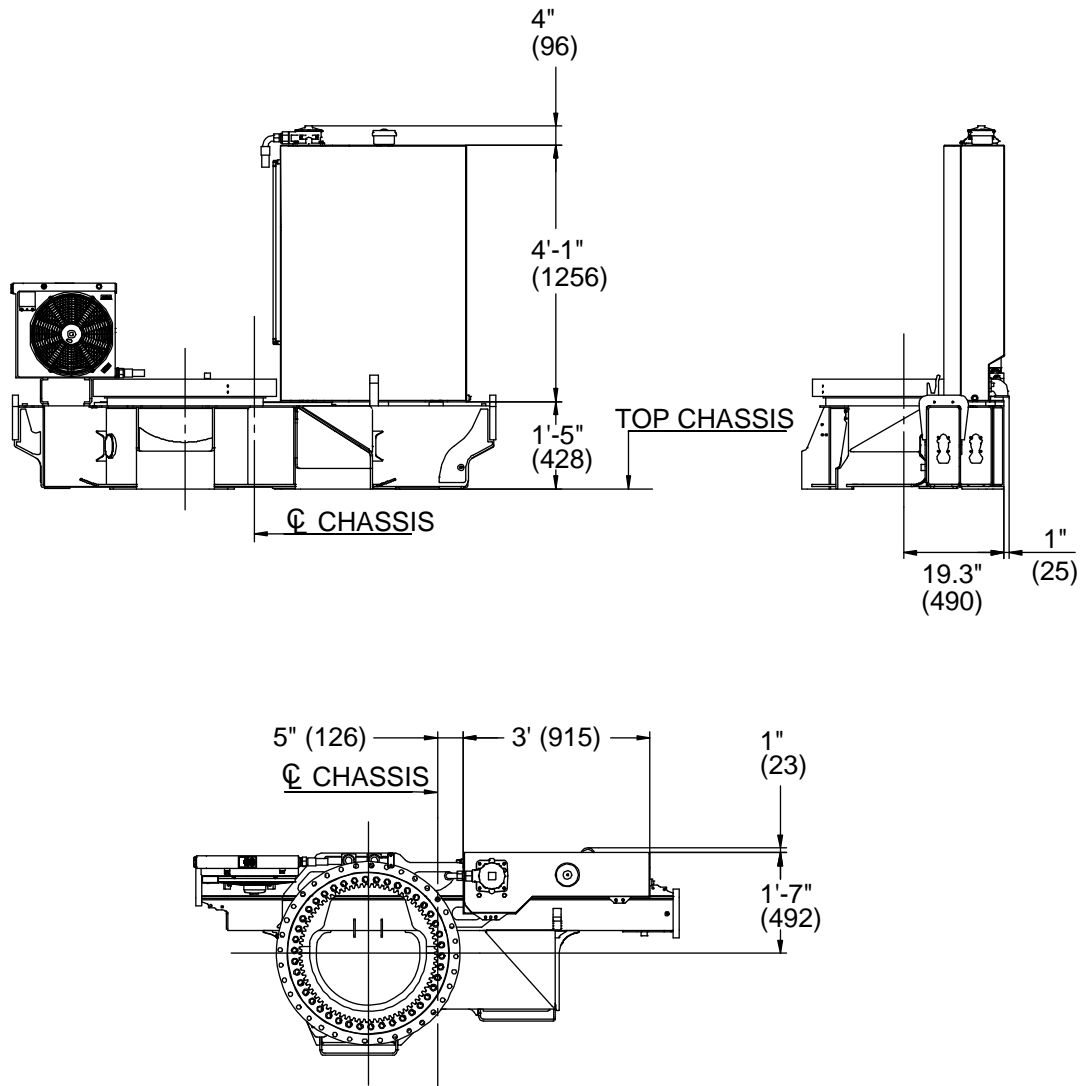
Stabilizer Drawing

Dimensions in ft-inches (mm).



Tank Dimensions

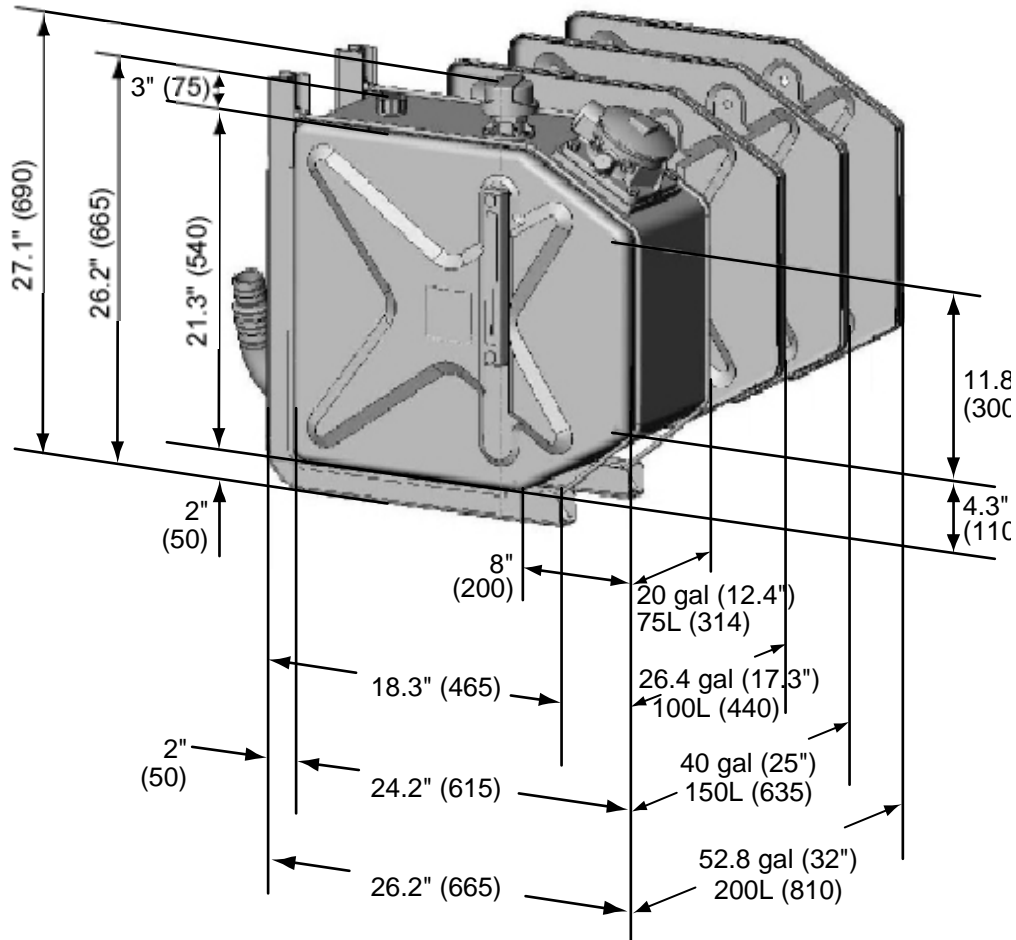
Dimensions in ft-inches (mm).



Chassis Mounted Tank Dimensions

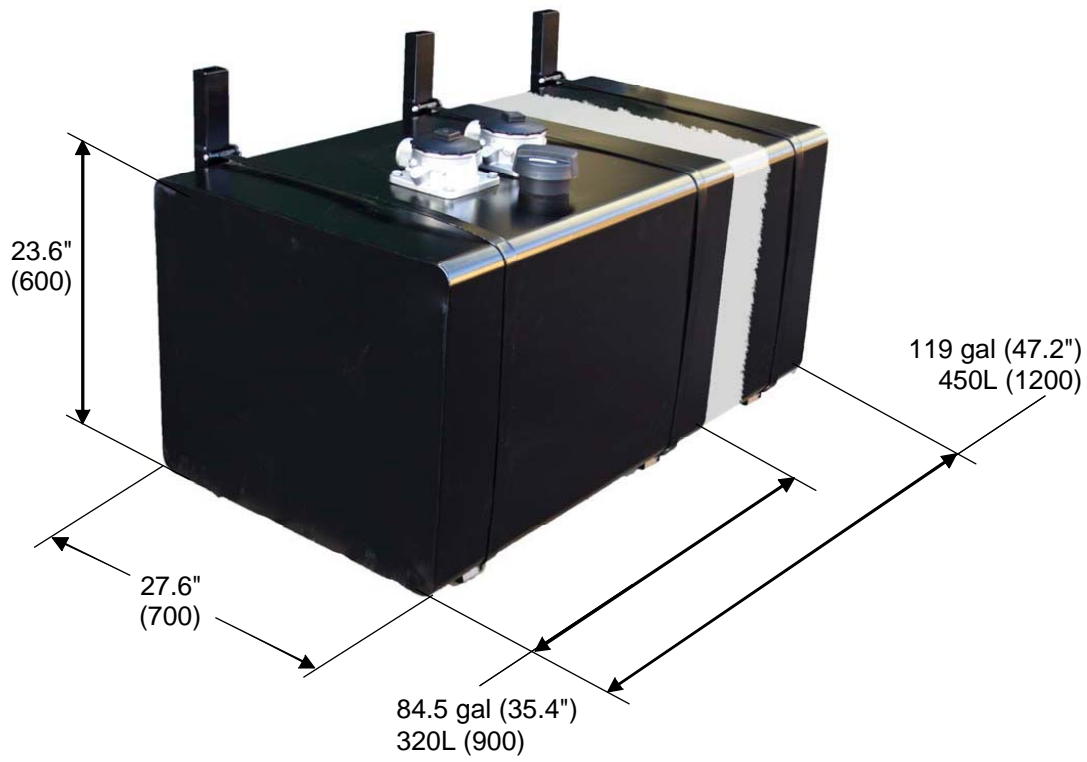
Dimensions in inches (mm).

20-53 Gallon (75-200L) Tanks



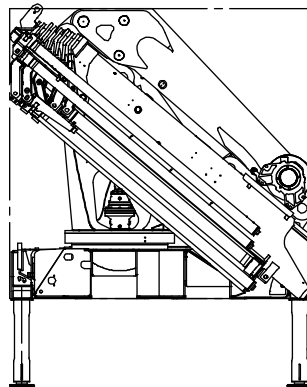
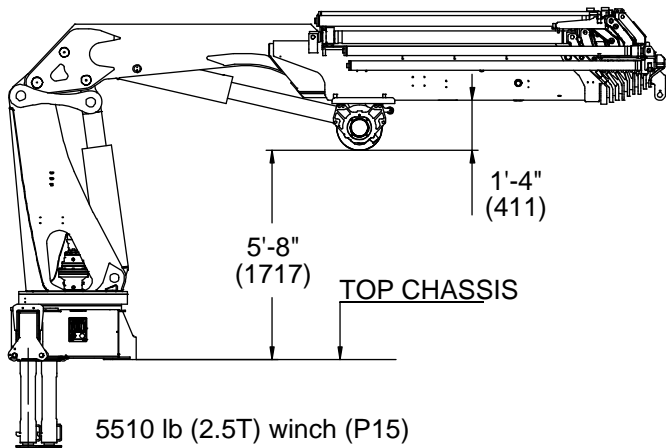
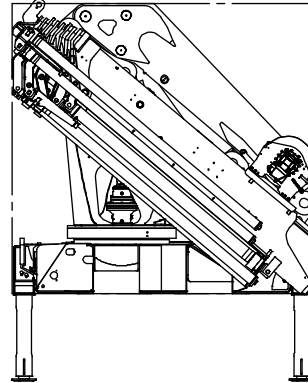
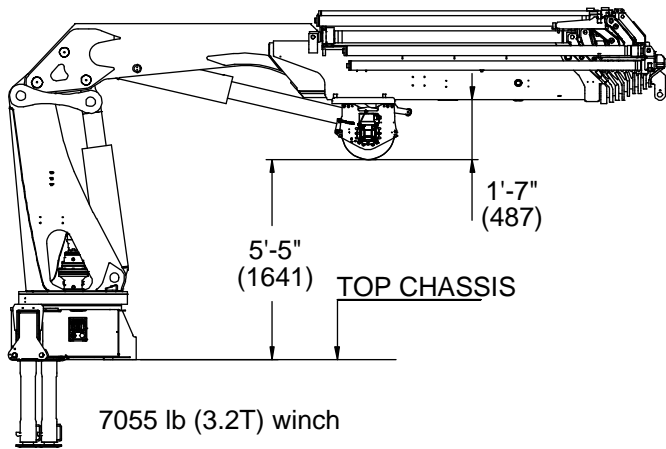
- Side-mounted chassis tanks include tank suspension, filters, suction socket and oil level indicator.
- Option right or left-side fitting.
- Suction socket for 2" and 2-1/2" suction hoses.
- Tank lengths include oil level indicator.
- Larger tanks include 2 return filters.

84.5-119 Gallon (320-450L) Tanks

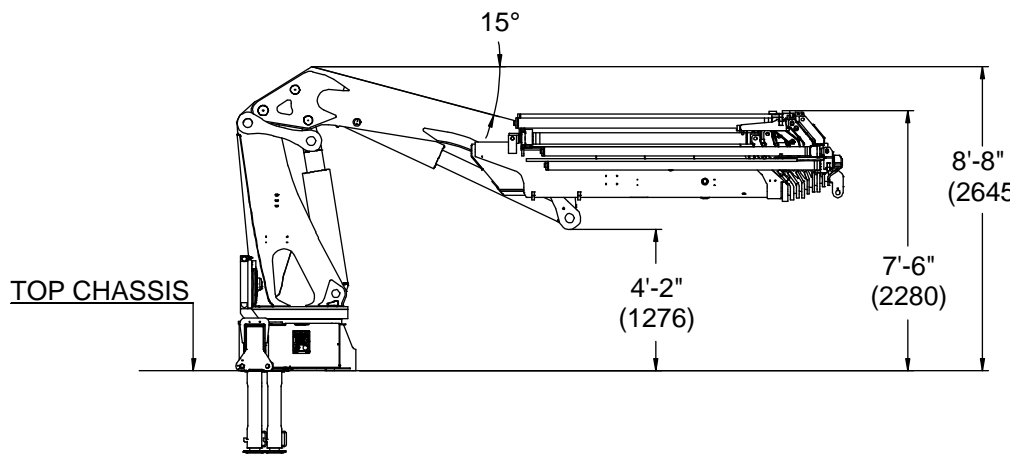
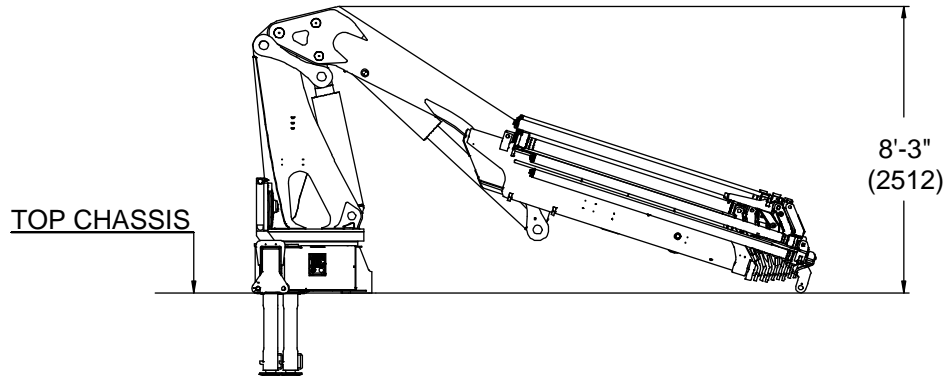


40/275 Winch Dimensions

Dimensions in ft-inches (mm).



40/275 Dimensions when Stowed in Truck



40/275 Swing Radius

