

# **EK125HH**







**SAVANNAH • GEORGIA • USA** 

## **▲**THE COMPANY

- CZM has over 40 years of foundation equipment manufacturing experience with a wide range of models for multiple applications: drilled shafts, CFA, driven piles with hydraulic hammers, secant piles, micro piles, and anchoring, among others.
- CZM Foundation Equipment's USA manufacturing facility is located in Savannah, Georgia.
- CZM Foundation Equipment has designed their models with the after sales being priority. Quality and service are the main ingredients to a quality machine, this is one of the direct reasons CZM uses Caterpillar as a base, the Caterpillar bases are not only operator and maintenance friendly but by using Caterpillar it enables the customer access to the large and already nationally established Caterpillar Network.
- CZM is the world's largest manufacturer of CFA drilling rigs, featuring the revolutionary torque mechanism "Bottom Drive CFA", an internationally recognized CZM patent.









#### **APPLICATION**

The EK125HH is a hydraulic pile drive machine mounted on CAT323 equipped with a free fall hydraulic impact hammer. This free fall feature has many advantages:

- Half of the life cycle maintenance free since operated by gravity.
- Less installed power and less fuel consumption therefore.
- No need of impact reaction absorption by the hydraulic circuit when ram hits the pile, thus a much higher durability and the possibility of working with any kind of bearing capacity and / or refusal specification.
- Much better rate ratio between piston weight and total hammer weight what implies on higher efficiency for same size machines.

Other important feature of the CZM hammer is the use of two external hydraulic cylinders which lift the ram up to the controlled height, guick and easy to visually, inspect and access for maintenance.

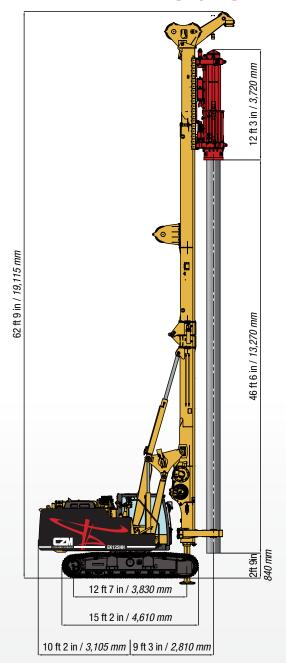
EK125HH is a compact machine of quick set up for operation and transport mode and it is a one load equipment. The 360-degress of swing and its parallelogram gives agility in the pile location and the ability of working in very tight access.

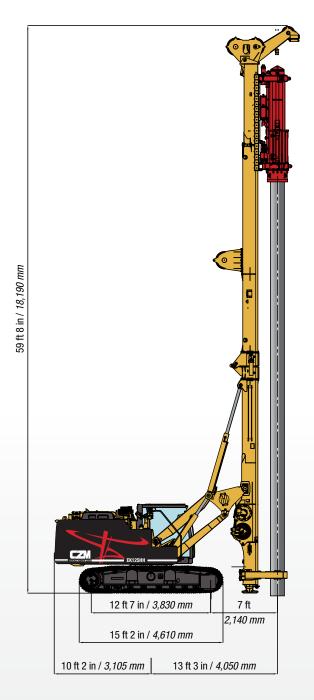
The computer in the cabin controls a precise drop height and driving frequency on the already renown high energy transfer efficiency of this kind of hammer.

## TECHNICAL SPECIFICATIONS

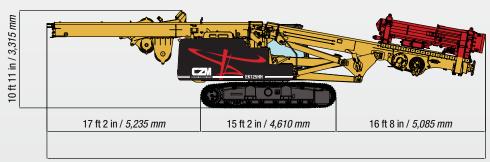
LEADER	DIESEL ENGINE CAT320E L TIER IV (CAT C6.6 ACERT)				
Overall height	63 ft	19 m	Gross Power – SAE J1995	164 hp	122 kw
Hammer stroke	46 ft	14 m	Displacement	403 in3	6,6 L
Max Pile Length	45 ft	13.7 m	Fuel Tank	108 gal	410 L
Max Pile Diameter	20 in	500 mm			
			HYDRAULIC SYSTEM (CAT320E L TIER IV)		
HYDRAULIC HAMMER – HH 3600			Hydraulic Pressure	5.076 psi	350 bar
Piston weight	8,000 lb	3,600 kg	Flow rate (main circuit)	2x49 gal/min	2x185 L/min
Hammer total weight	14,600 lb	6,600 kg	Flow rate (auxiliary circuit)	14.3 gal/min	54 L/min
Blows per minute	0 - 80	0 - 80	Pilot circuit pressure	569 psi	40 bar
Drop Height	0 - 4 ft	0 - 1.2  m	Pilot circuit flow	6.4 gal/min	24.3 L/min
			Hydraulic oil tank capacity	37.8 gal	143 L
MAIN WINCH					
Max. pull-force	40,400 lbf	18,400 kgf	UNDERCARRIAGE		
Line speed	200 ft/min	60 m/min	Track length	15 ft 2 in	4,610 mm
Cable diameter	-	24 mm	Length to Center of rollers	12 ft 7 in	3,830 mm
Drum diameter - 1st layer	18.5 in	465 mm	Transport position width (retracted)	8 ft 4 in	2,560 mm
			Working position width (extended)	11 ft 10 in	3,600 mm
AUXILIARY WINCH			Shoes width	23.6 in	600 mm
Max. pull-force	22,000 lbf	10,000 kgf	Max. travel speed	1.93 mph	3.1 km/h
Line speed	180 ft/min	55 m/min			
Cable diameter	3⁄4 in	-	TRANSPORT		
Drum diameter - 1st layer	16.5 in	420 mm	Transport height	10 ft 11 in	3,315 mm
			Length	49 ft	15 m
MAST INCLINATION			Transport width	9 ft	2,750 mm
Backward	15°	15°	Transport weight with hammer	90,000 lb	41,000 kg
Forward	9°	9°	Hammer weight	14,600 lb	6,600 kg
Sideways	9°/9°	9°/9°	Transport weight without hammer	75,400 lb	34,400 kg

## **GENERAL DIMENSIONS**

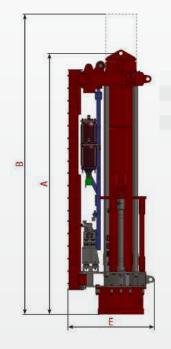




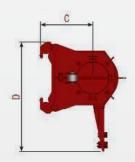
# TRANSPORT POSITION



#### HYDRAULIC HAMMER TECHNICAL SPECIFICATIONS



#### **DESCRIPTION HH3600** Piston weight 8,000 lbs Total weight with standard pile cap 14,600 lbs Blows per min. 0 - 80 1/min Max. energy per blow 32,000 ft.lbs Drop height

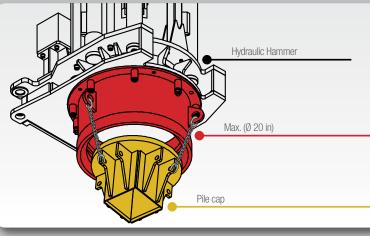


#### **DIMENSIONS** 12 ft 2 in 16 ft 6 in 2 ft 5 in 5 ft

4 ft



## PILE CAP



The pile caps are designed and manufactured according to the customer need.

# COMPUTER SYSTEM FOR HYDRAULIC HAMMER

- Accurate laser height control
- Remote access and online tracking
- Touch screen or mouse operation
- Special support for PDA test













#### WWW.CZM-US.COM

145 East Industrial Boulevard Pembroke • Georgia • 31321 United States • Phone: (912) 200-7654

