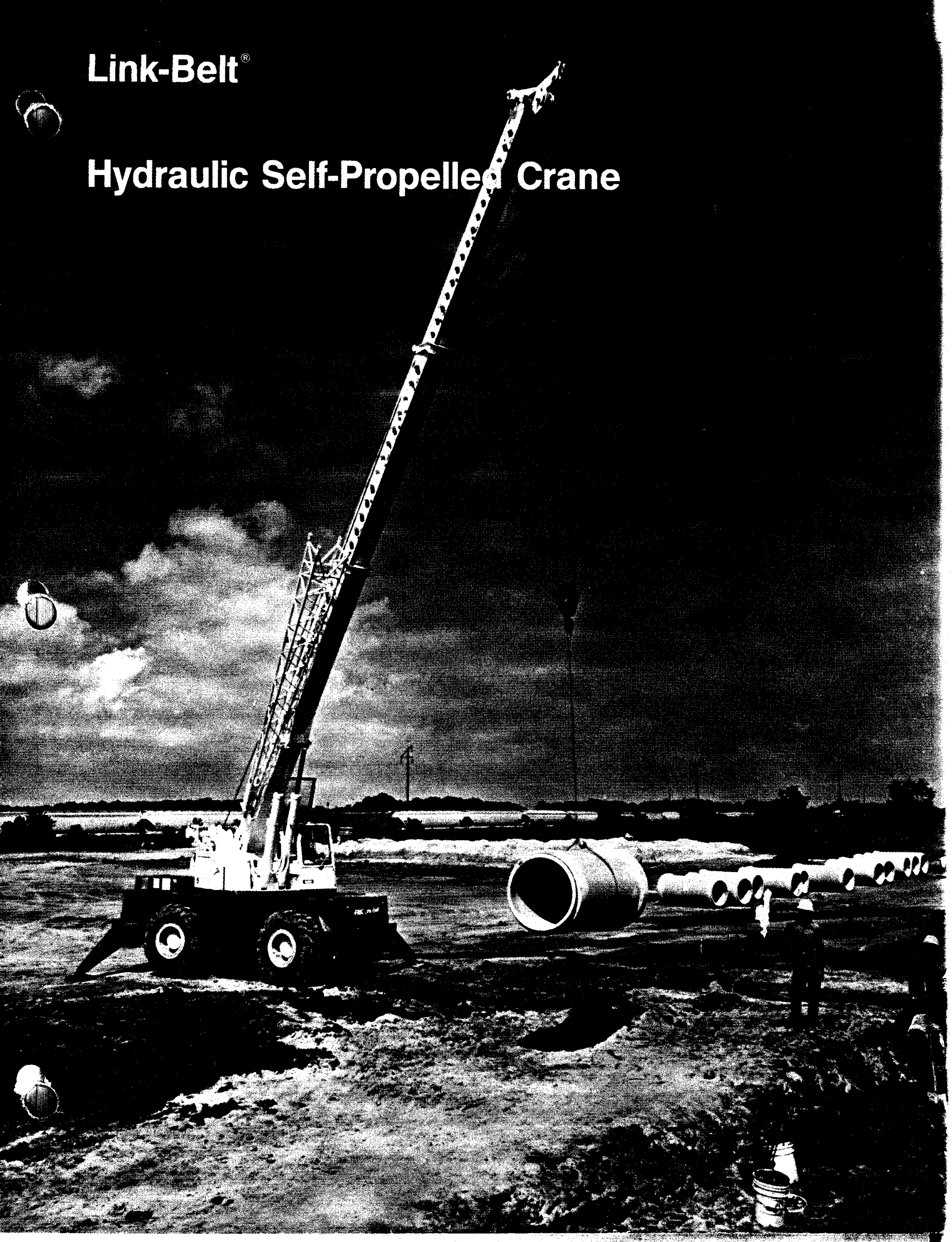
Link-Belt®

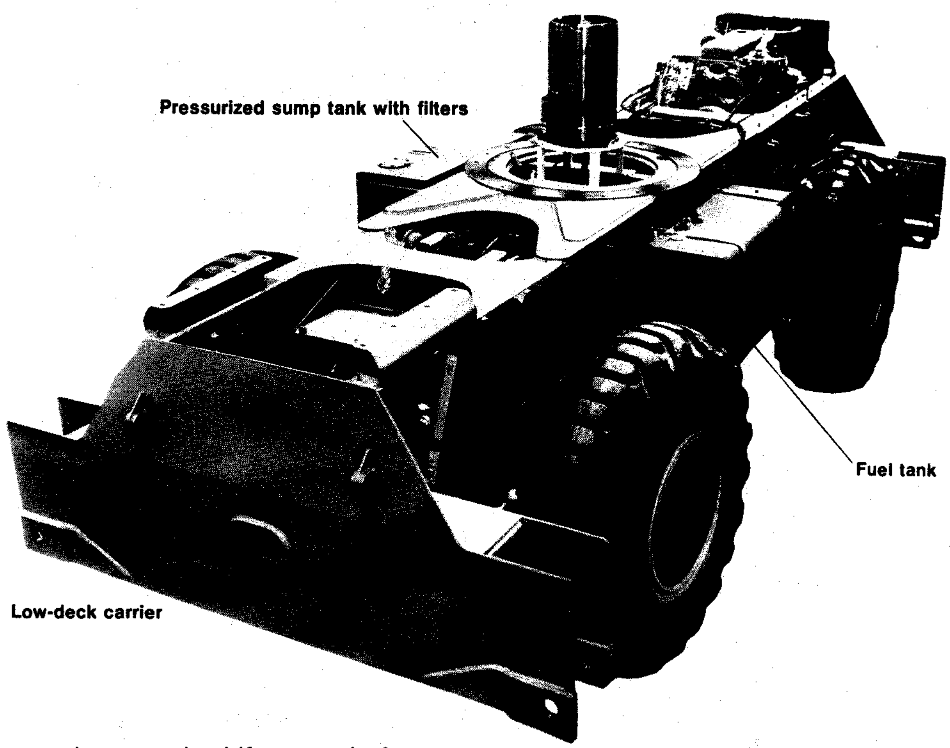
Hydraulic Self-Propelled Crane



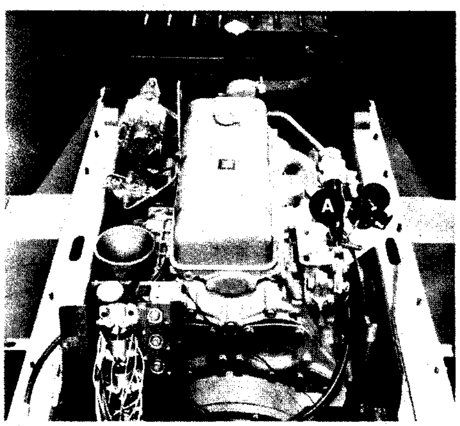
FMC's new hydraulic self-propelled crane with low-deck carrier design

Results in greater travel and operating stability

FMC now offers the new 15-ton (13.61 metric ton) Link-Belt® HSP-15 hydraulic self-propelled crane. The carrier design concept features a **low-deck carrier** with lowered **diesel engine mounting**. The result is a lower crane center of gravity for greater travel and swing stability and increased on-tire lifting capacity in the operating ranges. Also, results in increased visibility.



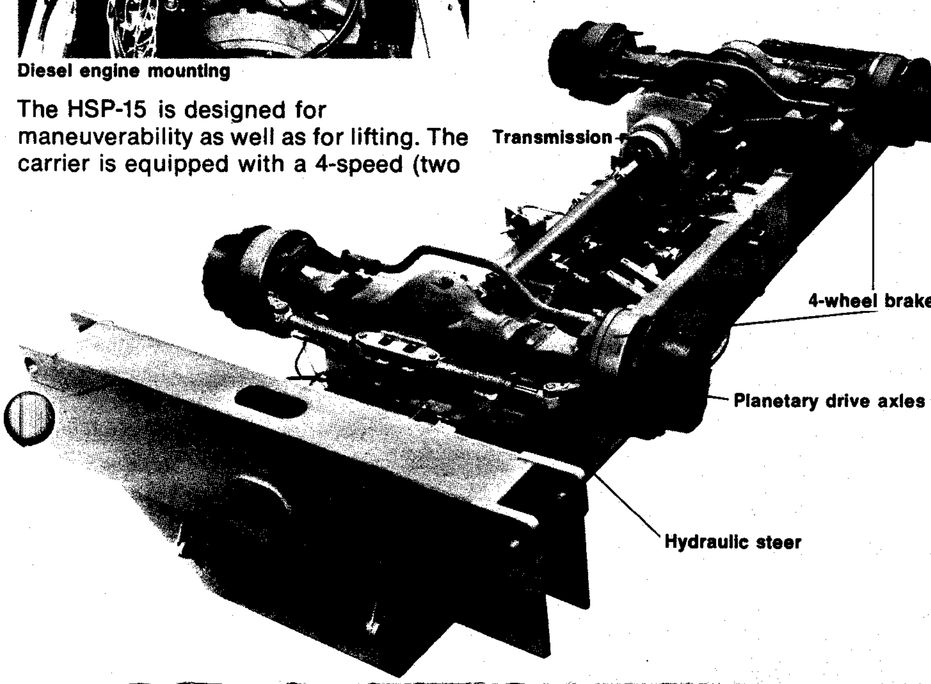
The diesel engine mounting with accessories, radiator, and the power shift transmission, are rubber mounted to the carrier frame. A sliding hood allows for access to the engine. Air cylinder **(A)** controls the diesel engine throttle. It is ideal for initial engine start-up when air pressure is low, providing a high idle engine speed. Air pressure for brakes, air throttle, transmission shift and rear axle disconnect is from the engine-driven air compressor.

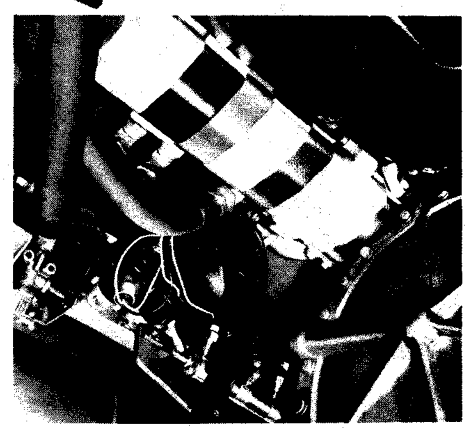


Diesel engine mounting

The HSP-15 is designed for maneuverability as well as for lifting. The carrier is equipped with a 4-speed (two range) automatic shift **transmission** controlled by a single operator control lever. An air cylinder shifts the transmission into reverse, neutral, low and high speeds.

For maneuverability, **hydraulic steering** with 2-wheel, 4-wheel, and crab-style steering are possible. All are coordinated with the steering wheel. Steering mode selection switch, plus visual rear wheel position indicator are located in the control console.



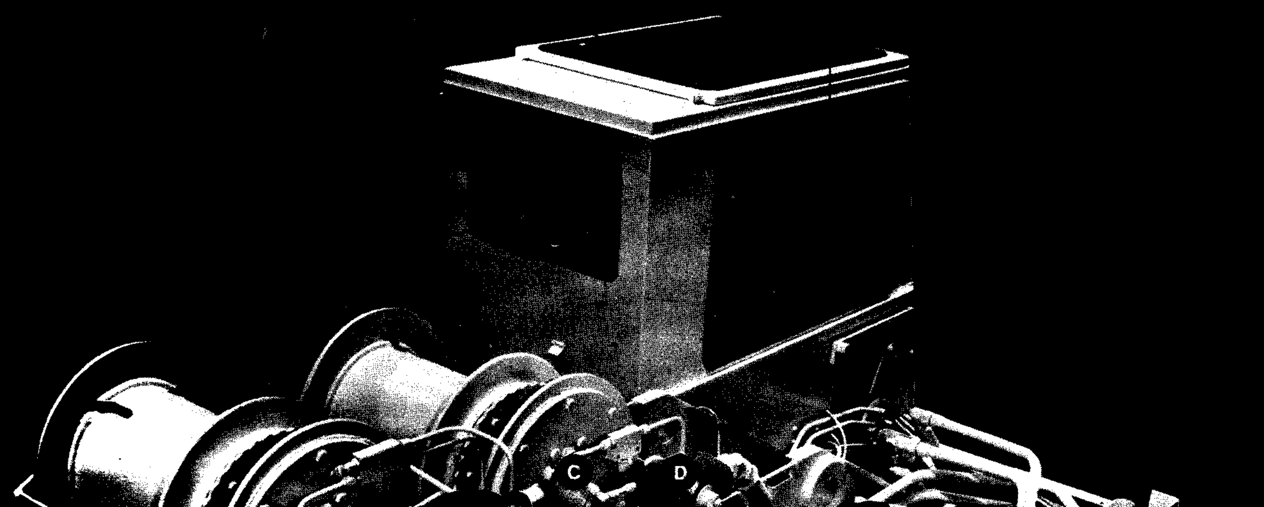


Hydraulic pumps

Hydraulic, air assist, **4-wheel service brakes** with front wheel spring applied, air released emergency and parking brakes are standard.

The front and rear **planetary drive axles** are equipped with a high traction differential. They allow one wheel to assume up to 60% of the available axle torque for traction on uneven ground.

The gear-type **hydraulic pumps** are powered by an extended engine/transmission drive shaft for providing a continually rotating pump drive.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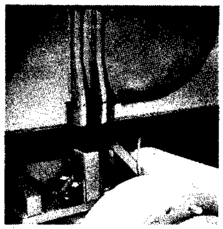
Unique boom design embossed with diamond-shaped depressions

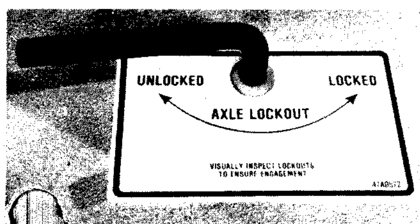
Main boom 25' - 60' (7.62 m - 18.29 m) plus 20' (6.10 m) fly

The HSP-15 is equipped with a 3-section, 25' - 60' (7.62 m - 18.29 m) power boom. Also available is a 20' (6.10 m) fly, which will swing into the stored position to the right side of the base boom section. The fly can be easily stored with the flared centering device for fast fly-to-boom storage.



Rear axle locked in

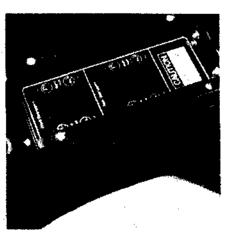
Rear axle locked out



Axle lock out control

The HSP-15 rear axle oscillates when travelling over uneven ground. For a rigid lifting base, the rear axle may be **locked in** and **locked out** by manually controlled locks.

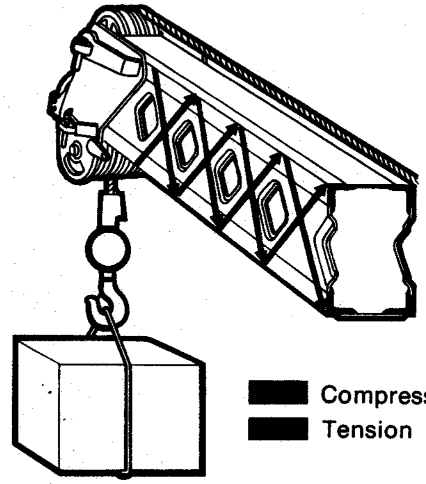
Hydraulic pivot-type outriggers are standard. **Outrigger controls** are located in the operator's cab. Floats are hinged to the ends of the outriggers.



Outrigger controls

The new standardized electrical circuit identification system has been incorporated in the design of the HSP-15 for increased performance and simplified service. This system employs manual reset circuit breakers instead of fuses. A carrier **storage compartment** is standard.

FMC's exclusive boom design (patented) is an engineering achievement. The design utilizes minimum gauge steel plate. Side plates are embossed with diamond-shaped depressions. This allows the use of lighter weight plate while increasing boom strength and stiffness. The diamond shape allows the natural flow of boom stresses (both compression and tension) and thus avoids high stress risers when a load is lifted.



FMC's exclusive boom design (patented)

To eliminate undesirable boom corner welds, the steel plates are welded to specially machined corner angles for greater strength and reliability. Also, for lubricating the rear boom wear shoes, fittings are mounted externally.

We are constantly improving our products and therefore reserve the right to change designs and specifications.

FMC Corporation Crane and Excavator Division World Headquarters Cedar Rapids Iowa 52406
Plants in Cedar Rapids Iowa (2) • Lexington & Bowling Green Kentucky • Ontario Canada • Milan Italy • Queretaro Mexico & Nagoya Japan (under license)

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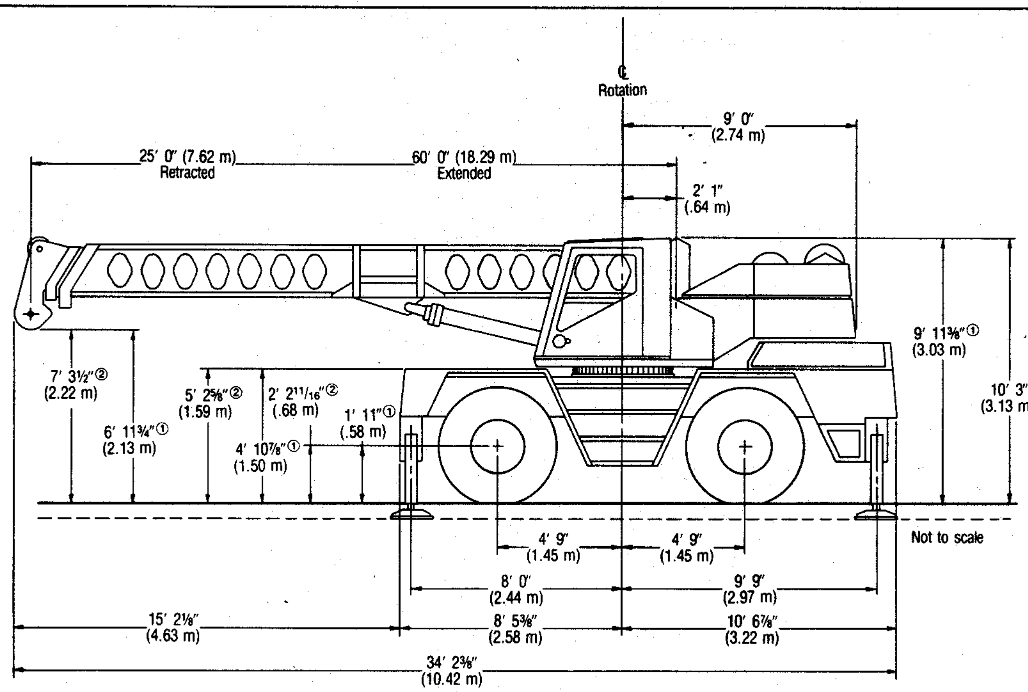
Printed in U.S.A.

General Specifications

Link-Belt® 15-Ton (13.61 metric ton)

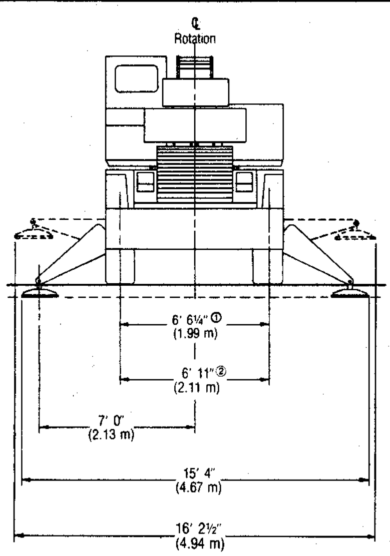
Hydraulic self-propelled crane

HSP-15



①Std. tires — 17.5 x 25 (16-ply rating)
②Opt. tires — 20.5 x 25 (20-ply rating)

Note: When machine is standing on fully extended outriggers, all vertical dimensions measured to ground line will increase approximately as below:
With std. tires — 10¹⁵/₁₆" (.28 m)
With opt. tires — 7¼" (.18 m)



General Dimensions	Feet	Meters
Over-all width①	—	—
with std. tires	7' 11⅞"	2.44
with opt. tires	8' 8⅜"	2.65
Tailswing of counterweight	9' 3⅝"	2.84
Minimum ground clearance	—	—
with std. tires	1' 2½"	.37
with opt. tires	1' 6¼"	.47
Ground clearance between tires and ground — on outriggers	—	—
with std. tires	6¾"	.17
with opt. tires	3⅞"	.10
Wheelbase	9' 6"	2.90

①Outriggers retracted

Mounting —

Type — FMC self-propelled, 4 x 4 drive, 8'0" (2.44 m) wide, 114" (2.93 m) wheelbase.

Frame — Welded plate; box section construction between outriggers.

Outriggers — Hydraulic pivot type; one pinned at each corner of mounting; 20" x 16" (.51 x .41 m) rectangular steel floats hinged at ends of outriggers. Outriggers individually controlled from operator's cab.

Suspension — 3-point; front axle bolted to frame, rear axle pin connected on bronze bushing to permit axle oscillation. Manual axle lockouts provide stable 4-point suspension for 'on tires' and 'pick and carry' lifting capacity.

Axles — Rockwell Std. PSM-824 drive/steer axles; 78¼" (1.99 m) track with standard tires, 83" (2.11 m) with optional tires.

Wheels and Tires — Planetary drives at each wheel. Std. tire — 17.5 x 25 (16-ply rating); optional — 20.5 x 25 (20-ply rating).

Brakes — Rockwell Std. 4-wheel air over hydraulic service brakes, with spring applied, air released parking/emergency brake on front axle drive line.

Steering — Full power hydraulic; pump mounted directly to transmission. 2-wheel, 4-wheel and 'crab' steering; 14" (.36 m) dia. steering wheel.

Turning Radius — measured to center line of outside tire — std. tires; 25'8" (7.86 m) for two wheel steer; 15'8" (4.82 m) for 4-wheel steer. Optional tires; 25'10" (7.91 m) for 2-wheel steer; 15'10" (4.85 m) for 4-wheel steer.

Axle Loadings — Basic boom retracted over front of mounting, with std. counterweight, optional fender package on machine and hook block.

Machine	Gross Weight①		Upper Facing Front①				Upper Facing Rear②			
			Front Axle		Rear Axle		Front Axle		Rear Axle	
	Lbs.	kg.	Lbs.	kg.	Lbs.	kg.	Lbs.	kg.	Lbs.	kg.
[illegible]um	42,484	19 271	21,133	9 586	21,351	9 685	15,090	6 845	27,394	12 426
[illegible]um	42,539	19 296	21,111	9 576	21,428	9 720	15,167	6 880	27,372	12 416

① Hook block at bumper.
② Hook block at boom point.

Engine — GM 4-53 diesel; 4 cylinder, 2 cycle, 3⅞" (98.43 mm) bore, 4½" (114.30 mm) stroke, 212 cu. in. (3 478 cm^3) displacement. Max. brake h.p. — 136 @ 2,800 r.p.m. governed load speed. Peak torque — 282 ft. lbs. (39.0 kgm) @ 1,800 r.p.m. Engine equipped with Donaldson dry type air cleaner and blower fan. Crankcase capacity — 3.5 gallons (13.25 liters).

Air Compressor — 12 c.f.m. (.34 m^3/min); Bendix-Westinghouse Tu-Flo 400.

Fuel tank — 62 gallons (13.25 liters) capacity.

Transmission — Allison TT-2221-1 powershift with TT-270 twin-turbine torque converter; 4 speeds forward, 2 reverse.

Travel Speeds, Gradeabilities and maximum tractive efforts - (see charts)

Standard Tires					
Transmission Range	Maximum Speed		Maximum Grade-ability①	Maximum Tractive Effort @ Stall	
	M.p.h.	Km/h		Pounds	Kilograms
Hi	24	38.6	22.6%	9,120	4 137
Low	6	9.7	73.5	37,800	17 146
Rev	9	14.5	73.5	27,920	12 665

Optional Tires					
Transmission Range	Maximum Speed		Maximum Grade-ability①	Maximum Tractive Effort @ Stall	
	M.p.h.	Km/h		Pounds	Kilograms
Hi	27	43.4	19.1%	7,845	3 558
Low	7.5	12.1	73.5	32,600	14 787
Rev	10.4	16.7	73.5	24,000	10 886

①Limited by surface conditions.

Hydraulic Pump Drive — Four section gear-type hydraulic pump mounted directly on extended shaft of transmission and driven by straight mechanical drive from the engine, supplies hydraulic oil flow for crane upper functions.

Hydraulic Sump Tank — FMC; fabricated with internal baffles for strength, deaeration, and cooling of oil. Equipped with 3 filter elements in tank; tank pressurized to 6 p.s.i. (41.37 kPa); oil capacity 95 gallons (360 liters).

Electrical System — One 12-volt 225 amp/hr battery, 12-volt 42-amp alternator, single sealed beam headlights; tail, directional, back-up, clearance, brake and emergency flasher lights; horn and low air pressure warning buzzer.

Accessories — Standard; skid-resistant finish on deck, cab access ladder, and storage compartment. Optional; fenders with lights as described under electrical system, towing shackles, spare tire and rim, cold weather starting accessories and lifting lugs.

Rotating Joint — FMC 10-way rotation joint provides passage of hydraulic oil, air and electrical lines between mounting and revolving upperstructure.

Revolving Upperstructure —

Frame — All-welded, line bored; provides boom mounting base, wire rope drum supporting frame, and attachment points for boomhoist cylinders.

Turntable Bearing — Inner race bolted to upper; outer race, with integral external swing gear, bolted to mounting deck.

Hydraulic System — The four section pump operating at 2,800 r.p.m. produces flow ratings of 50 g.p.m. (189.25 liters/min.) @ 2,800 p.s.i. (19 306 kPa) for boomhoist, rear main and auxiliary front drums; 21 g.p.m. (74.49 liters/min.) @ 2,500 p.s.i. (17 238 kPa) for swing and boom tip telescope; 21 g.p.m. (74.49 liters/min.) @ 2,500 p.s.i. (17 238 kPa) for outriggers and boom middle section telescope, and 16 g.p.m. (60.56 liters/min.) @ 2,500 p.s.i. (17 238 kPa) for power steering.

Control System — Swing, boom telescope, hoist motors and boomhoist functions controlled by levers in cab directly in front of operator. Push-pull type cables transmit force from control lever to the main hydraulic control valves. Foot pedals also provided for control of boomhoist, air throttle, service and swing brakes. Electrical switches control hydraulic outriggers, 2-wheel, 4-wheel, or 'crab' steering.

Swing System — Consists of a bi-directional hydraulic motor, mounted to speed reducers, vertical swing shaft and swing pinion; 360° rotation right or left.

Swing Speed — 3.0 r.p.m.

Swing Brake — Manually applied and released; two-shoe brake and brake drum mounted on speed reducer input shaft.

Swing Lock — Standard; manually controlled, two-position, pin type swing lock permits locking upper in travel position with boom centered directly over either end of machine. 360° house lock permits upper to be locked in any position — optional.

Single Speed Load Hoist System — Standard; rear main hoist drum. Driven by bi-directional gear-type hydraulic motor through planetary speed reduction unit. Automatic spring applied, hydraulically released disc drum brake integrally mounted to gear-type hydraulic motor. Brake automatically applied when load hoist control lever is returned to neutral position. The control lever actuates the main control valve in the load hoist hydraulic circuit and gives smooth, precise power control of load hoisting/lowering. Optional; auxiliary front hoist drum, driven in same manner as rear drum.

Two-Speed Load Hoist System — Optional for rear main hoist drum only; hoist drum is direct driven by bi-directional, tandem gear-type hydraulic motor. High speed is obtained by depressing a button on swing lever which actuates an electrical solenoid valve that diverts the oil through only one section of the hydraulic motor. For power load lowering, a holding valve restricts the outlet side of the hydraulic motor and requiring positive hydraulic pressure to reverse the motor and power the load down. An automatic, spring applied, hydraulically released brake is mounted on the hydraulic motor shaft.

Drums Wire Rope Capacity — Front and Rear; 529′ (161.24 m) of 9/16″ (14.31 mm) rope.

Drum Rotation Indicators — Standard with either load hoist system.

Operator's Cab — Offset; key locked door on sliding track with automatic lock to hold door open. Cab insulated from vibration by rubber mounts. Neoprene seal between platform and cab provides insulation from weather and sound. Windows — removable front, sliding rear, fixed side, and hinged rooftop. All windows and door equipped with safety glass panels.

Machinery Cab — Equipped with key locked doors, vented for cooling; hinged top.

Counterweight — Machine with standard main load hoist drum — 4,950# (2 245 kg). Machine with optional auxiliary load hoist drum — 4,100# (1 860 kg).

Attachment —

Boom — 25′ - 60′ (7.62 - 18.29 m) length. Fabricated box type; machined T-1 steel corner angles, diamond shaped depressions in side plates for lateral stiffness. Three-section power boom with two double-acting (extend/retract) telescoping cylinders. Boom equipped with replaceable, synthetic, rocker support shoes at top and bottom of boom center and tip sections, and at sides of base and center boom sections. Bumper pads at top side of base and center sections minimize boom sections springing upward due to quick load release.

Deflector Roller — One load hoist wire rope deflector roller, mounted on anti-friction bearings, mounted on lower top side of boom base section.

Boom Top Section – Hammerhead design, can be equipped to handle up to 6 parts of wire rope with 2 or 3 head sheaves and dead end link. Two idler sheaves permit reeving of both drums. All sheaves 10⅝″ (.27 m) root dia. mounted on anti-friction bearings.

Auxiliary Lifting Sheave — Optional; single 10⅝″ (.27 m) root diameter sheave, mounted on anti-friction bearings; for reeving one or two parts of load hoist wire rope off main rear, or optional auxiliary, front drum. Sheave mounting bracket bolted to boom head — does not interfere with stowing of fly or use of main boom head sheaves for multiple rope reevings.

Boom Length Indicator — Optional.

Boom Angle Indicator — Standard.

Hook Block — Optional.

Optional Accessories — Load moment indicator, with function kickout; anti-two block, boom working light package, cab mounted working light package.

Fly — Optional; 20′ (6.10 m) long, one-piece lattice type; mounted in-line with boom.

Fly Point Sheave — Single 10⅝″ (.27 m) root dia. sheave mounted on anti-friction bearings.

Weighted Ball/Swivel Hook — Optional.

Wire Rope — 9/16″ (14.29 m) dia. Type "N"; 6 x 25 (6 x 19 class) filler wire extra improved plow steel, preformed, independent wire rope core, right lay, regular lay.

Available Maximum Line Pull① — Developed by machinery with first layer of wire rope, not based on wire rope strength.

Single Speed Rear Main and Auxiliary Front Drums		
	Pounds	Kilograms
Standard Speed	9,810	4 450

Optional Two-Speed Rear Main Drum		
	Pounds	Kilograms
Standard Speed	9,810	4 450
High Speed	5,510	2 499

Permissible Line Speed and Pull① — Based on 9/16″ (14.29 mm) dia. Type "N" wire rope strength.

Layers of Wire Rope	Drum Speed	Single Speed Hoist — Rear Main② & Auxiliary Front② Drums				Optional Two-Speed Hoist — Rear Main② Drum			
		Line Speed		Line Pull		Line Speed		Line Speed	
		F.P.M.	Meters/min.	Pounds	Kilograms	F.p.m.	Meters/min.	Pounds	Kilograms
First	Standard	171	52.12	8,920	4 046	161	49.07	8,920	4 046
	High	—	—	—	—	287	87.48	5,010	2 273
Fifth	Standard	233	71.02	6,570	2 980	218	66.45	6,570	2 980
	High	—	—	—	—	390	118.87	3,690	1 674

① Based on GM 4-53 diesel engine.
② Drum capable of spooling 6 layers of wire rope, but 6th layer not recommended for lifting.

FMC Corporation Crane and Excavator Division World Headquarters Cedar Rapids Iowa 52406
Plants in: Cedar Rapids Iowa (2) • Lexington & Bowling Green Kentucky • Ontario Canada • Milan Italy • Queretaro Mexico & Nagoya Japan (under license)

Link-Belt® HSP-15 lifting crane capacities

PSCA Class 10-54
Refer to **Notes** page 5

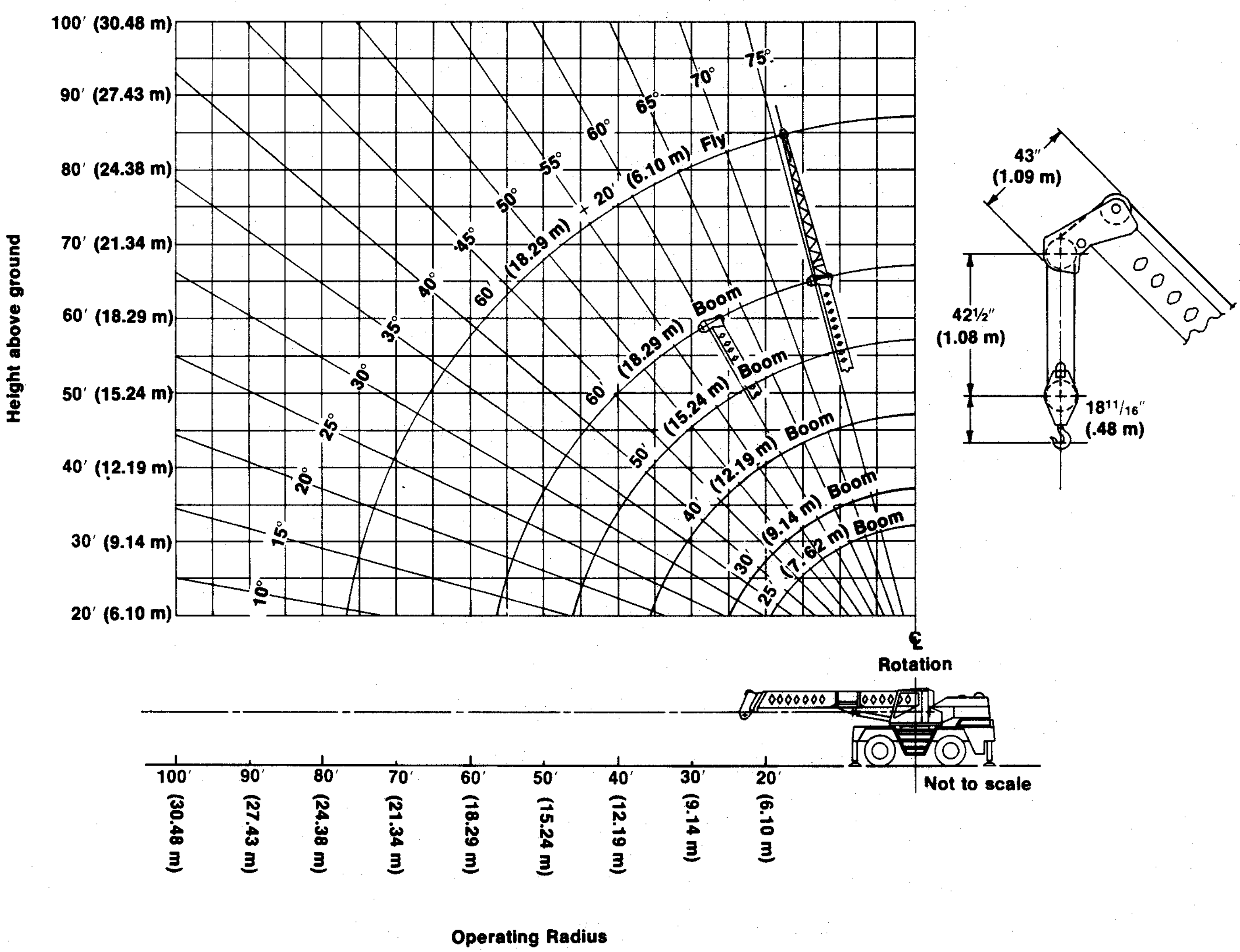
Boom — Three-section power boom; 25′ - 60′ (7.62 - 18.29 m) length.

Mounting — FMC self-propelled, 4 x 4 drive, 114″ (2.93 m) wheelbase, 8′ 0″ (2.44 m) wide.

Fly — Lattice type; 20′ (6.10 m) long, one-piece.

Counterweights — 4,950# (2 245 kg) on 1-drum machine; 4,100# (1 860 kg) on 2-drum machine.

Boom/fly working ranges



NOTE: Boom and Fly geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection, subsequent radius and boom angle change must be accounted for when applying load to hook.

HSP-15 lifting crane capacities

Refer to **Notes** page 5

25′ - 60′ (7.62 - 18.29 m) Boom ①

Boom Length	Load Radius		Loaded Boom Angle	Boom Point Height ②		Main Boom Capacities without fly mounted or stowed on boom — On Outriggers			
						Over Front		360° Swing	
	Feet	Meters	Degrees	Feet	Meters	Pounds	Kilograms	Pounds	Kilograms
25′ (7.62 m)	10	3.05	62.0	29′ 4″	8.94	30,000*	13 608*	30,000*	13 608*
	12	3.66	56.6	28′ 1″	8.56	30,000*	13 608*	30,000*	13 608*
	13	3.96	53.8	27′ 5″	8.36	30,000*	13 608*	30,000*	13 608*
	14	4.27	50.9	26′ 7″	8.10	29,700*	13 472*	29,300*	13 290*
	15	4.57	47.8	25′ 9″	7.85	27,500*	12 474*	27,100*	12 293*
	20	6.10	28.9	19′ 2″	5.84	19,700*	8 936*	18,200	8 256
30′ (9.14 m)	10	3.05	67.1	34′ 11″	10.64	30,000*	13 608*	30,000*	13 608*
	12	3.66	62.9	33′ 11″	10.34	30,000*	13 608*	30,000*	13 608*
	13	3.96	60.7	33′ 5″	10.19	30,000*	13 608*	30,000*	13 608*
	14	4.27	58.5	32′ 9″	9.98	28,700*	13 472*	29,300*	13 290*
	15	4.57	56.2	32′ 2″	9.81	27,500*	12 474*	27,100*	12 293*
	20	6.10	43.5	27′ 9″	8.46	19,700*	8 936*	18,200	8 256
	25	7.62	26.3	20′ 4″	6.20	15,200*	6 895*	12,300	5 579
40′ (12.19 m)	10	3.05	73.5	45′ 7″	13.89	30,000*	13 608*	30,000*	13 608*
	12	3.66	70.4	44′ 11″	13.69	30,000*	13 608*	30,000*	13 608*
	13	3.96	68.9	44′ 6″	13.56	30,000*	13 608*	30,000*	13 608*
	14	4.27	67.3	44′ 1″	13.44	29,700*	13 472*	29,300*	13 290*
	15	4.57	65.7	43′ 8″	13.31	27,500*	12 474*	27,100*	12 293*
	20	6.10	57.5	40′ 10″	12.44	19,700*	8 936*	18,200	8 256
	25	7.62	48.3	36′ 11″	11.25	15,200*	6 895*	12,300	5 579
	30	9.14	37.6	31′ 4″	9.55	12,100	5 489	9,100	4 128
	35	10.67	22.9	22′ 6″	6.86	9,200	4 173	6,800	3 084
50′ (15.24 m)	13	3.96	73.9	55′ 2″	16.82	30,000	13 608	30,000	13 608
	14	4.27	72.7	54′ 10″	16.71	29,700*	13 472*	29,300*	13 290*
	15	4.57	71.4	54′ 5″	16.59	27,500*	12 474*	27,100*	12 293*
	20	6.10	65.1	52′ 4″	15.95	19,700*	8 936*	18,200	8 256
	25	7.62	58.5	49′ 6″	15.09	15,200*	6 895*	12,300	5 579
	30	9.14	51.3	45′ 10″	13.97	12,100	5 489	9,100	4 128
	35	10.67	43.3	41′ 0″	12.50	9,200	4 173	6,800	3 084
	40	12.19	33.8	34′ 6″	10.52	7,400	3 357	5,400	2 449
	45	13.72	20.7	24′ 4″	7.42	5,900	2 676	4,200	1 905
60′ (18.29 m)	17	5.18	73.2	64′ 4″	19.61	22,500*	10 206*	22,500*	10 206*
	20	6.10	70.2	63′ 3″	19.28	19,700*	8 936*	18,200	8 256
	25	7.62	64.9	61′ 0″	18.59	15,200*	6 895*	12,300	5 579
	30	9.14	59.3	58′ 2″	17.73	12,100	5 489	9,100	4 128
	35	10.67	53.4	54′ 8″	16.66	9,200	4 173	6,800	3 084
	40	12.19	46.9	50′ 3″	15.32	7,400	3 357	5,400	2 449
	45	13.72	39.7	44′ 8″	13.62	5,900	2 676	4,200	1 905
	50	15.24	31.1	37′ 3″	11.35	4,900	2 223	3,500	1 588
	55	16.76	19.3	25′ 11″	7.90	4,000	1 814	2,700	1 225

①Boom sections must be extended equal distance.
②Measured vertically from center of boom head sheave to ground — machine standing on outriggers.

HSP-15 lifting crane capacities

Refer to **Notes** page 5

25′ - 60′ (7.62 - 18.29 m) Boom① Plus 20′ (6.10 m) Fly ②									
Boom Plus Fly Length	Load Radius		Loaded Boom Angle	Fly Tip Height ③		On Outriggers			
						Over Front		360° Swing	
	Feet	Meters	Degrees	Feet	Meters	Pounds	Kilograms	Pounds	Kilograms
	10	3.05	73.6	50′ 10″	15.49	14,000*	6 350*	14,000*	6 350*
	12	3.66	71.1	50′ 3″	15.32	12,500*	5 670*	12,500*	5 670*
25′ + 20′	15	4.57	67.1	49′ 1″	14.96	10,900*	4 944*	10,900*	4 944*
(7.62 m)	20	6.10	60.3	46′ 8″	14.23	8,900*	4 037*	8,900*	4 037*
+	25	7.62	52.7	43′ 5″	13.23	7,300*	3 311*	7,300*	3 311*
(6.10 m)	30	9.14	44.5	39′ 1″	11.91	6,400*	2 903*	6,400*	2 903*
	35	10.67	34.8	33′ 0″	10.06	5,600*	2 540*	5,600*	2 540*
	40	12.19	21.5	23′ 5″	7.14	5,100*	2 313*	5,100*	2 313*
	12	3.66	73.1	55′ 5″	16.89	13,500*	6 124*	13,500*	6 124*
	15	4.57	69.6	54′ 6″	16.61	11,800*	5 352*	11,800*	5 352*
30′ + 20″	20	6.10	63.5	52′ 4″	15.95	9,700*	4 400*	9,700*	4 400*
(9.14 m)	25	7.62	57.2	49′ 6″	15.09	8,200*	3 720*	8,200*	3 720*
+	30	9.14	50.0	45′ 10″	13.97	6,900*	3 130*	6,900*	3 130*
(6.10 m)	35	10.67	42.3	41′ 0″	12.50	6,200*	2 812*	6,200*	2 812*
	40	12.19	33.2	34′ 6″	10.52	5,600*	2 540*	5,600*	2 540*
	45	13.72	20.4	24′ 4″	7.42	5,100*	2 313*	5,100*	2 313*
	15	4.57	73.3	65′ 0″	19.81	13,300*	6 033*	13,300*	6 033*
	20	6.10	68.5	63′ 3″	19.28	11,100*	5 035*	11,100*	5 035*
40′ + 20′	25	7.62	63.4	61′ 0″	18.59	9,500*	4 309*	9,500*	4 309*
(12.19 m)	30	9.14	58.1	58′ 2″	17.73	8,300*	3 765*	8,300*	3 765*
+	35	10.67	52.1	54′ 8″	16.66	7,200*	3 266*	7,200*	3 266*
(6.10 m)	40	12.19	45.9	50′ 3″	15.32	6,500*	2 948*	6,300	2 858
	45	13.72	39.0	44′ 8″	13.62	5,900*	2 676*	5,100	2 313
	50	15.24	30.7	37′ 3″	11.35	5,400*	2 449*	4,200	1 905
	55	16.76	18.4	26′ 0″	7.92	4,700	2 132	3,400	1 542
	20	6.10	72.1	73′ 11″	22.53	12,200*	5 534*	12,200*	5 534*
	25	7.62	67.9	72′ 0″	21.95	10,500*	4 763*	10,500*	4 763*
	30	9.14	63.6	69′ 8″	21.24	9,300*	4 218*	9,300*	4 218*
50′ + 20′	35	10.67	59.1	66′ 10″	20.37	8,300*	3 765*	7,700	3 493
(15.24 m)	40	12.19	54.0	63′ 5″	19.33	7,300*	3 311*	6,100	2 767
+	45	13.72	48.8	59′ 3″	18.06	6,700	3 039	5,000	2 268
(6.10 m)	50	15.24	42.7	54′ 3″	16.54	5,500	2 495	4,000	1 814
	55	16.76	36.1	48′ 0″	14.63	4,600	2 087	3,300	1 497
	60	18.29	28.3	39′ 10″	12.14	3,900	1 769	2,700	1 225
	65	19.81	17.5	27′ 6″	8.38	3,300	1 497	2,300	1 043
	25	7.62	71.5	82′ 9″	25.22	11,400*	5 171*	11,400*	5 171*
	30	9.14	67.8	80′ 9″	24.61	9,900*	4 491*	9,900	4 491
	35	10.67	63.9	78′ 4″	23.87	8,500*	3 856*	7,600	3 447
60′ + 20′	40	12.19	59.7	75′ 6″	23.01	7,600*	3 447*	6,000	2 722
(18.29 m)	45	13.72	55.2	72′ 2″	22.00	6,500	2 948	4,800	2 177
+	50	15.24	50.6	68′ 2″	20.78	5,400	2 449	4,000	1 814
(6.10 m)	55	16.76	45.7	63′ 6″	19.35	4,500	2 041	3,200	1 452
	60	18.29	40.3	57′ 11″	17.65	3,800	1 724	2,700	1 225
	65	19.81	34.2	51′ 1″	15.57	3,200	1 452	2,200	998
	70	21.34	27.0	42′ 2″	12.85	2,700	1 225	1,800	816
	75	22.86	16.9	28′ 11″	8.81	2,300	1 043	1,400	635

① Boom sections must be extended equal distance.
② Capacities listed are for 20′ (6.10 m) one-piece fly.
③ Measured vertically from center of fly peak sheave to ground — machine standing on outriggers.

HSP-15 lifting crane capacities

Refer to **Notes** page 5

Lifting Capacities ① On Tires ②									
17.5 x 25 (16-ply) Tires									
Load Radius		'Pick & Carry' ③		Stationary					
		Over Front ④		360° Swing		Over Front		Front Centered ④	
Feet	Meters	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
10	3.05	19,600*	8 891*	14,700*	6 668*	20,400*	9 253*	25,400*	11 521*
12	3.66	16,800*	7 620*	12,000*	5 443*	17,700*	8 029*	21,900*	9 934*
15	4.57	13,500*	6 122*	8,800*	3 992*	14,700*	6 668*	17,900*	8 119*
20	6.10	9,900*	4 491*	5,400	2 449	10,900*	4 944*	11,700	5 307
25	7.62	7,400*	3 357*	3,200	1 452	7,800	3 538	7,800	3 538
30	9.14	5,700	2 586	2,100	953	5,700	2 586	5,700	2 586
35	10.67	4,300	1 950	1,300	590	4,300	1 950	4,300	1 950
40	12.19	3,200	1 452	—	—	3,200	1 452	3,200	1 452
45	13.72	2,500	1 134	—	—	2,500	1 134	2,500	1 134
50	15.24	1,900	862	—	—	1,900	862	1,900	862
55	16.76	1,400	635	—	—	1,400	635	1,400	635

20.5 x 25 (20-ply) Tires									
Load Radius		'Pick & Carry' ③		Stationary					
		Over Front ④		360° Swing		Over Front		Front Centered ④	
Feet	Meters	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
10	3.05	28,000*	12 700*	20,400*	9 253*	28,300*	12 837*	30,000*	13 608*
12	3.66	24,200*	10 977*	15,400	6 985	24,100*	10 932*	29,800	13 517
15	4.57	19,800*	8 981*	10,600	4 808	19,300*	8 754*	20,000	9 072
20	6.10	12,100	5 489	6,300	2 858	12,100	5 489	12,100	5 489
25	7.62	8,100	3 674	3,900	1 769	8,100	3 674	8,100	3 674
30	9.14	5,900	2 676	2,600	1 179	5,900	2 676	5,900	2 676
35	10.67	4,500	2 041	1,700	771	4,500	2 071	4,500	2 041
40	12.19	3,400	1 542	1,100	500	3,400	1 542	3,400	1 542
45	13.72	2,600	1 179	—	—	2,600	1 179	2,600	1 179
50	15.24	2,000	907	—	—	2,000	907	2,000	907
55	16.76	1,500	680	—	—	1,500	680	1,500	680

① Off main boom head only, boom sections must be equally extended.
② Refer to tire inflation chart for proper inflation.
③ Limited to 1.0 m.p.h. (1.60 km/hr) travel speed.
④ House lock must be engaged.

Tire Inflation ①				
	Type Operation			
	'Pick & Carry'		Stationary	
Tires	p.s.i.	kPa	p.s.i.	kPa
17.5 x 25 (16-ply rating)	75	517	75	517
20.5 x 25 (20-ply rating)	80	552	80	552

① Crane capacities on tires depend on tire capacity, condition of tires, and tire pressures.

Notes — lifting crane capacities

1. Capacities included in this chart are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.

2. Capacities shown are not more than 85% of minimum tipping loads unless marked with an asterisk.
   a. Asterisk (*) indicates capacities based on structural strength or hydraulic limitations.

3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping, surface conditions, inflation of tires, and operating speeds. Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, fly, or other suspended gear.

4. The following deductions from rated main boom capacities must be made if machine is equipped accordingly.
   a. With auxiliary lifting sheave — 100# (45.36 kg).
   b. With 20′ (6.10 m) one-piece fly stowed on boom — 300# (136.08 kg).

5. Powered boom length is from 25′ (7.62 m) to 60′ (18.29 m).

6. To determine capacities in-between those shown on the charts, use the following procedure:
   a. When making lifts off main boom head, auxiliary lifting sheave or fly — with boom lengths in-between those shown on the chart — refer to the rated lifting capacity of the next longer and next shorter booms for the same radius. The lesser of the two capacities will apply.
   b. When making lifts at a load radius not shown on the charts, use next longer radius to determine allowable capacity.

7. Do not operate machine with boom or boom plus fly lengths at or beyond radii where no capacities are shown. Machine may overturn without any load on the hook. (See operator's manual for handling boom or boom and fly with no load outside of chart.)

8. Extension or retraction of the boom with loads within the limits of the applicable rating chart may be attempted. The ability to telescope load is limited by hydraulic pressure, boom angle, boom length, boom lubrication, etc.

9. Boom sliding surfaces must always be properly lubricated, and pressure settings for all hydraulic functions must be properly set.

10. Least stable position on outriggers is over the side. When making lifts on outriggers, machine must be level and supported on fully extended outriggers with tires free of supporting surface.

11. Crane capacities on tires depend on tire capacity, condition of tires, and tire pressure. On tire picks require lifting from main boom head only on a smooth and level surface. Boom sections must be extended equally. "On tires" load lifts off fly are prohibited. Refer to diagram page for definition of working area.

12. The axle oscillation lockouts **must** be engaged before swinging upper over side. Pick and carry operations are restricted to 1 (1.6 Km/hr) mph max. speed. For on tire picks with boom centered over front the houselock **must** be engaged.

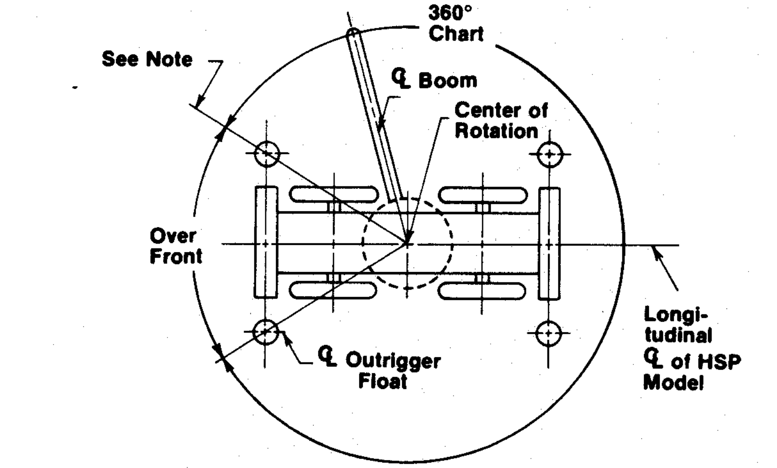
13. For the clamshell and concrete bucket operation weight of bucket and material must not exceed 80% of rated lifting capacity. Fly is not to be used for clamshell operation.

14. When making lifts off auxiliary-lifting sheave effective boom length is increased 2′ (.61 m). Effective length of boom is boom length shown on boom length indicator plus 2′ (.61 m).

15. Four parts 9/16″ (14.19 mm) diameter Type "N" wire rope required to lift maximum 30,000# (13,608 kg) rated load.

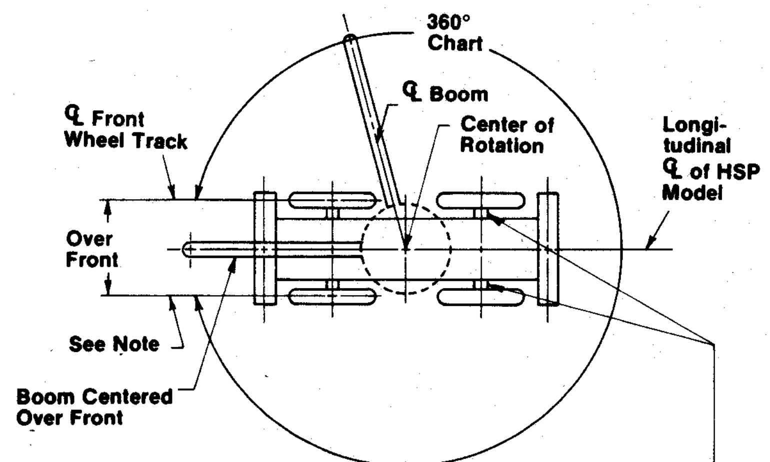
16. These capacities apply only to the machine as originally manufactured and normally equipped by FMC Corporation, Crane and Excavator Division.

HSP-15 working areas



HSP Model on Outriggers

NOTE: These lines determine the limiting position of any load for operation within working areas indicated.



HSP Model on Tires

Rear axle oscillation lockouts must be engaged for 360° operation

We are constantly improving our products and therefore reserve the right to change designs and specifications.

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