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SPECIFICATIONS

RANGER 40

UNIT SUBFRAME

The full length sub-frame is a ladder style construction made from heavy wall rectangular tubing. In addition top and bottom skin plates provide rigidity and a stable foundation for the slew drive pedestal.

OUTRIGGERS

At each corner of the Ranger frame there is a radial hybrid outrigger that pivots out to the extended position (manually), before hydraulically deploying. Controls for the outriggers are at the lower control station. Each outrigger cylinder is equipped with a counterbalance valve to prevent inadvertent shifting of the load. All four outriggers fold horizontally within the confines of the carrier as not to impede visibility when traversing work sites.

TURRET

The turret weldment consists of a base plate and two side plates. The turret base plate is bolted to the main ball-bearing gear on top of the base and supports the fluid motor and gear reduction drive system. The elevation cylinder pin and boom pin have grease fittings and replaceable bronze bearings for proper maintenance.

BOOM ASSEMBLY

The boom assembly is rated for category C (46KV) insulation and consists of three sections. The main boom and the intermediate boom are steel construction, while the final hydraulic extension boom is made from filament wound fiberglass. The boom assembly has a sheave height of 38 feet when fully extended. The optional jib boom extends the sheave height to 46 feet. An innovative **TRACK SYSTEM** feeds the auger motor and boom tip accessories.

Boom lift capacity is a maximum of 5000 lbs. with 4500 lbs. capacity available at 10 feet.

ROTATION

The turret and boom assembly rotate on a shear ball-bearing gear. A hydraulic motor and worm gear reduction drive the turret rotation. The unit can rotate 540 degrees and may

also be manually rotated in the event of power failure. The worm-driven slew drive is **completely enclosed and sealed** from the elements.

ELEVATION

A double-acting **5 INCH BORE** cylinder elevates the boom. The boom travels from -10° to +80° and provides a working radius from 5 feet through 30 feet. A pilot-operated holding valve prevents free fall in the event of a hose failure.

GROUND CONTROL STATION

Ground controls are located at the rear of the machine for easy operator access. The controls operate outrigger deployment & auxiliary tool circuit.

RIDER SEAT CONTROL STATION

FULL PRESSURE hydraulic controls operate all digger derrick functions: boom elevation, boom extension, turret rotation, winch drive, auger operation, pole claw operation, engine throttle, motor start/stop. All controls are placed within easy operator reach from the adjustable, vinyl covered command seat.

WINCH

A 6000 lb. planetary turret winch is mounted to the main boom. High strength composite rope is used for insulating purposes.

EARTH AUGER

A hydraulically driven auger package **PERMANENTLY** attaches to the telescopic boom assembly for the installation of poles (auger and auger drive can be removed if required). The maximum drilling radius is 21 feet 6 inches. The planetary auger drive can deliver up to 6000 foot-pounds of torque. An 18 inch auger is standard with the unit; however, other sizes are available as options.

POLE GUIDE

The hydraulic pole guide has multiple angle positions and is removable.

TRAILER

14,000 lb tandem axle trailer with dove tail fully prepped to transport Ranger. The trailer features heavy duty wood decking, 4 handy tie off rings to secure the SkyLift Ranger for transportation, adjustable loading ramps, electric brakes and all required Federal lighting.

HYDRAULICS

A 20 gallon hydraulic oil tank is furnished with dielectric hydraulic oil. Hydraulic tool outlets controlled by a switch at the control station, are provided at ground level.

CARRIER

IHI CONSTRUCTION MACHINERY model IC 30

Engine: Kubota 4 cylinder – 46 Horsepower

Transmission: 2 speed hydrostatic with left/right control levers

Speed: Low Range -3.70 mph , High Range - 6.80 mph

Brakes: Hydrostatic hydraulic brakes, mechanical parking brake

Crawler: Continuous high density molded rubber drive cleats; Width 12.5 in.
Each crawler track supported by 12 sealed bogey style roller assemblies.

Lower track roller frame sealed in oil

Track tension adjustable with grease fittings

Ground pressure – loaded – less than 6 psi.

Other features: Easy battery and radiator access under large hinged locking cover

Headlights

Turn Signals

Rear view mirrors

Access step, assist handles for cab entry

GENERAL DIMENSIONS

Overall Length : 17 feet 4 inches

Overall Width : 62 inches

Overall height: 7 feet 2 inches

Unit weight: 10,900 pounds

Stability: Gradeability – 30 degrees

Side Stability – 20 degrees

OPTIONS

- REMOVABLE POLE CARRIER BRACKETS
- 4 FEET AUGER EXTENSION
- RADIO REMOTE CONTROL
- PIN ON SINGLE MAN PERSONNEL BUCKET W/ LINER
- CONTINUOUS BOOM ROTATION
- FRONT HYDRAULIC BLADE AND BUMPER
- DETACHABLE 8FT JIB WITH HYDRAULIC ANGLE ADJUSTMENT
- HYDRAULIC OVERLOAD PROTECTION SYSTEM
- DETACHABLE 8000 LB ELECTRIC WINCH (CAN BE MOUNTED TO FRONT OR REAR BUMPER)
- HOSE REEL FOR HYDRAULIC TOOL CIRCUIT