

EK65HP



### **APPLICATION**

The **EK65HP** from CZM has been designed for high performance and to have the fastest and easiest setup for operation and transport mode. It is a reliable drilling rig mounted on a CAT base, keeping the operation and maintenance extremely friendly and efficient.

This model is a very compact drill rig and the hydraulic functions in the cabin also allow the Kelly bar to follow the raising and lowering

of the mast, therefore the Kelly bar travels with the machine in a fast, easy and economic way.

The **EK65HP** also has the versatility to be easily converted from long to short mast by simply replacing the top mast assembly and Kelly bar.

# TECHNICAL SPECIFICATIONS

<b>KELLY</b>	BAR	LONG	<b>MAST</b>	VERSION

Drilling Depth (Long - 5/80 ft; interlock kelly bar)	80 ft	24.4 m
Drilling Diameter	5 ft 3 in	1,600 mm

#### **KELLY BAR SHORT MAST VERSION**

Standard Drilling Depth (Short - 5/41 ft; interlock kelly bar)	41 ft	12 m
Maximum Drilling Depth	60 ft	18.3 m
Drilling Diameter (up the mast) 5	ft 3 in	1,600 mm
Drilling Diameter (below the mast)	8 ft	2.44 m

### **ROTARY HEAD**

Max. torque (nominal)	67,150 lbf.ft	9,310 kgf.m
Working speed of rotation	18-36 rpm	18-36 rpm
Spin-off rotation	75-130 rpm	75-130 rpm

#### **CROWD SYSTEM**

Cylinder stroke	6 ft 3 in	1,920 mm
Cylinder push force	27,000 lbf	12,300 kgf
Cylinder push speed	46 ft/min	14 m/min
Cylinder pull force	39,600 lbf	18,000 kgf
Cylinder pull speed	31 ft/min	9.5 m/min

#### **MAIN WINCH**

Max. pull-force - 1st Layer (effective)	27,120 lbf	12,330 kgf
Line speed - 1st Layer	230 ft/min	70 m/min
Cable diameter	3/4"	20 mm
Drum diameter - 1st Layer	15.75 in	400 mm

#### **AUXILIARY WINCH\***

Max. pull-force - 1st Layer (effective)	11,400 lbf	5,200 kgf
Cable diameter	5/8 in	16 mm
Drum diameter - 1st Layer	12.6 in	320 mm

#### **MAST INCLINATION**

Backward	15°	15°
Forward	5°	5°
Sideways	7° / 7°	7º / 7º

### DIESEL ENGINE CAT317 NEXT GEN (C4.4 EPA Tier 4 Final)

Net Power – SAE J1349	130 hp	97 kW
Displacement	269 in <sup>3</sup>	4.4 L
Fuel Tank	72 gal	271 L

### **HYDRAULIC SYSTEM (CAT317 NEXT GEN)**

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Hydraulic pressure	5,076 psi	350 bar
Max. Flow (main circuit - 2 pumps)	78 gal/min	296 L/min
Max. Flow (auxiliary circuit)	14.3 gal/min	54 L/min
Pilot circuit pressure	580 psi	40 bar
Pilot circuit flow	6.8 gal/min	25.8 L/min
Hydraulic oil tank capacity	28 gal	106 L

### **UNDERCARRIAGE**

Track length	13 ft	3,970 mm
Length to Center of rollers	10 ft 5 in	3,170 mm
Transport position width	8 ft 10 in	2,690 mm
Shoes width	28 in	700 mm
Max. drawbar pull	35,115 lbf	15,600 kgf
Max. travel speed	3.2 mph	5.2 km/h

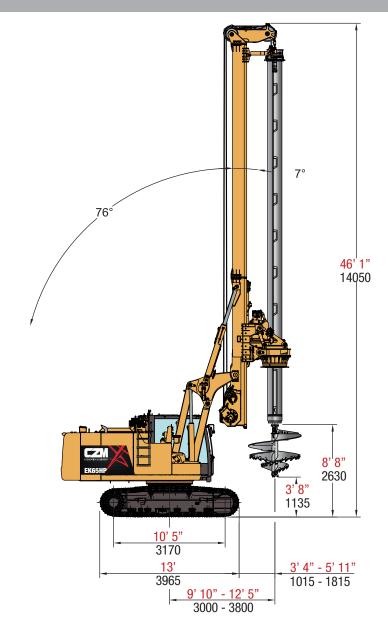
#### **TRANSPORT**

Transport height (Long Mast)	11 ft 5 in	3,485 mm
Transport height (Short Mast)	10 ft 9 in	3,280 mm
Length (Long Mast)	50 ft 5 in	15,380 mm
Length (Short Mast)	29 ft	8,850 mm
Transport width	8 ft 10 in	2,690 mm
Transport weight (long mast - kelly 5 / 80 ft)	65,000 lb	29,550 kg
Transport weight (short mast - kelly 5 / 41 ft)	60.000 lb	27.300 ka

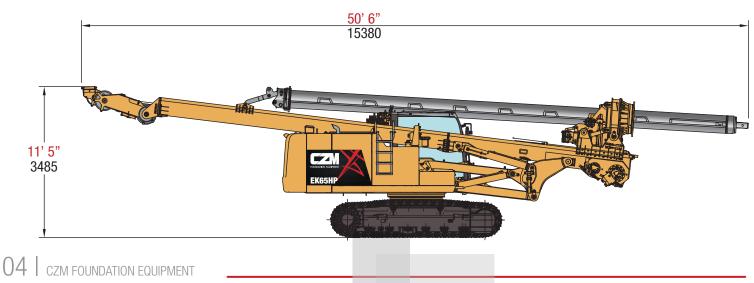
#### **GENERAL DATA**

Overall height (standard mast)	46 ft 1 in	14,050 mm
Overall height (short mast application)	24 ft 3 in	7,400 mm
(short mast application - w/ boom down)	19 ft 9 in	6,015 mm
Operation weight (standard mast)	65,000 lb	29,550 kg
Operation weight (short mast)	60,000 lb	27,300 kg

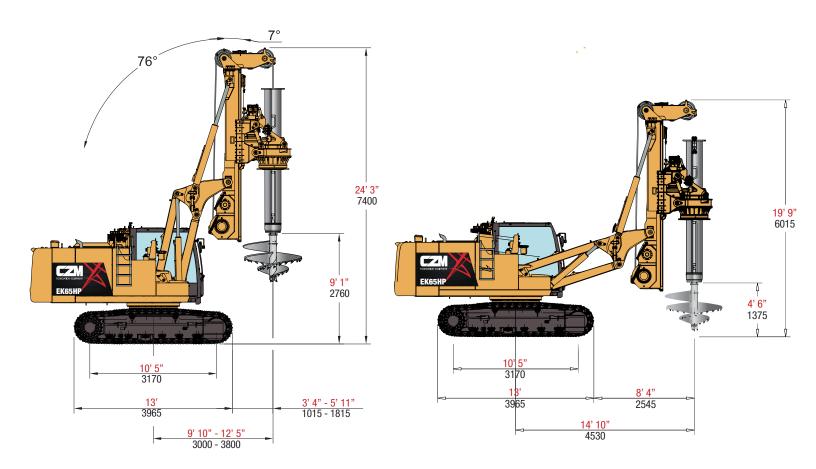
# **GENERAL DIMENSIONS** LONG MAST



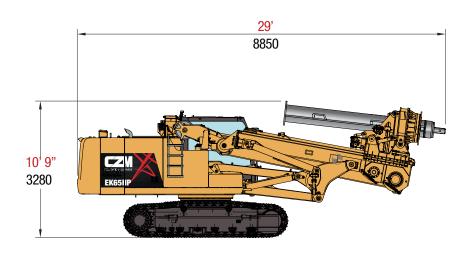
# TRANSPORT POSITION LONG MAST



# **GENERAL DIMENSIONS** SHORT MAST



# **TRANSPORT POSITION SHORT MAST**













CZM is headquartered in Savannah, Georgia, USA. For over 40 years, we have specialized in manufacturing foundation equipment. We design and customize models for many different drilling applications including Drill shafts, CFA/cased CFA, Micropile and anchoring, piledrive and hydraulic hammers and soil improvements. We are a Caterpillar OEM (Original Equipment Manufacturer).



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