



955A-LC CRANE

Manufactured and sold in conformance with U.S. Department of Commerce Commercial Standard CS90.58.
 Harnischfeger Corporation reserves the right to make changes in specifications without advance notice.
 Data published herein is statistical and for information only. Performance may vary with the conditions encountered.

GENERAL DATA

STANDARD CRANE — 75 TON RATING

BOOM: Angle lattice alloy steel construction.
 Basic length, bolt connected in two sections 50 ft.
 Open throat with pendant sheave and two boom point sheaves on anti-friction bearings, pitch diameter 27"
 8 part boom hoist reeving, standard for boom lengths thru 70 ft.
 10 part boom hoist reeving, with intermediate suspension, standard for boom lengths over 70 ft.

HOOK BLOCK (weighed) 25 tons
 Single sheave with swivel hook and 2 part hoist line standard. Additional parts of line optional extra.

POWER CONTROLLED LOAD LOWERING: Planetary device for lowering load under power. (Front drum), optional extra.

GANTRY: Fixed type high gantry, standard. Alternate high gantry, folding type (optional extra).

WORKING WEIGHT (including block) 147,980 lbs.
 Counterweight included in working weight (furnished as standard) 34,950 lbs.

MAXIMUM COUNTERWEIGHT — 82 TON RATING

BOOM: Angle lattice alloy steel construction.
 Basic length, bolt connected in two sections 50 ft.
 Open throat with two pendant sheaves and two boom point sheaves on anti-friction bearings, pitch diameter 27"
 8 part boom hoist reeving, standard for boom lengths thru 70 ft.
 10 part boom hoist reeving, with intermediate suspension, standard for boom lengths over 70 ft.

HOOK BLOCK (weighed) 82 tons
 Four sheave with swivel hook and 8 part hoist line standard.

POWER CONTROLLED LOAD LOWERING: Planetary device for lowering load under power. (Front drum), standard.

GANTRY: Fixed type high gantry, standard. Alternate high gantry, folding type (optional extra).

WORKING WEIGHT (including block) 162,535 lbs.
 Counterweight included in working weight (furnished as standard) 46,470 lbs.

Operating Radius in Feet	OPEN THROAT BOOM — STANDARD COUNTERWEIGHT									
	50 Ft. Boom	60 Ft. Boom	70 Ft. Boom	80 Ft. Boom	90 Ft. Boom	100 Ft. Boom	110 Ft. Boom	120 Ft. Boom	130 Ft. Boom	
12	15000									
15	11250	9940								
20	7110	6420	6400	6360	6330					
Loads Over 50,000 Lbs. Require Open Throat Crane Boom Point Section										
25	4805	4700	4670	4630	4600	4560	4530			
30	3785	3680	3650	3610	3580	3520	3490	3440		
35	3060	3000	2980	2930	2900	2860	2830	2780	2750	
40	2570	2520	2500	2450	2420	2380	2350	2300	2280	
45	2210	2170	2140	2090	2060	2020	1990	1940	1920	
50	1930	1890	1860	1810	1780	1740	1710	1670	1640	
55		1670	1640	1590	1560	1520	1490	1440	1420	
60		1490	1460	1410	1380	1340	1310	1260	1230	
65			1300	1260	1230	1190	1160	1110	1080	
70			1180	1130	1100	1060	1030	985	955	
75				1020	995	950	920	875	846	
80					920	900	854	825	780	750
85						818	771	743	697	670
90							745	700	655	625
95								634	605	560
100									575	547

Operating Radius in Feet	OPEN THROAT BOOM — WITH MAXIMUM COUNTERWEIGHT										
	50 Ft. Boom	60 Ft. Boom	70 Ft. Boom	80 Ft. Boom	90 Ft. Boom	100 Ft. Boom	110 Ft. Boom	120 Ft. Boom	130 Ft. Boom	140 Ft. Boom	150 Ft. Boom
12	16400										
15	11500	11455									
20	7200	7155	7125	7080	7050						
25	5300	5255	5225	5180	5150	5105	5075				
Loads Over 50,000 Lbs. Require Open Throat Crane Boom Point Section											
30	4190	4145	4115	4070	4040	3995	3965	3920			
35	3440	3395	3365	3320	3290	3245	3215	3170	3140	3095	
40	2900	2855	2825	2780	2750	2705	2675	2630	2600	2555	2525
45	2500	2455	2425	2380	2350	2305	2275	2230	2200	2155	2125
50	2180	2135	2105	2060	2030	1985	1955	1910	1880	1835	1805
55		1895	1865	1820	1790	1745	1715	1670	1640	1595	1565
60		1695	1665	1620	1590	1545	1515	1470	1440	1395	1365
65			1485	1440	1410	1365	1335	1290	1260	1215	1185
70			1335	1290	1260	1215	1185	1140	1110	1065	1035
75				1070	1040	995	965	920	890	845	815
80					860	815	785	740	710	665	635
85						675	645	600	570	525	495
90								490	460	415	385
100										315	285

NOTE: Operating radius means the horizontal distance from the center of rotation to the hook. Ratings shown are not more than 75% of tipping loads with the machine standing on a firm, level, uniformly supporting surface. Ratings include the weight of the hook, blocks, slings, etc. Deduct 1500 lbs. from main hook ratings when machine is equipped with a jib. Safe working loads depend upon the mounting, ground, boom length, radius of operation and proper handling, all of which must be taken into account by the user. Loads over 50,000 lbs. require open throat crane boom. Areas on plots where no ratings are shown, operation is not intended or approved.
 130 ft. boom on standard machine must be raised from or lowered to the ground over the ends of the crawlers only.
 150 ft. boom without jib, 140 ft. and 150 ft. booms with jibs as applied to machines with maximum counterweight must be raised from or lowered to the ground over the ends of the crawlers only. Ratings are contingent on machine being equipped with proper Part boom.
 Caution: Machines equipped with folding gantry must not be used for lifting operations with the gantry in lowered position. Machines with basic boom length may be transported or crawled with the gantry in lowered position.

Address inquiries to:



HARNISCHFEGER

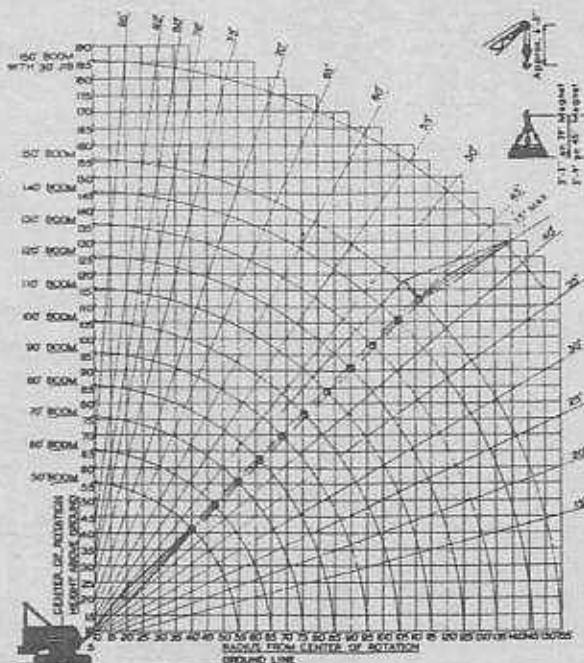




P&H

CRANE SPECIFICATIONS

955A-LC



CROWN LIFTERS

102, Anand Bhavan,
Keshavji Naik Road,
Chinch Bunder,
MUMBAI-400 009.

MORE BOOM . . . LESS WEIGHT

The P&H all-welded boom of high strength alloy steel lattice construction gives greater rigidity to twisting strains . . . eliminates "load-robbing" boom weight.

P&H bolt connections permit easy takedown and erection

in minutes. Basic boom length may be extended easily with inserted sections. A wide selection of section lengths provide proper boom length for every job.

MAXIMUM JIB RATINGS		
Offset Angle Jib to Boom Under Full Load	20 ft. Jib	*30 ft. Jib
	Lbs.	Lbs.
5°	14000	13000
10°	13500	12500
15° (max.)	13000	12000

Jib Ratings at any operating radius are the same as Crane Ratings shown in table for main booms when operated at that radius but not to exceed maximum Jib Ratings shown. Maximum jib operating radius not to exceed length of main boom on which it is being used.

*30 ft. jib is applicable only to machines with maximum counterweight.

HOIST REEVING					
No. of parts of line	1	2	4	6	*8
Maximum Load—Lbs.	25000	50000	100000	150000	164000

*8 parts of line: Maximum load of 164000 lbs. applicable only to machines with maximum counterweight.

DRUM SHAFT ASSEMBLY				
Crane Laggings	Cable Dia.	Cable Cap. 1st Wrap	Line Pulls	Line Speeds
Front—25° p.d.	1"	129 ft.	32,000 lbs.	187 f.p.m.
Rear—25° p.d.	1"	73 ft.	33,100 lbs.	187 f.p.m.

*Line pulls and speeds based on first layer of rope and engine at full load speed.

GROUND PRESSURES (FLAT SHOES)		
Shoe Width—inches	36	42
Lbs. per sq. in. (std. cwt.)	10.48	9.22
Lbs. per sq. in. (max. cwt.)	11.77	10.17

SPECIFICATIONS ... MODEL 955A-LC

CROWN LIFTERS

102, Anand Bhavan,
Keshavji Naik Road,
Chinch Bunder,
MUMBAI-400 009.

UPPER MACHINERY

Metric
Specifi-
cations

Dummins, NHRS-6-1, 6 cyl., (standard on crane, drag, clam-
shell) with Direct Power Take-Off 210 H.P. @ 1700 R.P.M.
is, NHRS-6-1, 6 cyl., (standard on shovel), with torque con-
verter drive 220 H.P. @ 1800 R.P.M.
ha, 6 WAKD, 6 cyl. (optional) with Direct
Take-off 210 H.P. @ 1800 R.P.M.
ha, 6 WAKD, 6 cyl. (optional) with Torque
converter Drive 210 H.P. @ 1800 R.P.M.

CONVERTER: Single stage, with all engines. Eliminates
tailshaft governor, thus providing more efficient and effec-
tation. Furnished as standard for shovel, not recommended
for cranes.

MOTOR DRIVE: Optional extra. AC motor, 125 H.P., 3
50 or 60 cycle, 440 or 550 volts. Torque converter required
service except crane or clamshell.

HYDRAULIC SYSTEM: 135 Gallons 511 lt.
Transfer pump, optional extra.

SWING DRIVE: Direct acting hydraulic, with adjustable air-assist (power
on main drum brakes. Swing-propel control is Magneto-torque).

PROPEL DRIVE: Swing and propel motion through two Magneto-torque
drives on jackshaft.

DRUM ASSEMBLY: Independent planetary gear type, with one
main cam clutches to lock drum to shaft when lowering. Spring-
loaded clutch automatically holds boom, external ratchet provides posi-
tion lock. Mounted on anti-friction bearings.
Hoist line-speed (with power take-off)

— raising 80 fpm 24.38
m/min.
— lowering* 50 fpm 15.24
m/min.

*Hoist line speed at low idle speed, 525 R.P.M.

FRONT DRUM: Mounts in front of front drum. It must be removed for
hoist and dragline operations. Optional extra.

FRONT DRUM DIA.: 15" 381 mm
Dia. 3/4" 20 mm
(See details upon request)

CLAM-SHELL DRIVE: Band type, internal expanding, operated by direct-acting
hydraulic auxiliary clutches.

CRANE DRIVE: Band type, external contracting, with power boost through
hydraulic system.

GANTRY DRIVE: Fixed type high gantry, standard. Folding high gantry (op-
tional extra).

WEIGHT: External castings only on standard stripper shovel,
crane, dragline, clamshell and trench hoe. Two additional internal
castings for maximum crane, clamshell and dragline ratings. See
general specs. for details.

FASTENING TO LOWER: 6 adjustable hook rollers, two front
and double rear.

ROLLERS: 24 rollers, five roller circle.

TEETH: External cut teeth.

ROTATION SPEED: 3.5 R.P.M.

LOCKING MECHANISM: Positive segment type on swing pinion. Hydraulic swing
lock in addition to swing lock, optional extra, (for crane and clam-
shell).

LOWER MACHINERY

ROLLER ASSEMBLY: Roller chain principle of design. The crawler shoes func-
tion as chain links, while replaceable pins act as pivot connections.
Roller frames bolted to the axles, 1:1 single roller assemblies (lower)
roller frame. Rollers ride on deep lugs on the heavier section of
the track, thus eliminating outside pressure points to prevent shoe
wear or breakage. Roller Dia. 10" 254 mm

PROPEL DRIVE: Independent spring loaded, double acting propel
on horizontal propel shaft, set and released through a man-
ual control at the operator's station. Crawler belt tension main-
tained by application of manual hydraulic jack force on track ad-
juster and insertion of proper shim.

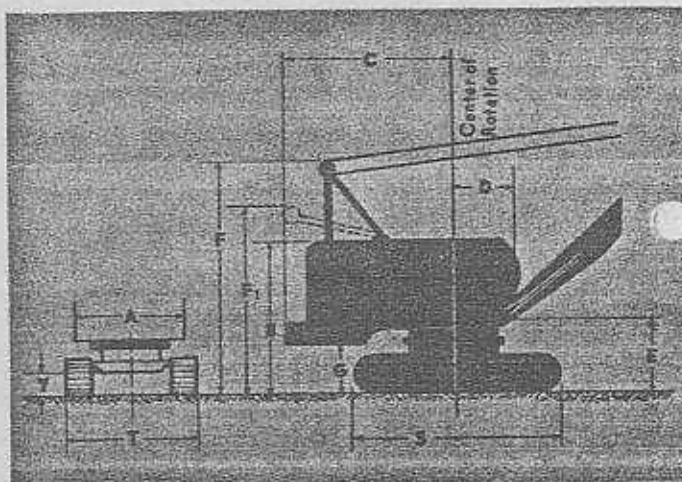
CLAM-SHELL MECHANISM: Sliding jaw clutches, one on each side of
tail propel shaft, control application of propelling power to the
shovel. Both air operated jaw clutches can be engaged together or
at a time with the other crawler automatically locked to the
same. The propel brakes remain set during engagement of
clutches.

Metric
Specifi-
cations

CRAWLER SHOES: Total number—both sides	92	
Cast flat shoes—standard width	36"	914 mm
Cast flat shoes (optional extra)—width	42"	1067 mm
PROPEL SPEED: (chain drive) — speed	0.80 M.P.H.	1.29 km/hr.

(Hunting type crawler drive sprockets on involute splined crawler drive shafts.)

GENERAL DIMENSIONS



A—Width of cab	10'-6"	3.20 m
B—Height to top of cab	12'-6"	3.81 m
C—Radius of rear end (counterweight)	14'-4 3/4"	4.38 m
D—Center of rotation to boom foot pin	4'-2 1/4"	1.28 m
E—Height from ground to boom foot pin	6'-4"	1.93 m
F—Clearance height over fixed or folding gantries (working position)	19'-5 1/4"	5.94 m
F1—Clearance height over high gantry—Folded	13'-0"	3.96 m
G—Counterweight ground clearance	3'-5"	1.07 m
S—Overall length of crawlers	18'-4 1/4"	5.61 m
Center to center of sprockets	15'-2 1/4"	4.63 m
T—Overall width of crawlers with 36" (914 mm) Std. Shoes	12'-8 1/2"	3.87 m
Y—Ground clearance of carbody (lowest point)	10"	254 mm

Manufactured and sold in conformance with U.S. Department
of Commerce Commercial Standard CS-90-58.

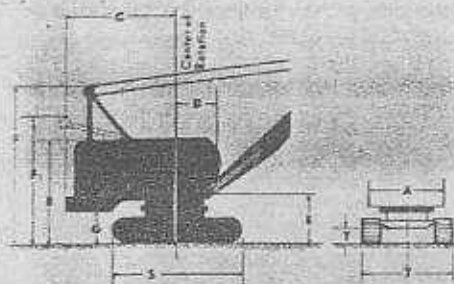
Harnischfeger Corporation reserves the right to make changes in
specifications without advance notice.

Data published herein is statistical and for information only.
Performance may vary with the conditions encountered.

HARNISCHFEGER
Milwaukee 46, Wisconsin



GENERAL DIMENSIONS



— Width of cab	10'-7"	3.22 m
— Height to top of cab	12'-6"	3.81 m
— Radius of rear end (counterweight)	14'-4 1/2"	4.39 m
— Center of rotation to boom foot pin	4'-2 1/4"	1.28 m
— Height from ground to boom foot pin	5'-4"	1.63 m
— Clearance height over fixed or folding gantries (working position)	19'-5"	5.90 m
— Clearance height over high gantry—Folded	13'-9"	4.04 m
— Counterweight ground clearance	3'-5 1/2"	1.05 m
— Overall length of crawlers	18'-6 1/2"	5.65 m
— Center to center of sprockets	15'-4 1/2"	4.69 m
— Depth width of crawlers with 36" (914 mm) Std. Shoes	12'-8 1/2"	3.87 m
— Ground clearance of carbody (lowest point)	14"	350 mm

P&H

YUBB-HALL

STRIPPER SHOVEL • HOE • DRAGLINE • CLAMHELL • CRANE

SPECIFICATIONS

UPPER MACHINERY

POWER:

DIESEL: Cummins, NHRS-6-1, 6 cyl., (standard on crane, drag, clam, and hoe) with Direct Power Take-Off 210 H.P. @ 1700 R.P.M.
 Cummins, NHRS-6-1, 6 cyl., (standard on shovel), with torque converter drive 220 H.P. @ 1800 R.P.M.
 Waukesha, 6 WAKD, 6 cyl., (optional) with Direct Power Take-Off 200 H.P. @ 1300 R.P.M.
 Waukesha, 6 WAKD, 6 cyl., (optional extra) with Torque Converter Drive 200 H.P. @ 1400 R.P.M.

TORQUE CONVERTER: Single stage, with all engines. Eliminates need for tailshaft governor, thus providing more efficient and effective operation. Furnished as standard for shovel.

ELECTRIC MOTOR DRIVE: Optional extra. AC motor, 125 H.P., 3 phase, 50 or 60 cycle, 440 or 550 volts. Torque converter required for all service except crane or clamshell.

FUEL TANK: 135 Gallons 511 lt.
 Fuel transfer pump, optional extra.

CONTROLS:

Boom hoist and boom lower—direct acting hydraulic.
 Front drum and rear drum hoist—air.
 Front drum power lowering or shovel retract—air.
 Front drum and rear drum brake—direct acting hydraulic with adjustable air assist (power brakes).
 Swing propel—magnetorque.

SWING UNITS: Swing and propel motion through two Magnetorque units on jackshaft.

BOOM HOIST ASSEMBLY: Independent planetary gear type, with one directional cam clutches to lock drum to shaft when lowering. Spring brake automatically holds boom, external ratchet provides positive lock. Drum mounted on anti-friction bearings.

boom hoist line-speed (with Power Take-Off) — raising 63.5 fpm 19.35 m/min.
 — lowering 128 fpm 39.01 m/min.

THIRD DRUM: Mounts in front of front drum. It must be removed for shovel, hoe and dragline operations. Optional extra.

Bottom Dia. 15" 381 mm
 Rope Dia. 3/4" 20 mm
 (Further details upon request)

CLUTCHES: (Front and rear main drums) band type internal expanding, direct acting, air controlled.

BRAKES: Band type, external contracting, with power boost through air-hydraulic system.

Metric Specifications

GANTRY: Fixed type high gantry, standard. Folding high gantry (optional extra).

COUNTERWEIGHT: External castings only on standard stripper shovel, std. crane, dragline, clamshell and trench hoe. Two additional internal castings for maximum crane, clamshell and dragline ratings. See attachment specs. for details.

TYPE OF FASTENING TO LOWER: 6 adjustable hook rollers, two front and two double rear.

SWING ROLLERS: 24 rollers, live roller circle.

SWING GEAR: External cut teeth.

ROTATING SPEED 3.73 R.P.M.

SWING LOCK: Positive segment type on swing pinion. Hydraulic swing brake in addition to swing lock, optional extra, (for crane and clamshell only).

Metric Specifications

LOWER MACHINERY

CRAWLERS: Roller chain principle of design. The crawler shoes function as chain links, while replaceable pins act as pivot connections. Crawler frames bolted to the axes, 11 single roller assemblies (lower) in each frame. Rollers ride on deep lugs on the heavier section of the shoe, thus eliminating outside pressure points to prevent shoe bending or breakage. Roller Dia. 10" 254 mm

CRAWLER DRIVE: Independent spring loaded, double acting propel brakes on horizontal propel shaft, set and released through a manual air control at the operator's station. Crawler belt tension maintained by application of manual hydraulic jack force on track adjusting rod and insertion of proper shim.

STEERING MECHANISM: Sliding jaw clutches, one on each side of horizontal propel shaft, control application of propelling power to the crawlers. Both air operated jaw clutches can be engaged together or one at a time with the other crawler automatically locked to the lower frame. The propel brakes remain set during engagement of jaw clutches.

CRAWLER SHOES: Total number—both sides 92
 Cast flat shoes—standard width 36" 914 mm
 Cast flat shoes (optional extra)—width 42" 1067 mm

PROPEL SPEED: (chain drive)—speed 0.788 M.P.H. 1.27 km/hr.

(Hunting type crawler drive sprockets on involute splined crawler drive shafts)

Manufactured and sold in conformance with U.S. Department of Commerce Commercial Standard CS90-58.
 Harnischfeger Corporation reserves the right to make changes in specifications without advance notice.
 Data published herein is statistical and for information only. Performance may vary with the conditions encountered.

Address inquiries to:

CROWN LIFTERS

102, Anand Bhavan,
 Keshavji Naik Road,
 Chinch Bunder,
 MUMBAI 400 000

HARNISCHFEGER

Milwaukee, Wisconsin 53246

