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Manual # 99904686

# 8/55 Technical Specifications

Revision Date 20111213



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## Revisions

DATE	LOCATION	DESCRIPTION
20111213	SPECS	ECN 11628 – UPDATED STABILIZER WORDING

## CHAPTER 1

# Technical Data and Charts

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## 8/55 Specifications

8/55	1-HYDRAULIC	2-HYDRAULIC	3-HYDRAULIC	4-HYDRAULIC
Crane Rating*	54,970 ft-lb (7.6 tm)	52,080 ft-lb (7.2 tm)	50,630 ft-lb (7.0 tm)	49,910 ft-lb (6.9 tm)
Maximum Horizontal Reach	17' 5" (5.3 m)	23' 4" (7.1 m)	28' 10" (8.8 m)	34' 5" (10.5 m)
Maximum Vertical Reach	23' 7" (7.2 m)	28' 10" (8.8 m)	36' 9" (11.2 m)	39' 4" (12.0 m)
Maximum Capacity	6120 lb (2775 kg)	5950 lb (2700 kg)	5820 lb (2640 kg)	5690 lb (2580 kg)
Max Cap @ Max Reach	3195 lb (1450 kg)	2260 lb (1025 kg)	1720 lb (780 kg)	1325 lb (600 kg)
Crane Weight **	2050 lb (930 kg)	2215 lb (1005 kg)	2370 lb (1075 kg)	2515 lb (1140 kg)
Hook Approach				
Vertical	8' 5" (2.57 m)	8' 2" (2.49 m)	7' 11" (2.41 m)	7' 8" (2.33 m)
Horizontal	2' 9" (0.84 m)	2' 11" (0.89 m)	3' 1" (0.94 m)	3' 3" (1.0 m)
Center of Gravity - Stored				
Vertical	1' 8" (510 mm)	1' 9" (525 mm)	1' 10" (550 mm)	1' 10" (560 mm)
Horizontal (C/L Rot To Bridge)	7" (180 mm)	7" (180 mm)	7" (180 mm)	7" (180 mm)

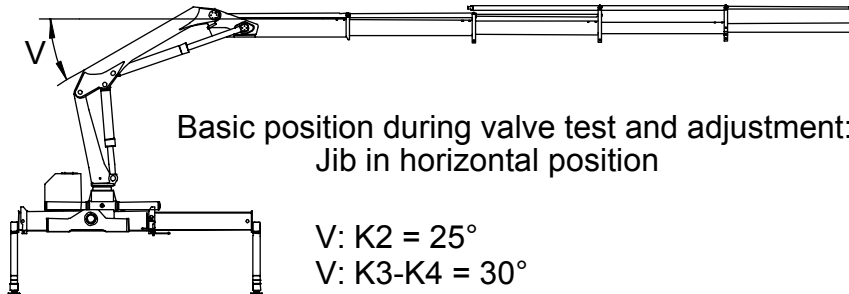
\* Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from centerline of rotation with all extensions retracted and the inner and outer booms in a horizontal position, per ANSI B30.22.   \*\* Crane weight does not include stabilizers.

8/55 SPECIFICATIONS	
Stabilizer Pad Diameter	6" (160 mm)
Crane Storage Height	6' 6" (1975 mm)
Mounting Space ***	2' 2" (670 mm)
Rotational Torque	6870 ft-lb (950 kgm)
Rotation	400°
Optimum Pump Flow	9.2 gpm (35 l/min)
System Pressure	4,135 psi (285 bar)
Oil Reservoir Capacity	11 gal (42 L)
Stabilizer Extension Span	
Standard (manual out /hydraulic down)	14' 9" (4500 mm)
Weight	360 lb (164 kg)
Option (hydraulic out / hydraulic down)	18' 4" (5600 mm)
Weight	540 lb (245 kg)

\*\*\* Maximum swing clearance radius required is 21" (540 mm) at 7' (2135 mm) from top of chassis frame.

MINIMUM CHASSIS SPECIFICATIONS	
Front Axle Rating (GAWR)	7,000 lb (3,175 kg)
Rear Axle Rating (GAWR)	15,000 lb (6,805 kg)
Resistance To Bending Moment	780,000 in-lb (89,865 kg-m)

## 8/55 Pressure Settings



<b>WORKING PRESSURE ON MAIN-RELIEF VALVES &amp; PORT-RELIEF VALVES</b>			
<i>Function</i>	<i>Direction</i>	<i>Port</i>	<i>Pressure (Loading Group 03)</i>
Main-Relief Valve			4135 psi (285 bar)
Stabilizer legs, Grab, Rotator	Up	A-port	2175 psi (150 bar)
	Down	B-port	2175 psi (150 bar)
		A-port	2175 psi (150 bar)
Extension Cylinders	Extend	B-port	2175 psi (150 bar)
		A-port	P
	Retract	B-port	P
Jib Cylinder	Up	A-port	3990 psi (275 bar)
	Down	B-port	2540 psi (175 bar)
Boom Cylinder	Down	A-port	1815 psi (125 bar)
	Up	B-port	4350 psi (300 bar)
Rotation System	Right	A-port	2175 psi (150 bar)
	Left	B-port	2175 psi (150 bar)
Separate Stabilizer Valve			2175 bar (150 bar)

### OPENING PRESSURE ON LOAD-HOLDING VALVES

Boom Cylinder	4495 psi (310 bar)
Jib Cylinder	3990 psi (275 bar)
Extension Cylinder C1-V1 (Retract B)	6235 psi (430 bar)
Extension Cylinder C2-V2 (Extend A)	3045 psi (210 bar)
External Relief Valve	

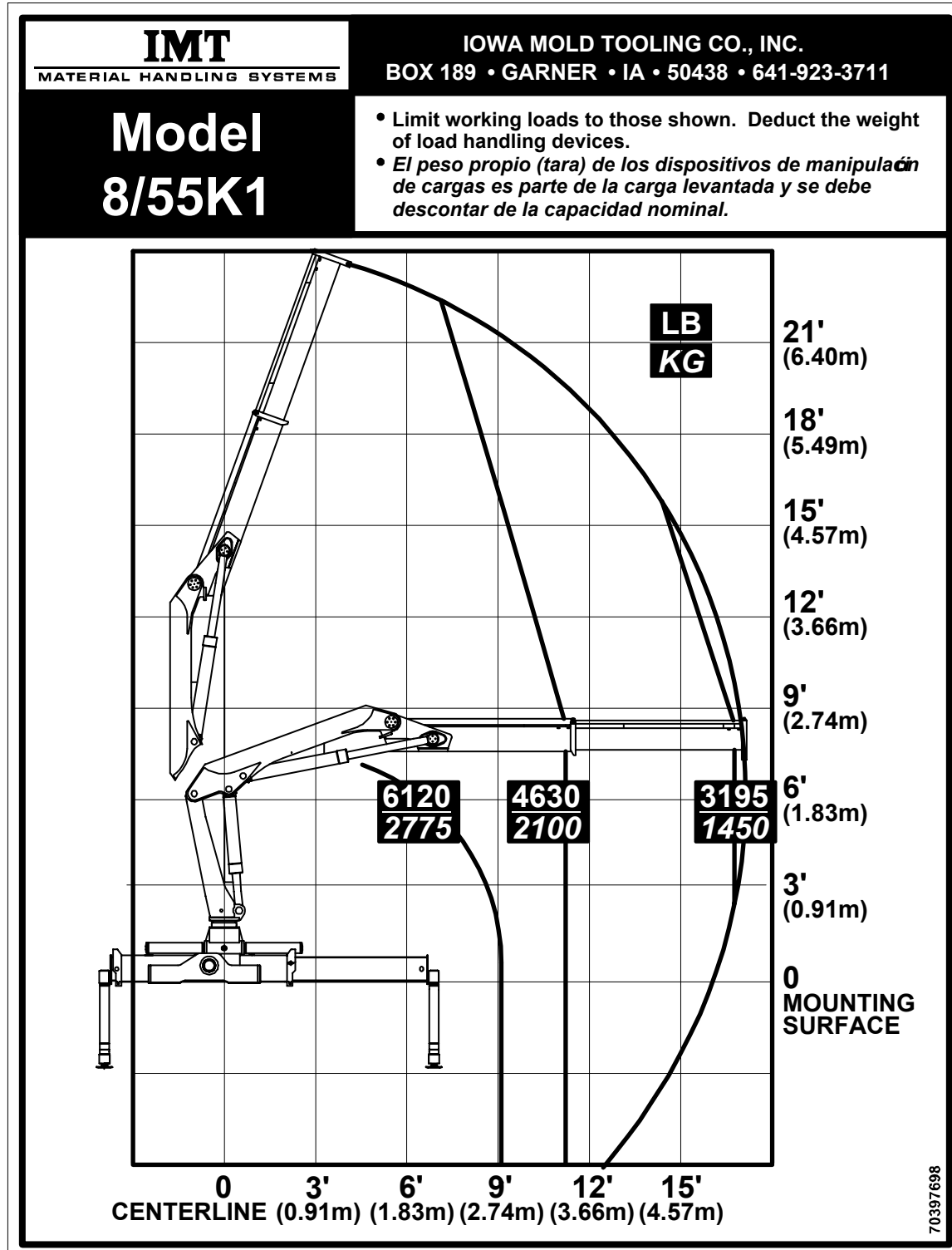
### PRESSURE SETTING

Pressure Setting for Load-Moment Limitation (LMB)	3945 psi (272 bar)
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### MAXIMUM PUMP PERFORMANCE

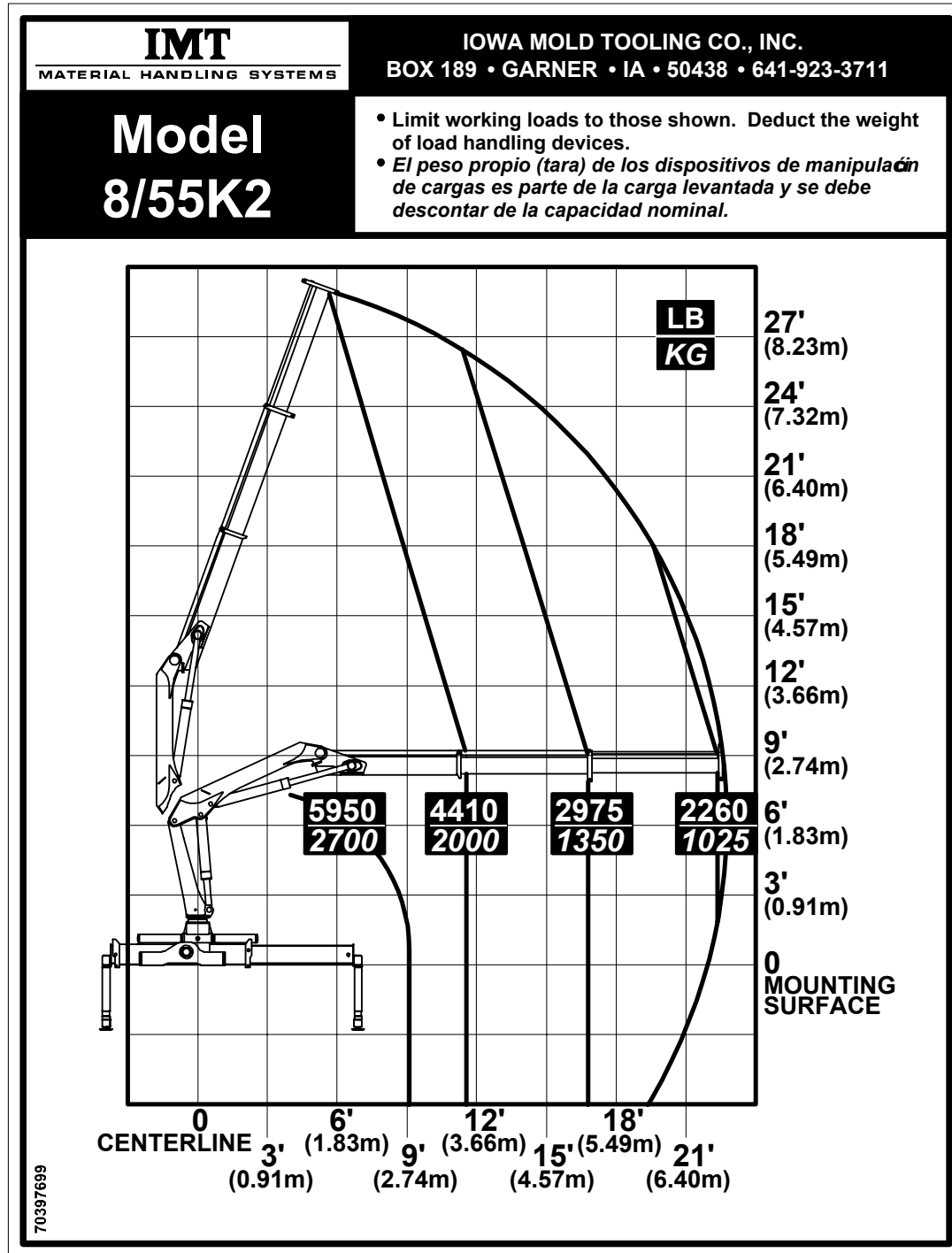
Pump Performance K2	9.3 gpm (35 l/min)
Pump Performance K3 & K4	7.9 gpm (30 l/min)

# 8/55 K1 Capacity Chart

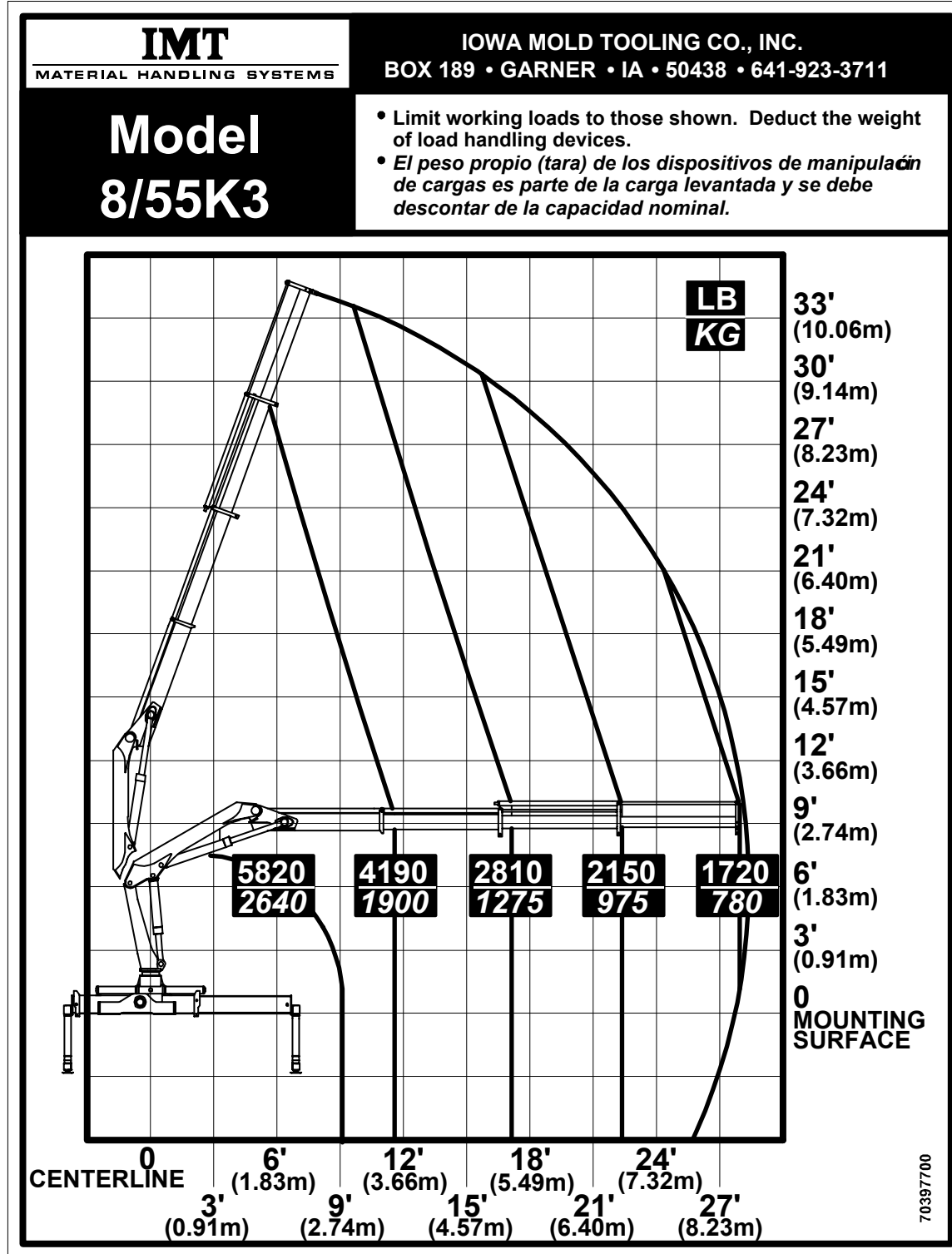




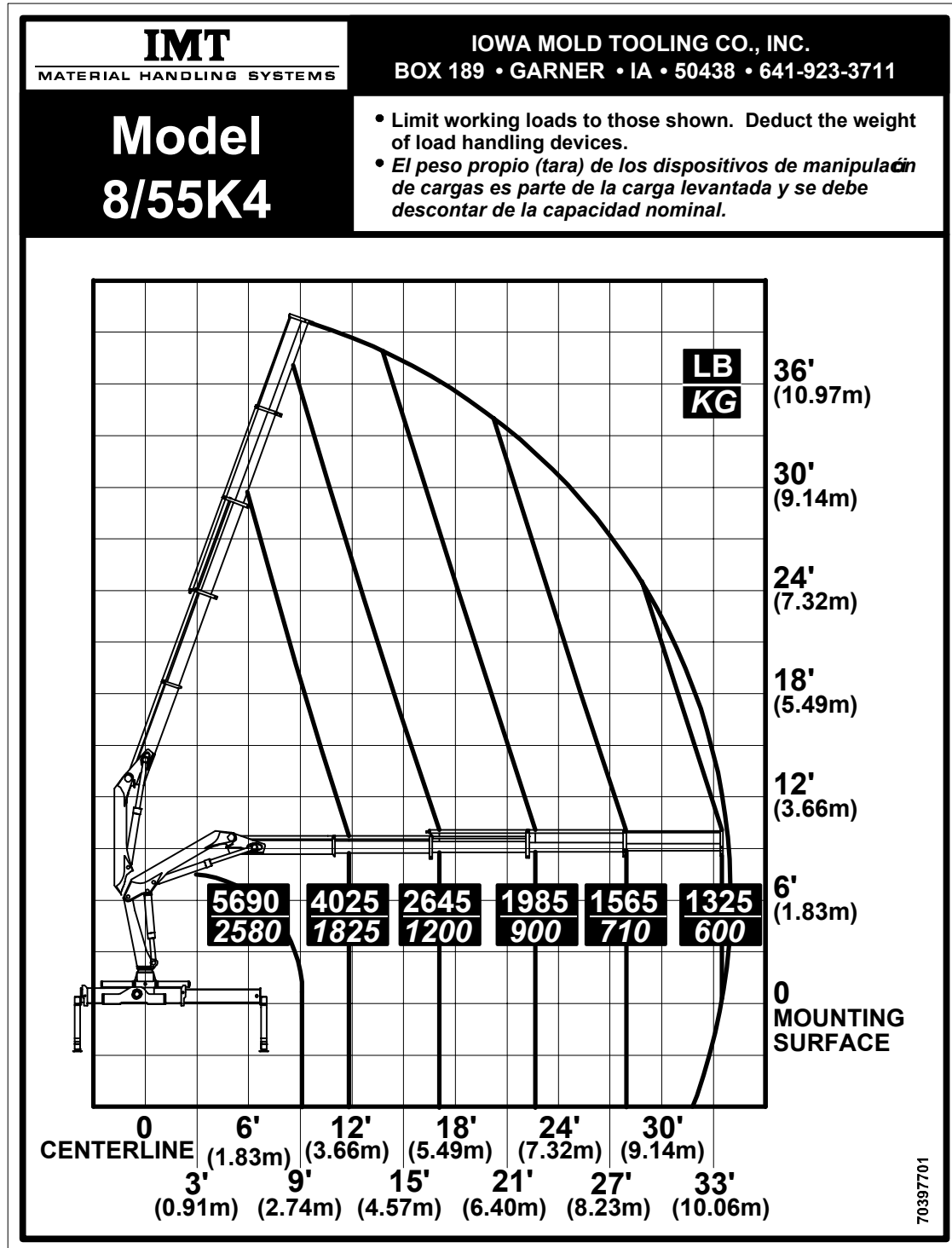
# 8/55 K2 Capacity Chart



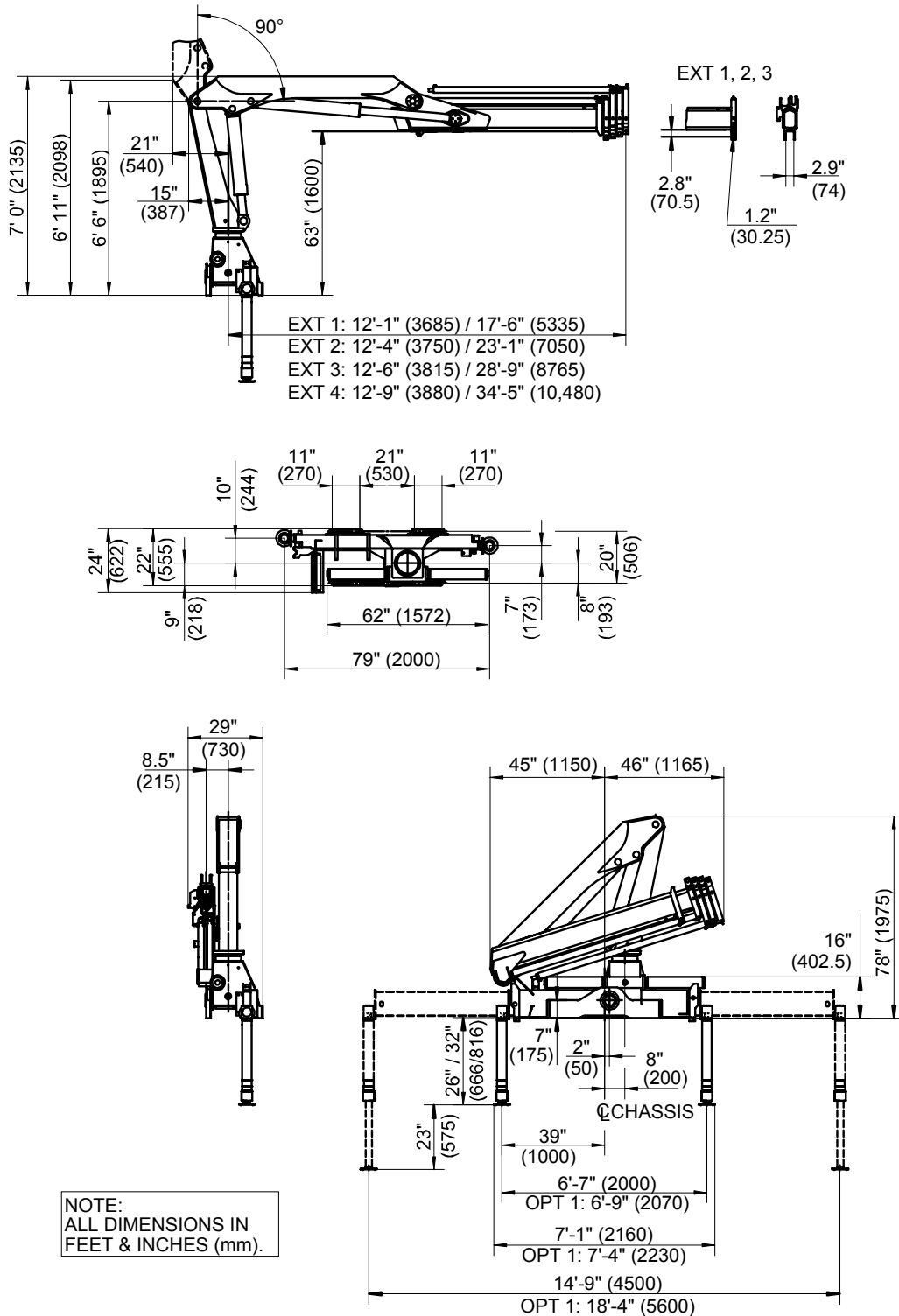
# 8/55 K3 Capacity Chart



# 8/55 K4 Capacity Chart



# 8/55 Geometric Configuration



## CHAPTER 2

# Hydraulic Schematics

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# Hydraulic Diagram - 8/55 Standard

