

20/138

Articulating Crane



► 20/138 Articulating Crane

IMT® articulating cranes have hexagonal boom design for superior reach and precise control. With a maximum lift capacity of 115,345 lb (6960 kg) for the 20/138SL model and 15,740 lb (7140 kg) for the 20/138DL model, these compact cranes have a superior lift-to-weight ratio and can stow within themselves, a perfect addition to your fleet to help get the job done.



20/138SL Specifications

	2 - Hydraulic	3 - Hydraulic	4 - Hydraulic	5 - Hydraulic	6 - Hydraulic	7 - Hydraulic	8 - Hydraulic
Crane Rating*	133,085 ft-lb (18.4 tm)	129,470 ft-lb (17.9 tm)	126,580 ft-lb (17.5 tm)	122,960 ft-lb (17 tm)	120,070 ft-lb (16.6 tm)	116,450 ft-lb (16.1 tm)	114,280 ft-lb (15.8 tm)
Max Horizontal Reach	27' 3" (8.3 m)	33' 10" (10.3 m)	41' (12.5 m)	48' 7" (14.8 m)	56' 5" (17.2 m)	63' 8" (19.4 m)	71' 2" (21.7 m)
Max Vertical Reach	35' 1" (10.7 m)	42' (12.8 m)	49' 3" (15 m)	56' 5" (17.2 m)	64' 4" (19.6 m)	71' 10" (21.9 m)	79' 1" (24.1 m)
Max Capacity	15,345 lb (6960 kg)	14,505 lb (6580 kg)	13,715 lb (6220 kg)	12,985 lb (5890 kg)	12,745 lb (5780 kg)	12,080 lb (5480 kg)	11,550 lb (5240 kg)
Max Cap @ Max Reach	4870 lb (2210 kg)	3640 lb (1650 kg)	2710 lb (1230 kg)	2030 lb (920 kg)	1500 lb (680 kg)	1080 lb (490 kg)	815 lb (370 kg)
Crane Weight **	3900 lb (1770 kg)	4245 lb (1925 kg)	4585 lb (2080 kg)	4895 lb (2220 kg)	5170 lb (2345 kg)	5400 lb (2450 kg)	5590 lb (2535 kg)
Hook Approach							
Vertical	7' 3" (2.21 m)	7' 6" (2.29 m)	7' 10" (2.38 m)	8' 1" (2.47 m)	8' 5" (2.56 m)	8' 8" (2.65 m)	9' (2.74 m)
Horizontal	2' 3" (0.69 m)	2' 5" (0.74 m)	2' 7" (0.79 m)	2' 9" (0.84 m)	2' 11" (0.89 m)	3' 1" (0.94 m)	3' 3" (1 m)
Center of Gravity - Stored							
Vertical	2' 6" (770 mm)	2' 8" (820 mm)	2' 8" (815 mm)	2' 9" (835 mm)	2' 10" (855 mm)	2' 10" (875 mm)	2' 11" (890 mm)
Horizontal (C/L Rotation to Bridge)	13.4" (340 mm)	12.4" (315 mm)	12.2" (310 mm)	11.8" (300 mm)	11.2" (285 mm)	10.6" (270 mm)	10.4" (265 mm)

20/138DL Specifications

	2 - Hydraulic	3 - Hydraulic	4 - Hydraulic	5 - Hydraulic	6 - Hydraulic	7 - Hydraulic	8 - Hydraulic
Crane Rating*	133,085 ft-lb (18.4 tm)	130,195 ft-lb (18 tm)	126,580 ft-lb (17.5 tm)	123,685 ft-lb (17.1 tm)	120,070 ft-lb (16.6 tm)	117,175 ft-lb (16.2 tm)	115,005 ft-lb (15.9 tm)
Max Horizontal Reach	27' 3" (8.3 m)	33' 10" (10.3 m)	41' (12.5 m)	48' 7" (14.8 m)	56' 5" (17.2 m)	63' 8" (19.4 m)	71' 2" (21.7 m)
Max Vertical Reach	35' 1" (10.7 m)	42' (12.8 m)	49' 3" (15 m)	56' 5" (17.2 m)	64' 4" (19.6 m)	71' 10" (21.9 m)	79' 1" (24.1 m)
Max Capacity	15,740 lb (7140 kg)	15,035 lb (6820 kg)	14,395 lb (6530 kg)	13,780 lb (6250 kg)	13,205 lb (5990 kg)	12,655 lb (5740 kg)	12,215 lb (5540 kg)
Max Cap @ Max Reach	4895 lb (2220 kg)	3640 lb (1650 kg)	2735 lb (1240 kg)	2050 lb (930 kg)	1520 lb (690 kg)	1080 lb (490 kg)	815 lb (370 kg)
Crane Weight **	4055 lb (1840 kg)	4400 lb (1995 kg)	4805 lb (2180 kg)	5115 lb (2320 kg)	5390 lb (2445 kg)	5620 lb (2550 kg)	5810 lb (2635 kg)
Hook Approach							
Vertical	7' 3" (2.21 m)	7' 6" (2.29 m)	7' 10" (2.38 m)	8' 1" (2.47 m)	8' 5" (2.56 m)	8' 8" (2.65 m)	9' (2.74 m)
Horizontal	2' 3" (0.69 m)	2' 5" (0.74 m)	2' 7" (0.79 m)	2' 9" (0.84 m)	2' 11" (0.89 m)	3' 1" (0.94 m)	3' 3" (1 m)
Center of Gravity - Stored							
Vertical	2' 7" (795 mm)	2' 8" (820 mm)	2' 9" (840 mm)	2' 10" (855 mm)	2' 10" (855 mm)	2' 11" (890 mm)	3' (910 mm)
Horizontal (C/L Rotation to Bridge)	12.8" (325 mm)	12.4" (315 mm)	12" (305 mm)	11.4" (290 mm)	10.8" (275 mm)	10.4" (265 mm)	10" (255 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.

Standard Features

- Application-specific product offering
- Superior lift-to-weight ratio
- Long-reach capabilities
- Hexagonal booms for superior reach and maximum control
- Internal hose routing
- 15° overbending on outer boom

Options

- Radio remote control
- Various stabilizer configurations
- Double link arm system
- Boom mounted winch
- Floodlight on outer boom
- Boom tip functions for hydraulic attachments
- Oil cooler

Specifications

Stabilizer Pad Diameter	7" (175 mm)
Crane Storage Height	7' 6" (2295 mm)
Mounting Space^{***}	2' 11" (880 mm)
Rotational Torque	17,555 ft-lb (2.4 tm)
Rotation	400°
Optimum Pump Performance	14.5 gpm (55 L/min)
System Pressure	4785 psi (330 bar)
Oil Reservoir Capacity	23.8 gal (90 L)
Stabilizer Extension Span	
Standard (manual out/hydraulic down) Weight	18' 3" (5575 mm) 605 lb (275 kg)
Option (hydraulic out/hydraulic down) Weight	21' 2" (6455 mm) 785 lb (355 kg)

^{***} Maximum swing clearance radius required is 24" (600 mm) at 7' 10" (2375 mm) from top of chassis frame.

Minimum Chassis Specifications

Front Axle Rating (GAWR)	14,000 lb (6350 kg)
Rear Axle Rating (GAWR)	40,000 lb (18,145 kg)
Resistance to Bending Moment Minimum	2,000,000 in-lb (230,425 kg-m)

Hexagonal Boom Design

A wide hexagonal profile with large bearing surfaces ensures greater strength and stability for horizontal and vertical spans — even when working in extreme positions with long reaches. Plus, it's protected by powdercoat paint that never fades, flakes, or corrodes.



Internal Hose Routing

Fed internally through protective nylon drag chains or roller guides, all hoses are equipped with sturdy, high-pressure swivel couplings to prevent them from twisting.



Overbending

Overbending between the main boom and jib provides greater flexibility when working under power wires and more potential for high lifting in narrow passages. It also lowers the total height when the loader is stowed over the truck body.

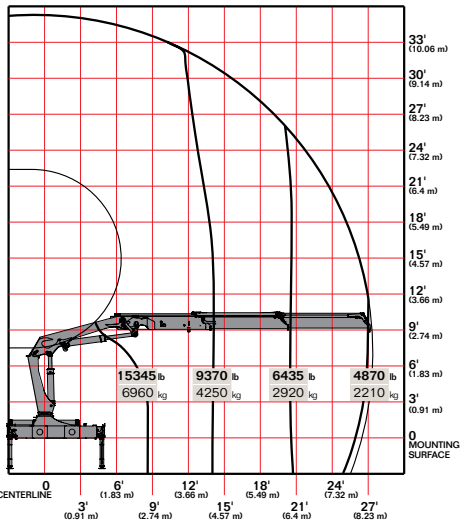


Stow Bracket Innovation

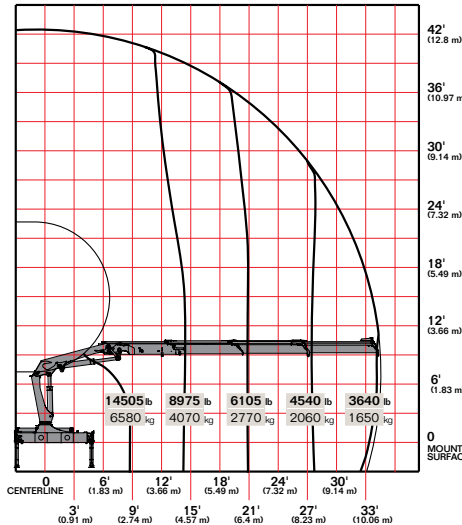
The stow bracket is designed to secure the boom for transport position but not allow for bracket damage. Unlike systems with rigid fixed brackets, the "J" hook will pivot if an incorrect movement is attempted.

▶ 20/138SL Capacity Charts

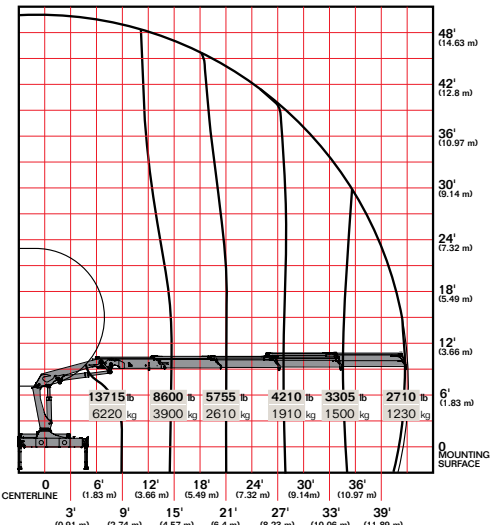
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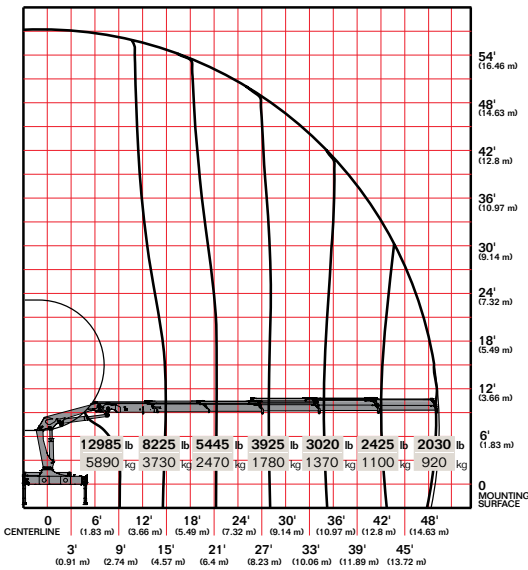
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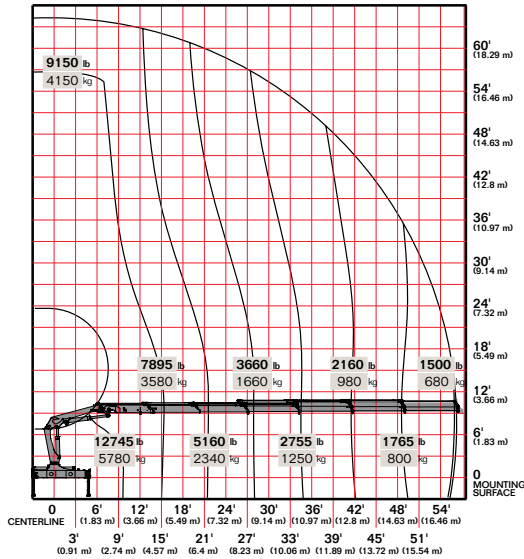
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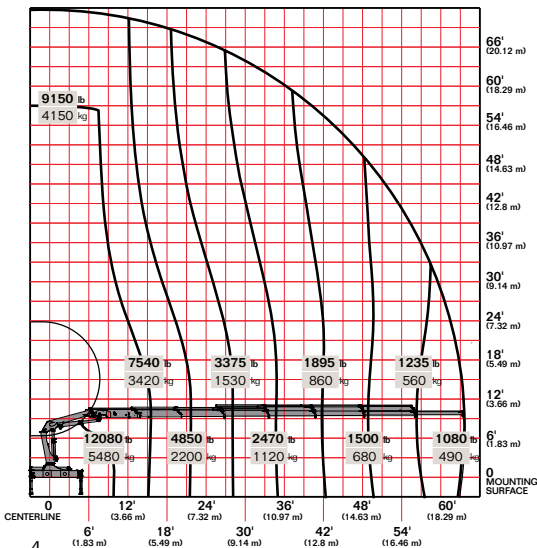
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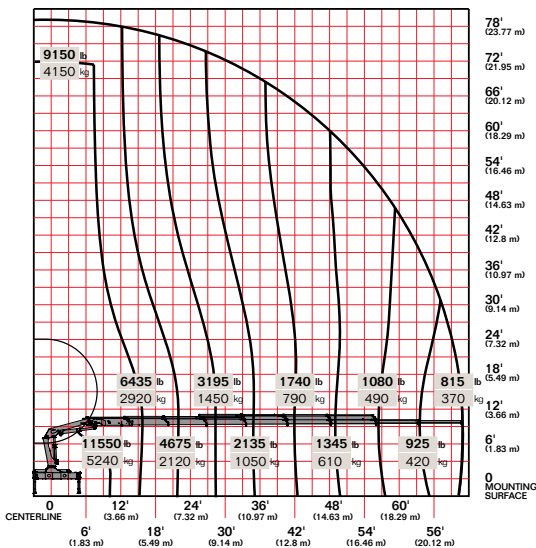
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20/138SL K7



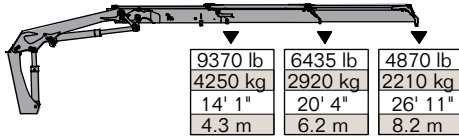
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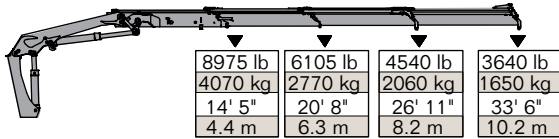
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▶ 20/138SL Lifting Capacity

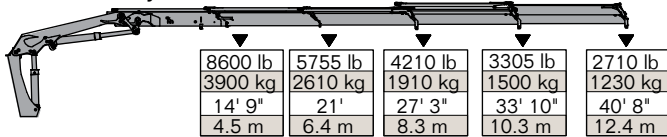
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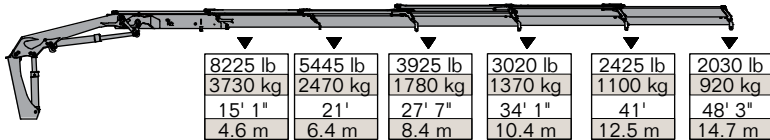
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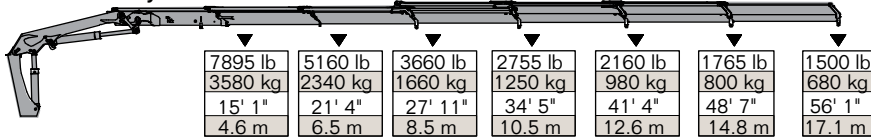
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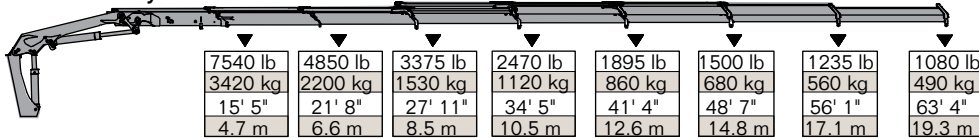
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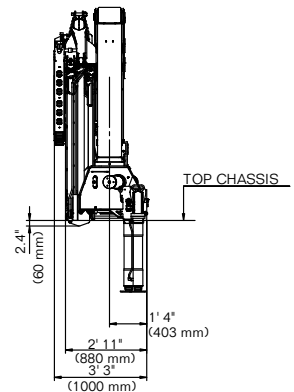
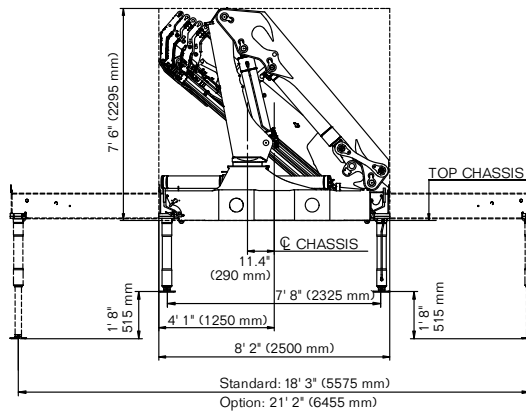
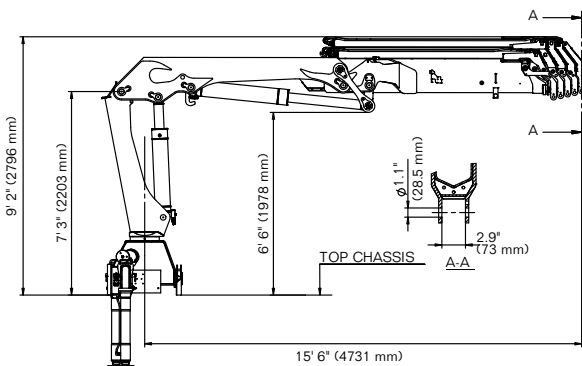
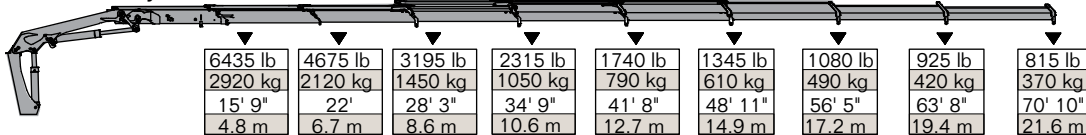
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20/138SL - 7 Hydraulic

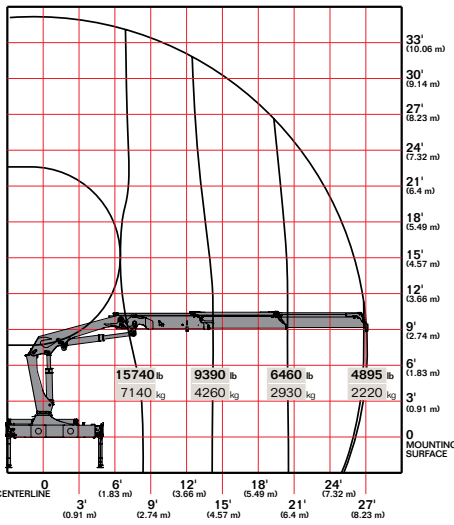


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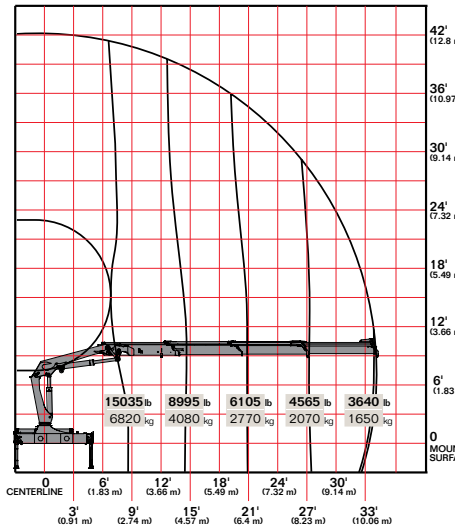


▶ 20/138DL Capacity Charts

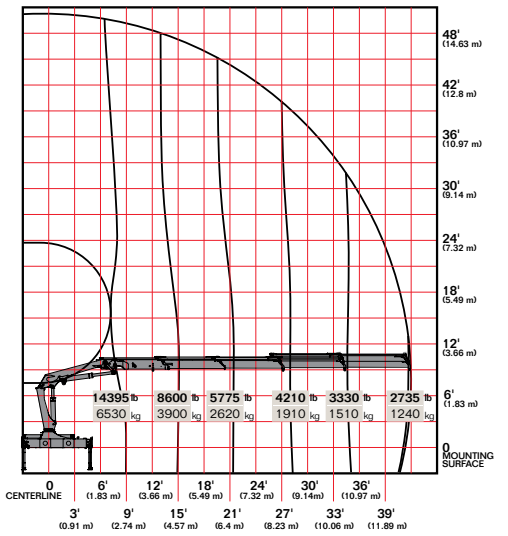
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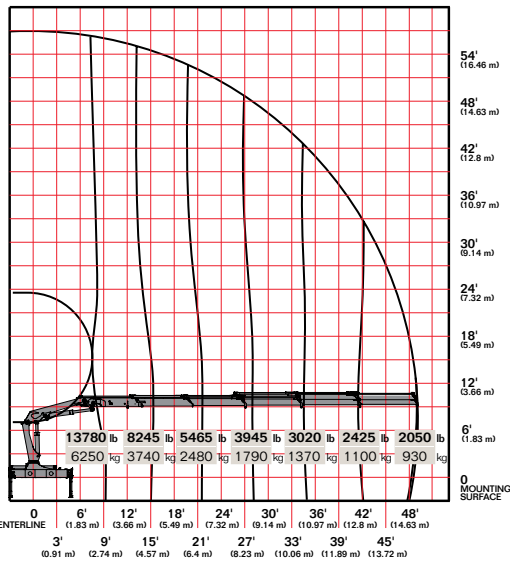
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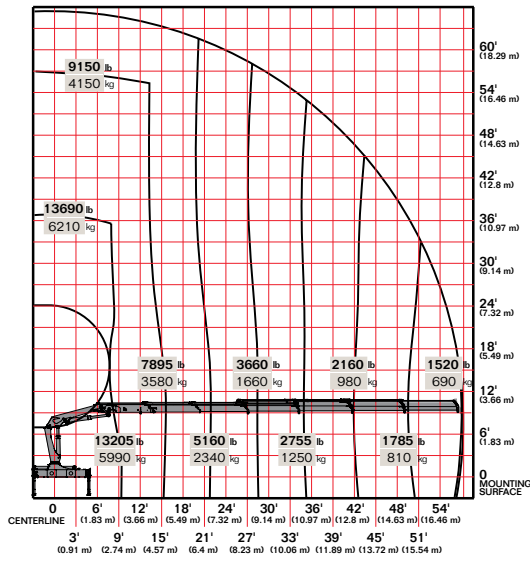
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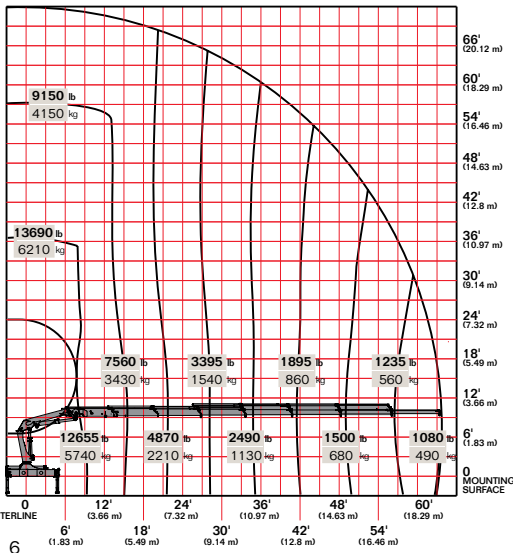
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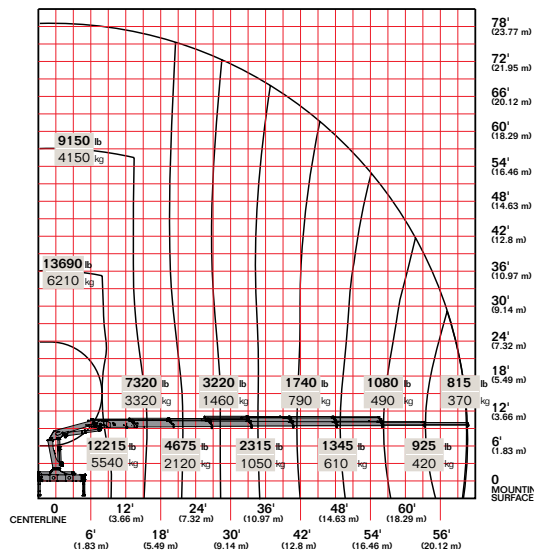
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20/138DL K7



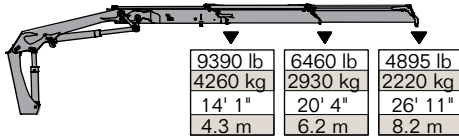
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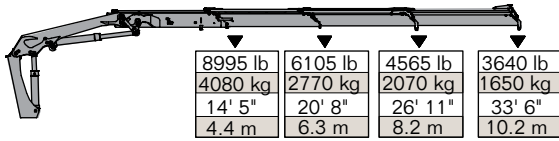
Limit working loads to those shown. Deduct the weight of load-handling devices.

► 20/138DL Lifting Capacity

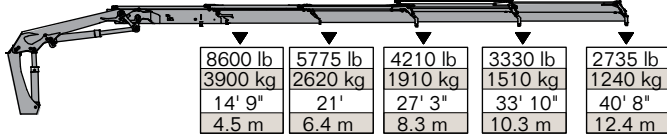
20/138DL - 2 Hydraulic



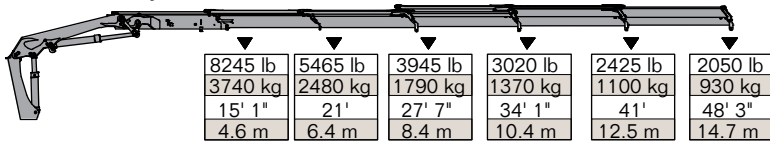
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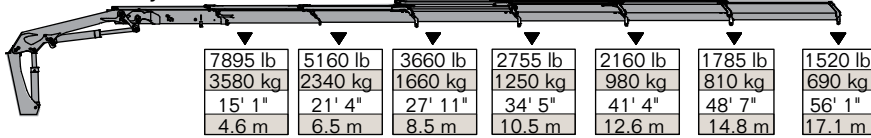
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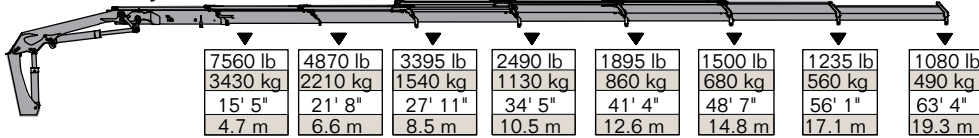
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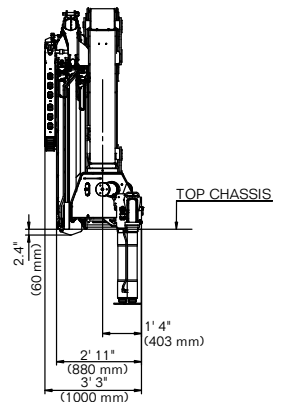
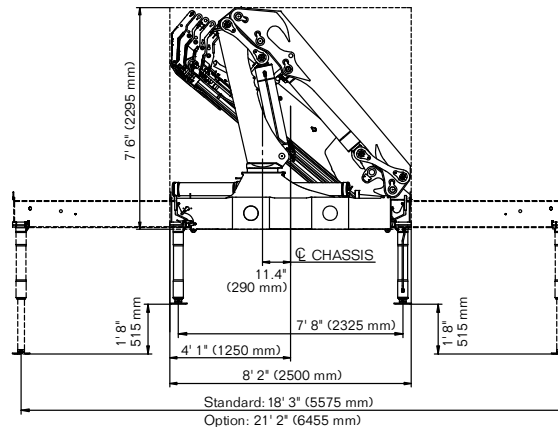
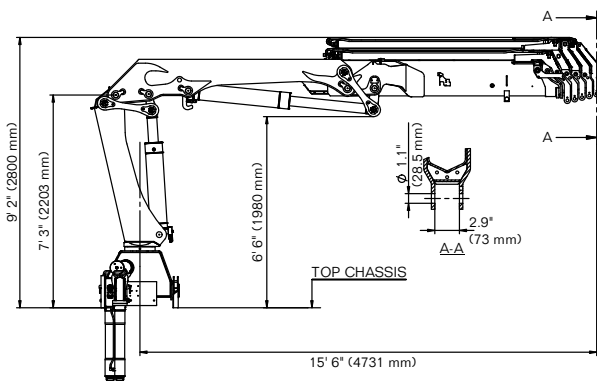
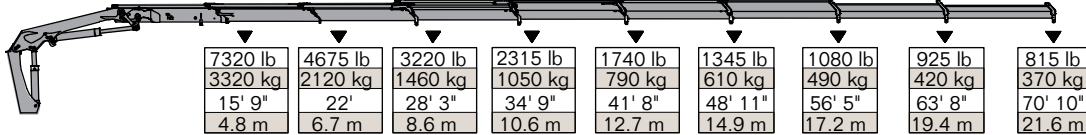
20/138DL - 6 Hydraulic



20/138DL - 7 Hydraulic



20/138DL - 8 Hydraulic



Power Source

- Standard integral-mounted piston hydraulic pump and PTO application

Cylinder Holding Valves

- Integral-mounted counterbalance valves or load-holding check valves
- Prevention of sudden cylinder collapse in case of hose failure

Rotation System

- 400 degree rack and pinion
- 17,555 ft-lb (2.4 tm) rotational torque
- Counterbalance valve on each cylinder to stop motion in case of hose failure

Hydraulic System

- Open-centered system — closed optional
- Regeneration system on extension cylinder to ensure quick deployment
- Hydraulic oil reservoir, air breather, replaceable return-line filter, and control valve with levers

Overload System

- Load-limiting capability for boom functions
- Rated capacity limitation (RCL) 5300 blocks load-increasing functions when full capacity is attained



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Iowa Mold Tooling Co., Inc.
500 Highway 18 West
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