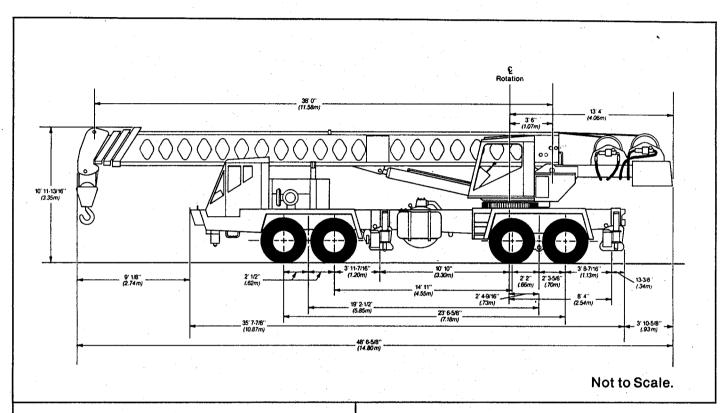
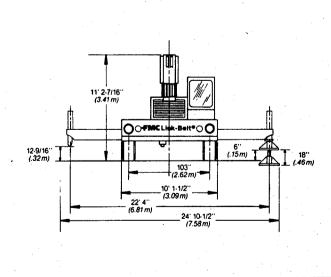




General Specifications

Link Belt®
Hydraulic Crane
HTC-1055 55-ton (50.00 metric ton)





General dimensions	Feet	meters
Turning radius-outside front fenders	49' 0''	14.94
Tailswing-across corners	13' 7-3/16''	4.14
Ground clearance-standard tires	9''	.23
Ground clearance-optional tires	10''	.25



Upperstructure



Boom

FMC patented design. Boom side plates have diamond shaped impressions for superior strength to weight ratio and are offset welded to carefully machined 100,000 p.s.i. (689.5 MPa) steel angle chord for maximum integrity and strength. Boom telescoping sections are vertically and horizontally supported by wear shoes.

Boom — 38' 0" - 120' 6" (11.58 m -36.73 m) 4 - section boom includes base, two power sections, and manual fourth section. Manual section is power extended by manually activating a simple cylinder locking system.

Boom head — Standard; four 14-1/4" (0.36 m) root diameter head sheaves with five 14-1/4" (0.36 m) root diameter head sheaves available to handle up to 10 parts of 3/4" (19 mm) wire rope. Two removable wire rope guards, and rope dead-end lugs are provided on each side of boom head.

Auxiliary lifting sheave — Optional; single 14-1/4" (0.36 m) root diameter sheave mounted to boom head with removable wire rope guards. For use with one or two parts of line off the optional front winch. Does not affect erection of jib, or use of main head sheaves for multiple reeving.

Boom elevation — Two FMC designed double-acting hydraulic boom hoist cylinders with integral holding valves. Hand or foot controls for boom elevation from - 3° to 78°.

Optional. 34'6" (10.52m) stowable one-piece lattice type.

Jib

Optional; 30'0" (9.14 m) stowable A-frame. Can be offset 5°, 17.5°, and 30°. Attaches to fly only.



Cab and Controls

Environmental cab; isolated from vibration by rubber mounts. All tinted, tempered safety glass windows. Sliding rear window and swing up roof window supported with two gas cylinders. Slide-by door opens to 32" (0.81 m) width. Six-way adjustable operator's seat. Control levers for swing, boom telescope, winch, and boom holst, with foot control for swing brake. Outrigger controls, sight level bubble.

Cab instrumentation — Dash mounted gauges for hydraulic oil temperature, fuel, water temperature, and oil pressure.



Swing

Bi-directional hydraulic swing motor mounted to a two-stage planetary reducer for 360° continuous smooth swing at 2.45 r.p.m.

Swing brake — Standard manually applied/released disc brake mounted on the speed reducer. Foot acutated brake.

Swing lock — Standard 360° position pin-type controlled from operator's cab. Two position house lock for travel and pick and carry modes.

Counterweight — Pinned to upperstructure frame. 10,000 lb. (4 536 kg) counterweight with single-winch system. 9,050 lb. (4 105 kg) counterweight with two-winch system. Optional counterweight removal system is available.



Hydraulic system

Main pump — Four-section gear-type pump. Powered by carrier engine with disc-pack pump disconnect, which is

operated from carrier cab. Pump can be engaged/disengaged with engine at idie. Maximum system pressure 2,900 p.s.i. (200.0 Bars). Hydraulic oil cooler is standard.

Reservoir — FMC, 140 gallon (530.0 L) capacity. Diffusers for deareation.

Filtration — One 2-micron filter located inside of hydraulic reservoir. Accessible for easy replacement.

Control valves — 6 separate control valves allow simultaneous operation of all crane functions.



Load hoist system

Standard; Model 2M17 rear winch with two-speed motor and automatic brake, power up/down mode of operation. Bi-directional, gear-type hydraulic motor.

Optional; Model 2M17 front winch with two-speed motor and automatic brake, power up/down mode of operation. Bi-directional, gear-type hydraulic motor.

Optional; Model 3M17 winch with power up/down, two-speed, and exclusive FMC controlled true gravity free fall. Available on front, rear or both winches.

Line pulls and speeds — Maximum permissible line pull is 14,430 lbs. (6 545 kg) and maximum line speed is 548 f.p.m. (167.03 m/min.) on 17" (0.43 m) root diameter drums.

Optional upperstructure equipment

— Electric boom length/angle indicator, boom hoist foot control, drum rotation indicators, propane heater, diesel heater, seat belt, 60-ton (54.43 metric ton) hook block, roof window windshield wiper, 8-1/2-ton (7.71 metric ton) ball & swivel, antitwo block, load moment device, flood lights, lifting lug package, hand throttle, fire extinguisher.



Chassis



Type

FMC 8 x 4 drive, 10' 1-1/2" (3.09 m) wide, 230-1/2" (5.85 m) wheelbase.

Frame — All-welded high strength alloy steel plate construction with box-type design and integral 100,000 p.s.i. (689.5 MPa) steel outrigger boxes.



Outriggers

Standard - Power hydraulic, double box, single beam outriggers, front and rear. Vertical jack cylinders, each with integral holding valve. Beams extend 22' 4" (6.81 m) centerline to centerline, and retract to within 10' 1-1/2" (3.09 m) overall width. Equipped with stowable, lightweight 30 -1/2" (0.77 m) diameter floats. Controls and sight level bubble located in upperstructure cab.

Bumper outrigger - Optional; a front center vertical jack mounted under bumper with 20" (0.51 m) square lightweight float.



Axles

Front — Rockwell tandem; 103" (2.62 m) track.

Rear — Rockwell tandem; 90" (2.29 m) track, 6.17 to 1.0 ratio with interaxle differential lockout.

Suspension

Front — Reyco spring suspension with torque rods.

Rear — Hendrickson solid mount 54" (1.37 m) bogie beam.

Wheels

Front — Gunite cast, six-spoke.

Rear — Gunite cast, six-spoke.

Tires

Front — 18.00 x 22.5 (16-PR) transport type, tubeless.

Rear — 11.00 x 20.0 (14-PR) transport type with tube.

Optional Rear — 12.00 x 20.0 (14-PR) transport type.

Rear — Lug-type 11.00 x 20.0 (14-PR) 12.00 x 20.0 (14-PR).



Brakes

Full air on all wheels. Air dryer is standard.

Service

Front— Rockwell Stopmasters, 15" x 6" (.38 m x .15 m) shoe diameter, 720 sq. in. (4 645 cm²).

Rear — Cam-type, 16-1/2" x 7" (.42 m x .18 m) shoe diameter, 896 sq. in. (5 781 cm²).

Parking/emergency — One spring set, air released chamber per rear axle end. Parking brake applied with valve mounted on carrier dash. Emergency brakes apply automatically when air pressure drops below 60 p.s.i. (4.14 Bars) in both systems.

Steering — Sheppard Steering, rackand-pinion design.

Clutch — Lipe-Rollway 14" (0.36 m) diameter, spring loaded, double plate dry disc.

Universals — Mechanics spider and bearing assembly; FMC midpoint bearing.

Transmission — Fuller Roadranger RTO-6613; 13 speeds forward, 3 reverse.



Electrical System

Standard; one 12-volt battery for GM and two 12 volt batteries for Cummins; 1,115 cold cranking amps available, 65 amp alternator.

Lights — Two dual-beam sealed headlights; front and rear directional signals; stop and tail lights; four-way emergency flashers; back-up lights; front, rear, and side clearance lights with integral reflectors and license plate light.



Carrier Cab

FMC one-man cab. Accoustical insulation with vinyl covering, and mounted on rubber isolation pads. Equipped with electric windshield wiper and washer, horn, six-way adjustable seat with seat belt, dome and dash lights, cigar lighter, ashtray, 22,400 BTU capacity heater, defroster, door and window locks, fire extinguisher, LH/RH rear view mirrors, and tilt/telescoping steering wheel. Sliding LH/RH and rear tinted windows.

Cab instrumentation — Standard Illuminated instrument panel with speedometer, odometer, tachometer, voltmeter, hourmeter, front and rear air pressure gauges, low air pressure light and warning buzzer, automotive type ignition (common with upper), engine oil pressure gauge, water temperature gauge, fuel gauge, turn signal indicator, high-beam light switch, adjustable defroster vents, and circuit breakers.

Additional standard equipment —
Front and rear fenders, air dryer, backup warning alarm, cab step, access
ladder to carrier deck with hand grab,
two front tow loops, and skid-resistant
finish on carrier deck.

Optional equipment — Engine block heater, ether injection starting package, spare tire and rim assemblies.



Speed and gradeability ^①

Engine	Maximum Speed	Max. Gradeability
GM 6-71N	55.7 m.p.h. (89.6 km/h)	32%
Cummins NTCC-230*	50.9 m.p.h. (81.9 km/h)	35%

Travel speed based on full toad r.p.m. Gradeability is based on peak torque of the engine, lowest forward gear. Gradeability values above 58% (30°) are theoretical due to engine oil pan limits.

Engine	GM 6-71N	Cummins NTCC-230*
Cylinders - cycle Bore Stroke Displacement Maximum brake h.p. Peak torque Electrical system Fuel capacity Alternator Crankcase capacity Air Compressor	6 - 2 4-1/4" (0.11 m) 5" (0.13 m) 426 cu. in. (6 981 cm³) 238 at 2,300 r.p.m. 635 ft. lbs. (861.06 J) 12 volt negative ground 92 gallons (348.22 L) 65 amp 30.5 quarts (28.86 L) 12 c.f.m. (0.34 m³/min)	6 - 4 5-1/2" (0.14 m) 6" (0.15 m) 855 cu. in. (14 013 cm³) 230 at 2,100 r.p.m. 650 ft. ibs. (881.40 J) 12 volt negative ground 92 gallons (348.22 L) 65 amp 46 quarts (43.53 L) 13.2 c.f.m. (0.37 m³/min)

^{*}Optional equipment

Axle loads

Base machine includes 38' - 120' 6" (11.58 m- 36.73 m) 4-section boom, rear winch with 2- speed hoisting and power up/down, 600' (182.88 m) 3/4" (19 mm) hoist line, FMC 8 x 4, 10'	G. V. W. Upper Facing Front			Upper Facing Rear						
			Front Axle		Rear Axle		Front Axle		Rear Axle	
(3 m) carrier with GM 6-71N diesel engine, with 1000 lb. (454 kg) front CTWT, Roadranger	Lbs.	kgs	Lbs.	kgs.	Lbs.	kgs.	Lbs.	kgs.	Lbs.	kgs.
transmission, full fuel and hydraulics.	65,900	29 892	37,086	16 822	28,814	13 070	9,732	4 415	56,168	25 478
Counterweight for single winch Counterweight for two winches Free Fall rear winch with 600' (182.88 m) rope Power up/down front winch with 465'	10,000 9,050 412	4 536 4 105 187	- 4,888 - 4,442 - 171	- 2 217 - 2 015 - 78	14,888 13,492 583	6 753 6 120 264	7,367 6,684 273	3 342 3 032 124	2,633 2,366 139	1 194 1 073 63
(141.73 m) rope Free Fall front winch with 465' (141.73 m) rope 34'6" (10.52 m) lattice fly, stowed	1,739 2,170 1,150	789 984 522	- 533 - 641 1,210	- 242 - 291 549	2,272 2,811 -60	1 031 1 275 - 27	964 1,179 - 924	437 535 - 419	775 991 2,074	352 450 941
30' (9.14 m) A-frame jib, stowed Hook block at bumper Headache ball at bumper	1,230 1,050 215	558 476 98	1,060 1,625 333	481 737 151	170 - 575 - 118	77 - 261 - 54	- 753 - -	- 341 - -	1,983	899
Auxiliary lifting sheave Front bumper outrigger Fly and jib stowage brackets	160 385 222	73 175 101	294 547 113	133 248 51	- 134 - 162 109	- 61 - 73 49	- 255 - - 58	- 116 - - 26	415 280	188 _ 127
12.00 x 20.0 rear tires with rims and wheels Removed 1000 lb. (454 kg) front CTWT Headache ball for free fall	585 - 1,000 325	265 - 454 147	- 1,464 503	- 664 228	585 464 - 178	265 210 81	- 1,464 -	- 664 -	464 -	210
Cummins engine Counterweight removal system	550 115	249 52	608 56	276 - 25	- 58 171	- 26 78	- 85	- 38	30	14

⁽¹⁾ Adjust gross vehicle weight and axle loading according to components weight.

Note: All weights are ± 3%

