

WATSON INCORPORATED

Model 2500CM Specifications

General Description:

The Model 2500CM is a self-contained drill unit specifically designed for mounting on a hydraulically driven crawler undercarriage. Configurations include two-element kelly bar systems with drill depths to 80' and three-element kelly bar systems with drill depths to 90'. A short mast option is available.

The following outlines standard specifications with 60' (nominal) drill depth:

POWER UNIT:	John Deere diesel, 173 hp
TRANSMISSION:	Torque converter driven powershift, Funk Model 2000
ROTARY:	Single reduction with heavy duty spiral bevel ring gear and pinion. Roller type kelly drive; output torque to 81,000 ft. lbs.
MAST:	Lattice type structure. Mast is elevated with two independently controlled hydraulic cylinders that allow positioning 10 degrees past vertical and 10 degrees each side
KELLY:	Telescoping two-element, 6" outer/4 1/4" (solid) inner bar (kelly stub per customer's requirement)
Kelly operating performance:	Outer element is controlled full length by a hydraulic cylinder. Crowd force to 24,000#
KELLY WINCH AND SERVICE WINCH:	Inner kelly winch: Pullmaster M25 with "controlled freefall" Line pull – 25,000# Line speed – 160 fpm low/200 fpm high Cable size – 3/4" diameter Service winch: Pullmaster M12 Line pull – 12,000# Cable size – 1/2" diameter

ROTATING FRAME:	Mounted to a slew ring bearing with gear teeth. Rotation is provided by hydraulic motor and gear box with an integral braking system. Unit incorporates dual swing motors. Rotational swing 360 degrees
SLIDE FRAME:	Incorporates engine, inner kelly winch, mast mount and operator's control position. Slide travel is 42". Extended drill radius is 144"
MOUNTING:	Crawler type undercarriage, expanding carbody, tracks 10' to 12' wide x 14' long, triple grousers. Crawlers are hydraulically driven with independently controlled tracks
DRILL UNIT OPTIONS:	Open back mast for air circulation Kelly/mast configurations for alternate drill depths Reaction jack installation High capacity service winch Water tank Operator's cab Air conditioning/heater for cab Work platforms on both sides Umbrella installation Fixed width (11' 11" wide) carbody

10 July 07

WATSON INCORPORATED

Model 2500 CM with 60' (nominal) Drill Depth

OVERALL UNIT LENGTH: 45'-0"

OVERALL UNIT HEIGHT: 146" (12'-2")

EXPANDED CARBODY WIDTH:
Tracks expanded: 11'-11"
Tracks retracted: 10'-0"

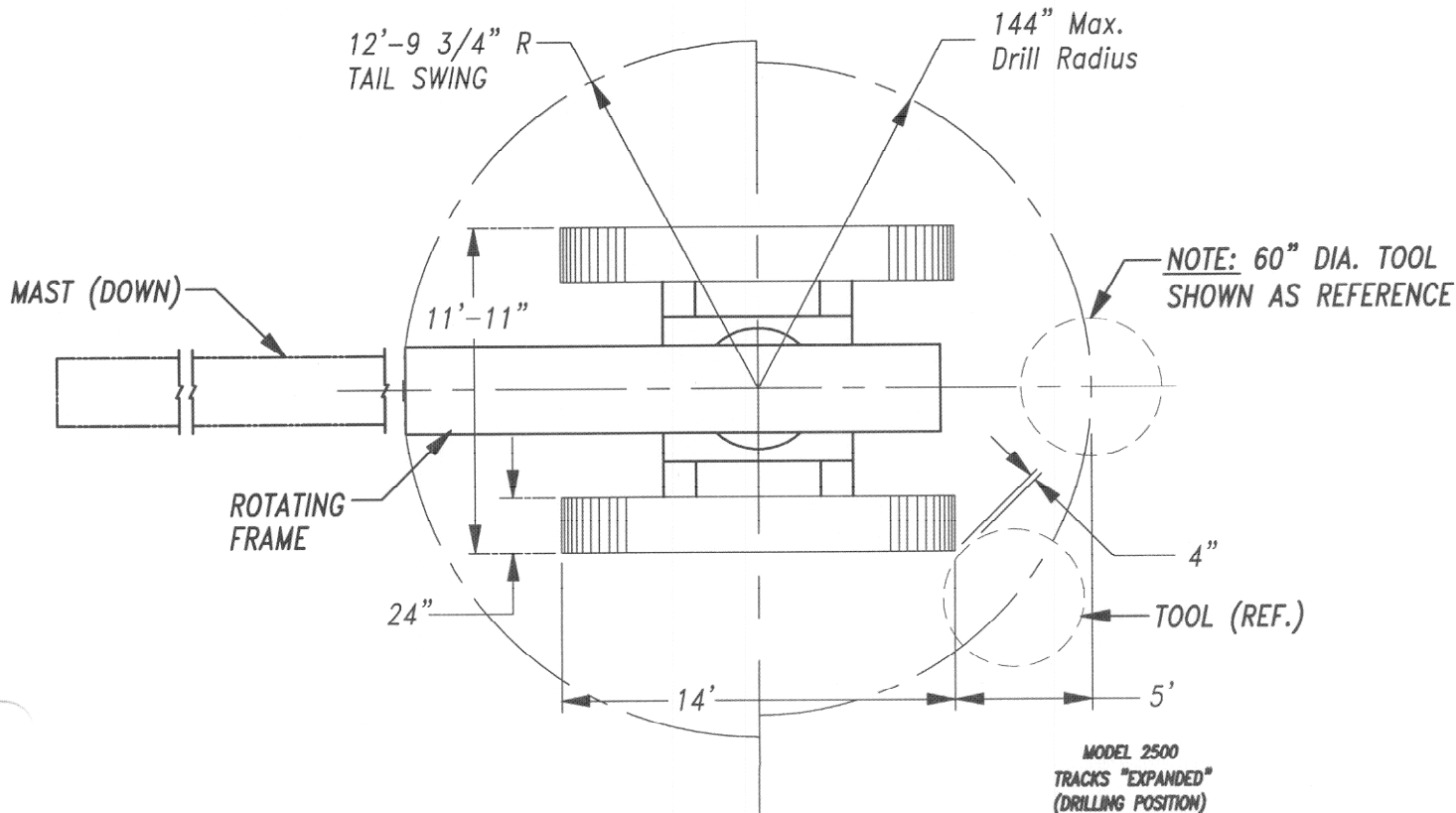
APPROX. WEIGHT: 64,000 LBS.
(solid inner kelly)

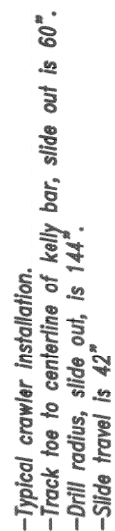
ROTARY CLEARANCE: 92" (7'-8")

DRILL RADIUS (slide out)
C/L rotation to C/L kelly: 144" (12'-0")

DISTANCE OFF TRACK TOE TO KELLY C/L:
Slide in: 18"
Slide out: 60"

SLIDE DISTANCE: 42"





Approximate Weight is 64,000#

CND TRANSFER DATE:		TRANSFER BY:				
				ITEM	QTY	NEXT ASSY

Model 2500CM

