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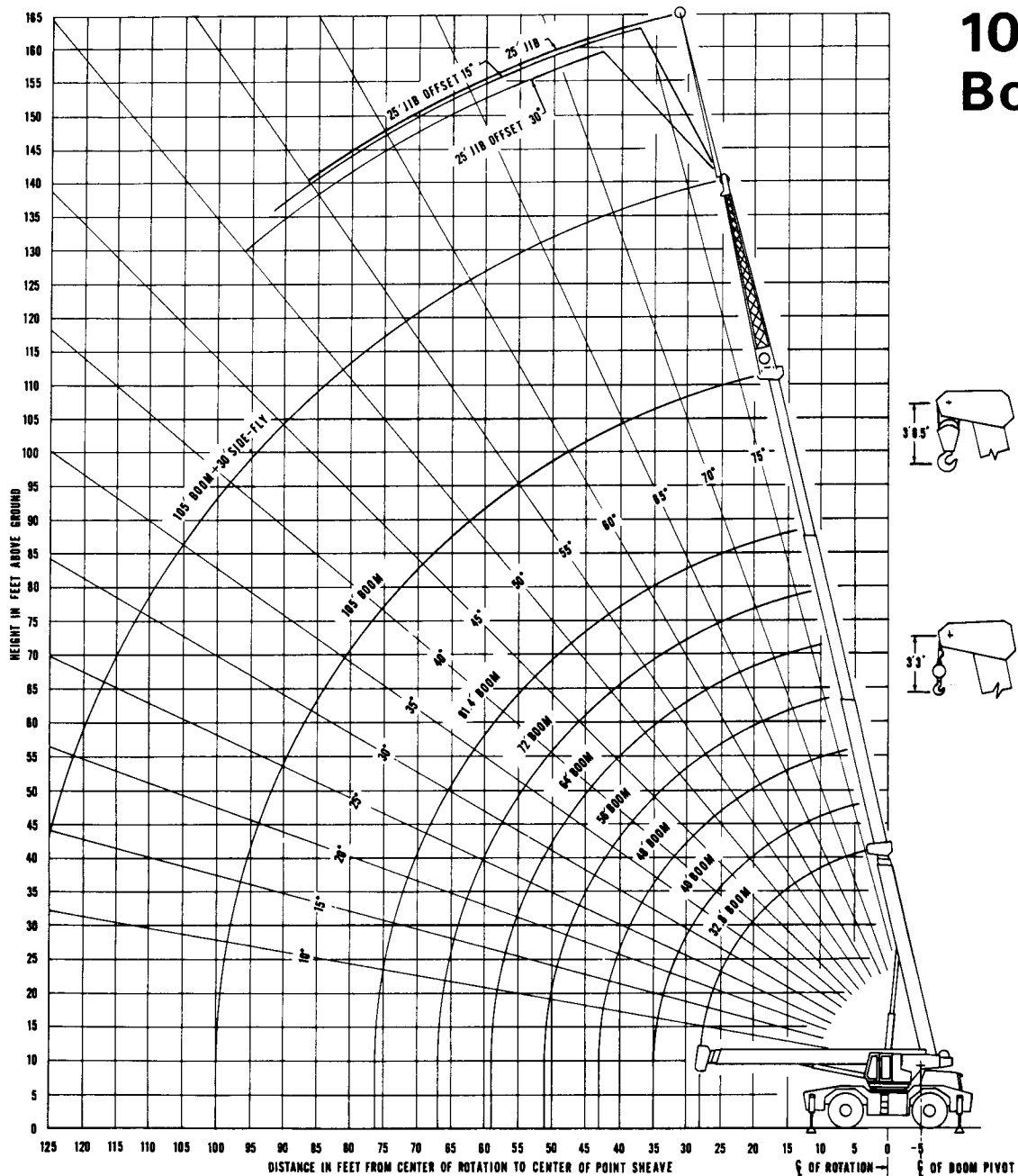
Self-Propelled **45 Ton Hydraulic Crane**

Capacities
Specifications
Operating Ranges



EQUIPMENT CO.

105' Boom



OPERATING INSTRUCTIONS:

Radius of the load is the horizontal distance from a projection of the axis of rotation before loading, to the center of vertical hoist line or tackle with load applied.

Boom angles, which represent the unloaded boom angles, are to be used for reference only. These boom angles must be adjusted to maintain the proper load radius while the load is being picked. Load ratings in shaded areas are based on machine's hydraulic or structural competence and not of the machine's stability. Tipping capacities do not exceed 85% of tipping loads for "on outrigger" capacities and 75% of tipping loads for "on rubber" capacities as determined by tests in accordance with SAE recommended practice—"Crane Load Stability Test Code SAE J765a".

Crane load capacities are based on freely suspended loads. They are the maximum covered by the manufacturer's warranty with the machine leveled and standing on a firm supporting surface. Practical working loads depend upon supporting surface, wind, and other factors affecting stability, hazardous surroundings, experience of personnel, and proper handling; all of which must be taken into account by the operator. The weights of all auxiliary handling devices such as boom attachments, hoist block, hooks, and slings, except hoist rope, shall be considered as part of the load ratings.

All powered boom sections are synchronized to be extended equally at all times. Each section extends to a maximum distance of 24.3 feet. The maximum powered boom load which may be telescoped is limited by hydraulic pressure, boom angle, and boom capacity. It is safe to attempt to telescope any load within the stated conditions of the rating chart.

"On outriggers" capacities are based on outriggers being fully extended to a distance of 21 feet from centerline of vertical jack cylinders.

"On rubber" capacities are based on the tire as specified in the table. Machine must be on a firm and smooth, level surface.

For boom lengths not shown, use load ratings for next longer boom. Positioning or operation at radii and boom lengths beyond the maximums or minimums shown, is not intended or approved.

The boom assembly shall be fully retracted and leveled when crane is out of service.

WARNINGS:

1. Minimum working main boom angle for the fully extended boom plus sidefly and jib is 55 degrees. TIPPING can occur rapidly without advance notice.
2. For other boom configurations, having powered sections not fully extended, but with or without sidefly; and with or without the jib, the rated loads are found in the columns headed by the maximum length of their respective boom configurations. The boom angle must be used to determine the particular rated load. For boom angles not provided, use the rating of the next lower boom angle.

CAB

Fully-enclosed all steel cab with safety glass windows, removable front window, hinged skylight and sliding rear window, electric windshield wiper and washer, defroster fan, dome light, fire extinguisher, fully adjustable air cushioned seat, seat belt. Propane or diesel heater optional.

CONTROL

Five levers for all boom, winch, and swing movements. One foot pedal, linked to boom raise-and-lower lever. Dead-man type (except swing) are self-centering: when controls are released, machine movements stop automatically. Swing brake, with free swing. Machine leveling gauge, electric horn, mechanical house lock, emergency brake, parking brake.

Key-operated ignition switch with indicator light, starter button, foot throttle, fuel gauge, voltmeter, hour meter. Gauges for engine oil pressure, transmission oil pressure, transmission oil temperature, engine coolant temperature, air pressure. Hydraulic filter and low air warning lights.

MAIN WINCH

(Model GH30) 2 speed hydraulic powered up and down.

Layer	High Speed: fpm		Line Pull (Lbs)	Storage
	Max. Line Speed Full Load	No Load		
1	320	354	12,520	92 ft.
2	348	385	11,540	178 ft.
3	371	410	10,820	269 ft.
4	394	436	10,190	366 ft.
5	417	461	9,630	468 ft.
6	453	501	9,130	577 ft.

Layer	Low Speed: fpm		Line Pull (Lbs)	Storage
	Max. Line Speed Full Load	No Load		
1	250	275	15,540	92 ft.
2	271	299	14,330	178 ft.
3	290	319	13,440	269 ft.
4	308	338	12,660	366 ft.
5	326	358	11,960	468 ft.
6	354	389	11,340	577 ft.

Winch includes 450' (137 m) of 5/8" (15.9 mm) cable. Free fall is optional.

AUXILIARY WINCH (Optional)

Model GH30) Single speed Hydraulic powered up and down. Optional free fall - consult factory.

Layer	Speed: fpm		Line Pull (Lbs)	Storage
	Max. Line Speed Full Load	No Load		
1	160	172	12,520	92 ft.
2	174	193	11,540	178 ft.
3	186	205	10,820	269 ft.
4	197	218	10,190	366 ft.
5	209	232	9,630	468 ft.
6	227	252	9,130	577 ft.

Optional: 450' (137 m) of 5/8" (15.9 mm) cable.

WIRE ROPE

All winch cable is preformed wire rope, 6x25 strands, right-regular lay, EIPS, steel core.

SWING

Planetary, with internal brake. Spring set, hydraulic release. Free swing or automatic brake.

Speed - 3 rpm

ENGINE

GM 6V-53N diesel, 6 cyl ohv, 2 cycle, 197 hp (147 kw) at 2800 rpm, 318 cid (5.2L), 3,875" bore x 4.5" stroke (98 mm x 114 mm), 21:1 compression ratio, 431 ft-lbs (59.6 mkg) max torque at 1500 rpm.

Electric starter, 12-volt 65 amp alternator, 225 amp hour battery, 20-hour rate (975 cca).

Air compressor, 12 cfm (5.7 L/sec)

Fuel capacity: 130 gallons (492L)

TRANSMISSION

Six speed with rear axle disconnect. Electric three speed range and directional shift with electric over air high low shift and rear axle disconnect.

Drive	Range	Gear	Max. Speed	
			mph	km/hr
4 wheel	Low	1st	1.5	2.4
4 wheel	Low	2nd	3.1	4.9
4 wheel	Low	3rd	8.3	13.3
2 wheel	High	1st	4.3	6.9
2 wheel	High	2nd	8.7	14
2 wheel	High	3rd	21.7	34.9

Gradeability: NOTE: All performance data is based on standard machines, and may vary due to engine performance and optional equipment. Machine should be operated within a 30° slope limitation due to engine lubrication design.

AXLES

Ratio 22.4:1. Planetary steering. Front axle rigidly mounted to frame. Rear axle pinned for oscillation; automatic oscillation lockout with manual override. Non-spin differential optional.

BRAKES

Four-wheel air service brakes. Drums 20.25" x 4" (514 mm x 102 mm). Spring-set emergency and parking brakes on all four wheels.

TIRES:

21.00 x 25-24-PR, 15 x 25 rim

Optional:

26.5 x 25-20-PR, 22 x 25 rim

26.5 x 25-26-PP, 22 x 25 rim

29.5 x 25-22-PR, 25 x 25 rim

29.5 x 25-28-PR, 25 x 25 rim

Spare tire, tire inflation kit

STEERING

Two independent systems. Front hydrostatic controlled by Char-Lynn orbitrol unit. Rear hydrostatic controlled by toggle switch on dash panel, with

rear-wheel centering indicator light.

Turning radius:

Front-wheel steering: 38' (11.6m)

Four-wheel coordinated: 21'6" (6.6m)

OUTRIGGERS

Beam type, hydraulic powered 24" (61cm) diameter floats. 21' (6.4m) spread center-to-center of jacks.

Optional - 30" (76 cm) floats.

WEIGHT (WITH 80' BOOM)

	Total	Front Axle	Rear Axle
Lbs.	76,700	38,500	38,200
kg	34,785	17,460	17,325

WEIGHT (WITH 105' BOOM)

	Total	Front Axle	Rear Axle
Lbs.	78,900	41,800	37,100
kg	35,782	18,957	16,825

STANDARD EQUIPMENT

Dual headlights, tail lights, brake lights, back-up lights, turn signals, parking lights; front and rear fenders, tow loops, rear view mirrors, electric back-up alarm, electronic boom angle indicator with adjustable limit settings and audible warning, electronic load moment indicating system. Anti-Two block system with audible and visual warning signals only, without automatic stop.

OPTIONAL EQUIPMENT

Jib: 25' (7.6 m) self-storing. Can only be erected to the end of the Side Fly.

Anti-Two block system: Electric-hydraulic for boom, Side Fly, or jib. Stops boom lower, boom extended, winch up movements automatically; audible and visual warning signals in cab; manual override.

Working lights: On front of cab and on boom. Rotating amber beacon: On top of cab.

Vandalism protection package: Padlocks for access and storage doors, fuel tank; Lexan windows; tinted safety glass.

Tow winch: Mounted on front of frame, controlled from cab. Line pull 15,000 lbs. (680 kg).

Rooster sheave, 45-ton 5-sheave hook block, 15-ton single sheave hook block, headache ball with 5-ton swivel hook, headache ball with 3-ton swivel hook for auxiliary winch, drum rotation indicators for main and auxiliary winches, front and rear pintle hooks, cold-weather starting kit with extra battery, electric heating element for hydraulic reservoir.

NIXON-EGLI EQUIPMENT CO.

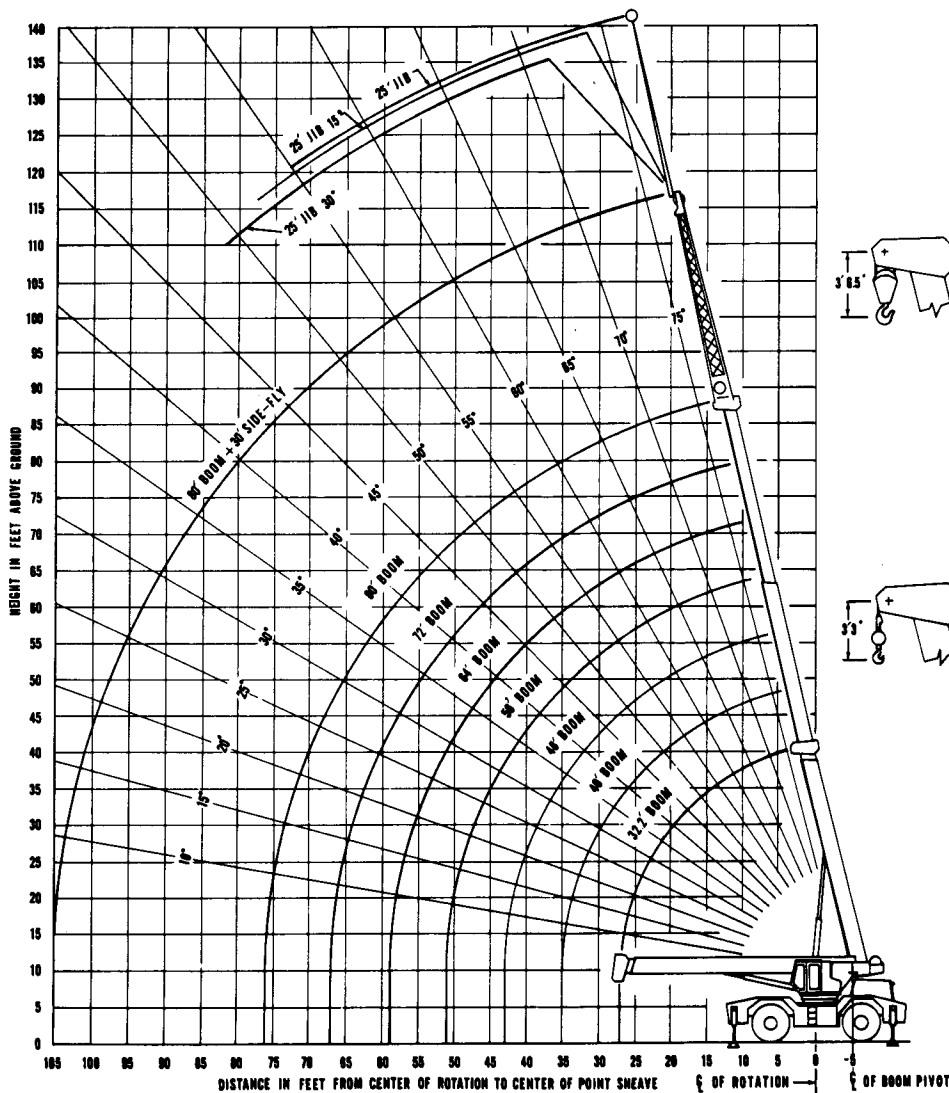
24701 CLAWITER ROAD
HAYWARD, CA 94545
(510) 783-1711

BADGER EQUIPMENT CO.

Airport Industrial Park, P.O. Box 168
Winona, MN 55987 (507) 454-1563
FAX: (507) 454-3326

Form 8073 (Replaces 8047)

80' Boom



WARNINGS:

1. Minimum working main boom angle for the fully extended boom with power pin extended plus sidely and jib is 55 degrees. **Tipping** can occur rapidly without advance notice.
2. For other boom configurations, having powered sections not fully extended, but with power pin extended or retracted; with or without sidely; and with or without the jib, the rated loads are found in the columns headed by the maximum length of their respective boom configurations. The boom angle must be used to determine the particular rated load. For boom angles not provided, use the rating of the next lower boom angle.

HYDRAULIC SYSTEM

Two 2-section tandem pumps, 162 gpm (613 L/min) at 2470 rpm, mounted on torque converter with clutch. Steering pump, 18 gpm (68 L/min).

12 double-acting cylinders:

2 boom hoist: 8" (203 mm) ID
6.0" OD x 5.0" ID (152 mm x 127 mm) rod

2 boom telescoping: 6" (152 mm) ID
5" OD x 4" ID (127 mm x 102 mm) rod

Outrigger cylinders:

4 telescoping: 2.5" ID, 1.5" rod
(64 mm x 38 mm)

4 jack: 6.5" ID, 4.5" rod
(165 mm x 114 mm)

Vane-type swing motor.

Operating pressure: 2500 psi (176 kg/cm²) max.

Pressurized reservoir.

Oil capacity: reservoir 182 gal (689 L), system 300 gal (1,136 L)

Filtration unit built into reservoir: 10-micron disposable-element filter with automatic safety relief, built-in magnets; visual indicator or filter housing, indicator lights in engine gauge cluster.

Fin and tube type oil cooler.

Main relief valves in all circuits. Holding valves on boom hoist, boom telescoping and jack cylinders; thermal relief protection in telescope and hoist circuits.

BOOM

80' Boom — Three section. Base section plus two self proportioning hydraulically telescoping sections. Extends to 80' (24.4 m), retracts to 32'6" (9.9 m). Modified hexagon cross-section is self-aligning. Five-sheave head.

105' Boom — Four-section, two self-proportioning hydraulically telescoping section, manually pinned end section. Extends to 105' (32 m), retracts to 32'9" (10 m). Modified hexagon cross-section is self-aligning. Five-sheave head.

Side Fly (optional) — 30' (9.1 m) self-storing boom section, hinged to boom head.

IMPORTANT INSTRUCTIONS

Radius of the load is the horizontal distance from a projection of the axis of rotation before loading, to the center of vertical hoist line or tackle with load applied.

Boom angles, which represent the unloaded boom angles, are to be used for reference only. These boom angles must be adjusted to maintain the proper load radius while the load is being picked.

Load ratings in shaded areas are based on machine's hydraulic or structural competence and not on the machine's stability.

Tipping capacities do not exceed 85% of tipping loads for "on outrigger" capacities or 75% of tipping loads for "on rubber" capacities as determined by tests in accordance with SAE recommended practice -- "Crane Load Stability Test Code SAE J-765 a."

Crane load capacities are based on freely suspended loads. They are the maximum covered by the manufacturer's warranty with the machine leveled and standing on a firm supporting surface.

Practical working loads depend upon supporting surface, wind, and other factors affecting stability, hazardous surroundings, experience of personnel, and proper handling; all of which must be taken into account by the operator.

The weights of all auxiliary handling devices such as boom attachments, hoist block, hooks, and slings, except hoist rope, shall be considered as part of the load ratings.

Powered boom sections are synchronized to be extended equally at all times. Each section extends to a maximum distance of 24 feet. The maximum powered boom load which may be telescoped is limited by hydraulic pressure, boom angle, and boom capacity. It is safe to attempt to telescope any load within the stated conditions of the rating chart.

"On outriggers", capacities are based on outriggers being fully extended to a distance of 21 feet from centerline to centerline of vertical jack cylinders.

For boom lengths not shown, use load ratings for next longer boom. For load radii not shown, use load rating for next larger rated radius. Positioning or operation at radii and boom lengths beyond the maximums or minimums shown, is not intended or approved.

The boom assembly shall be fully retracted and leveled when crane is out of service.

From main boom capacities, deduct: 650 lbs. when Side-Fly stowed; 1,530 lbs. when Side-Fly erected; 200 lbs. when jib stowed; 1,670 lbs. when jib erected.

Hoist reeving should be based on 9,000 lbs. per part of line.