



# EK90M

Courtesy of Crane.Market



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.









# EK90M MULTIPURPOSE

The **EK90M** is designed to be a “Multifunctional Drill Rig” mounted on a CAT® 320 excavator base.

This versatile machine works for applications of Micropile, Jet Grouting, Segmented Flight Auger, Interlocking Kelly Bar and Tiebacks. Its unique design allow for simple conversion between these applications. With no major hose changes necessary, these can be done in just a few hours..

For some applications the rig is equipped with a double tool feeder, one on each side of the main mast, to allow for drilling and extracting casings or augers without manhandling.

These versions are also equipped with radio remote control to ensure a fast and safe operation. Operation can be executed either from the remote control, or the cabin.

The parallelogram, the mast vertical slide, and the rotary shift slide are exemplary features useful for a multiple process of drilling operations.

## TECHNICAL SPECIFICATIONS

### GENERAL DATA

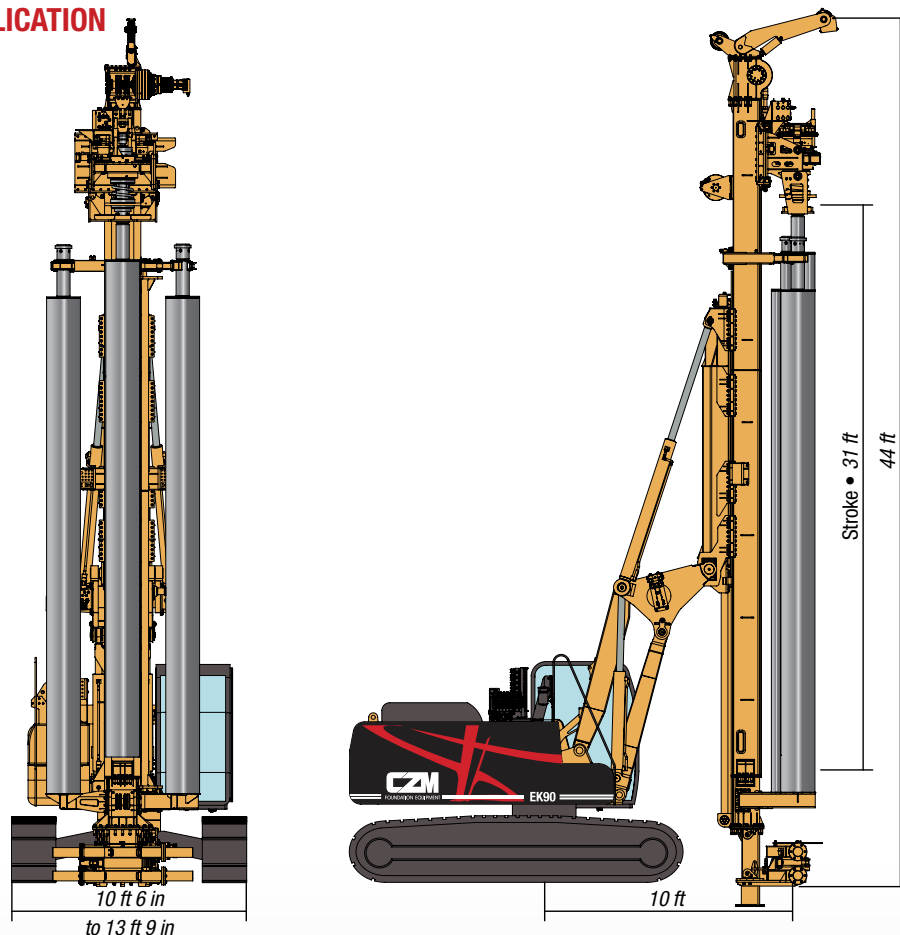
Base excavator	CAT® 320	Side shift stroke	32 in
Diesel engine	CAT® C.4	Mast slide stroke	11 ft
Power	140 HP	Auxiliary winch	6,600 lb
Hydraulic pressure	5.076 psi	Standard rotary max. torque	34,000 lb.ft
Transport weight (average)	65,000 lb	Standard rotary speed	21 - 118 rpm
Rotary stroke (std)	31 ft		

**\* Technical specifications common to all versions**

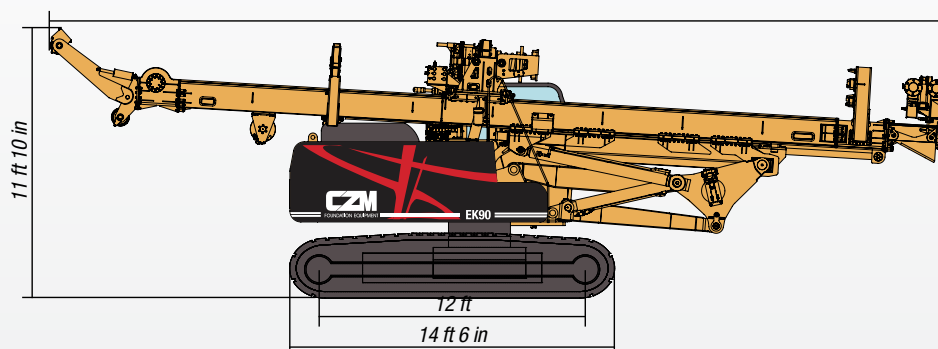


# GENERAL DIMENSIONS

## MICRO-PILING APPLICATION



## TRANSPORT POSITION



## TECHNICAL SPECIFICATIONS

### MICRO PILE APPLICATION

Standard stroke multi pass	25 ft
Single pass stroke	31 ft
Feed/Extract force	44,300 lb
Max feed rate	6 ft/min
Double rotary options	Eurodrill single and double
Standard double clamps	18 in
Side shift stroke	32 in

### JET GROUTING APPLICATION\*

Single stroke depth	80 ft
Maximum rod diameter	5 in

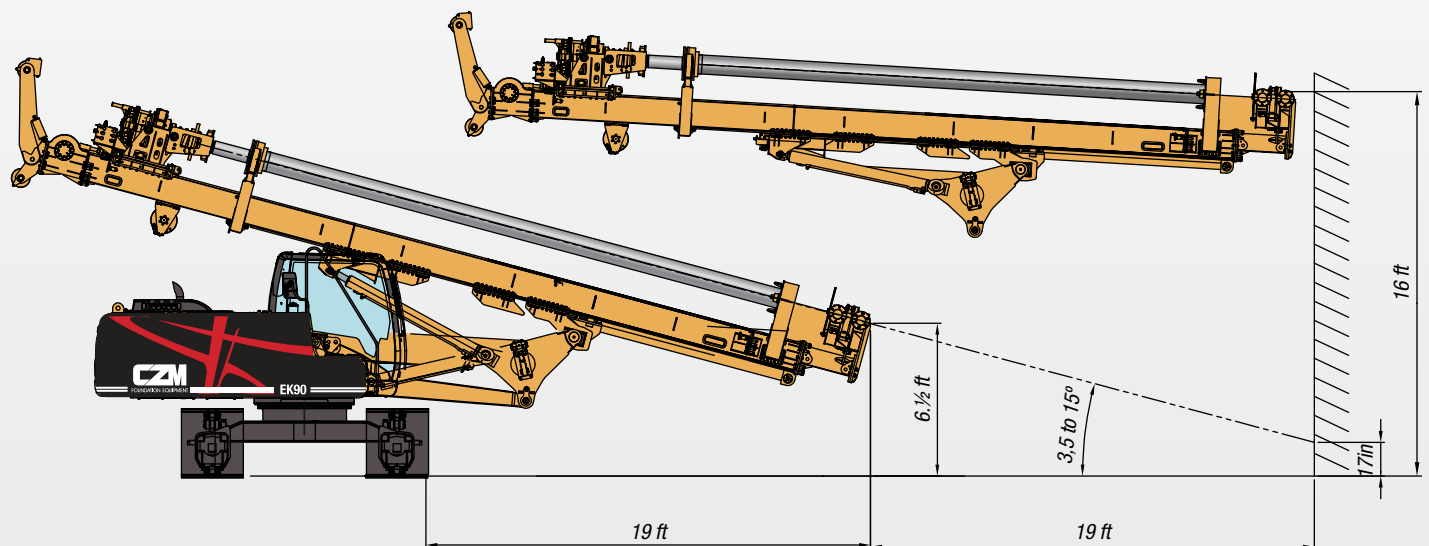
\*See general dimensions on page 11.

### Radio remote control:

Standard on Micro pile version.

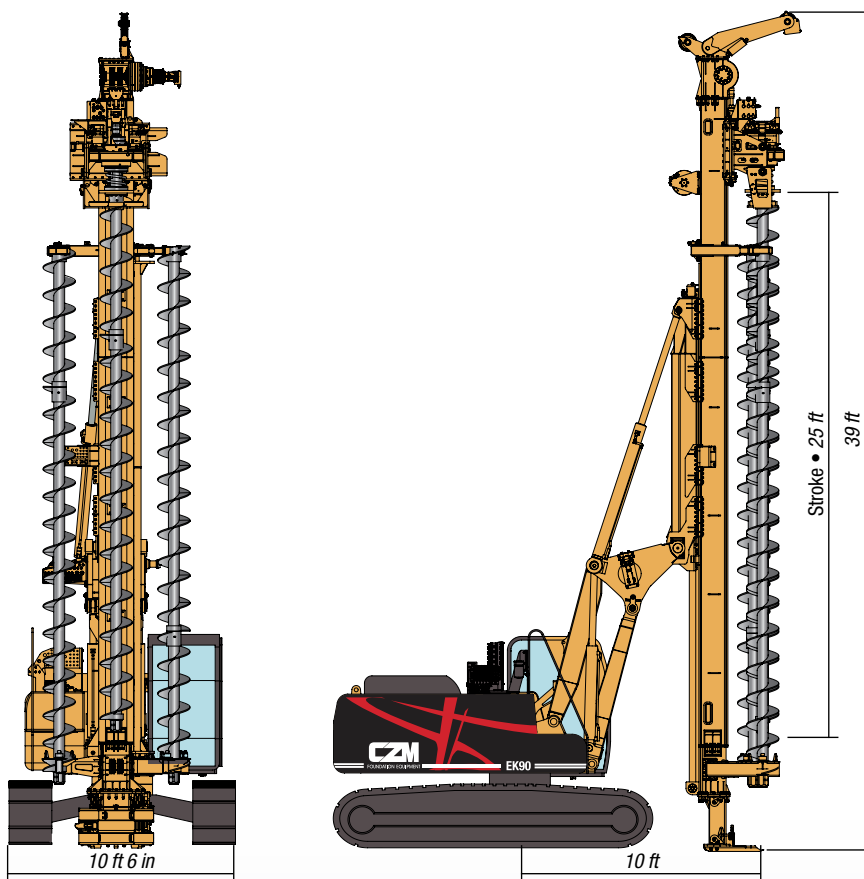


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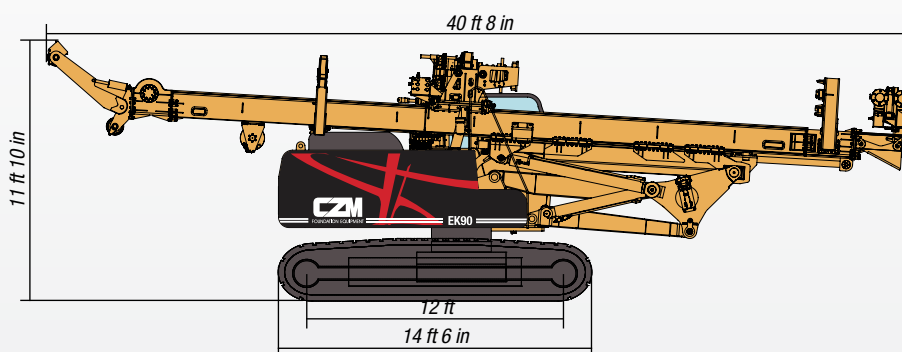


## GENERAL DIMENSIONS

### SEGMENTED FLIGHT AUGER APPLICATION



## TRANSPORT POSITION



## TECHNICAL SPECIFICATIONS

### SEGMENTED FLIGHT AUGER APPLICATION

Max. drilling diameter	18 in
Max. depth with - 3 segments	65 ft
Inside diameter auger concrete passage	4 in
Extraction force	44,300 lb
Down crowd	44,300 lb
Max. feed / extraction speed	6 ft/min

### HORIZONTAL DRILLING APPLICATIONS

Max. depth (limited to 2 segments)	52 ft
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### Radio remote control:

Standard on flight auger application.



# SEGMENTED FLIGHT AUGER (SFA)

## SEGMENTED FLIGHT AUGER APPLICATION

Max. drilling diameter	500 mm	18 in
Max. depth with - 3 segments	20 m	65 ft
Inside diameter auger concrete passage	100 mm	4 in
Extraction force	20.1 ton	44,300 lb
Down crowd	20.1 ton	44,300 lb
Max. feed / extraction speed		6 ft/min

## HORIZONTAL DRILLING APPLICATIONS

Max. depth (limited to 2 segments)	16 m	52 ft
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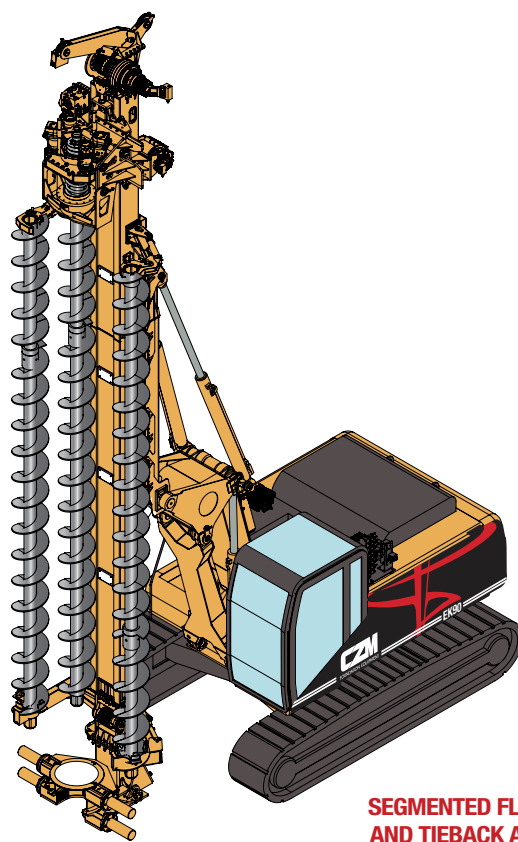
## RADIO REMOTE CONTROL:

Standard on flight auger application.





**CONTINUOUS  
FLIGHT AUGER**

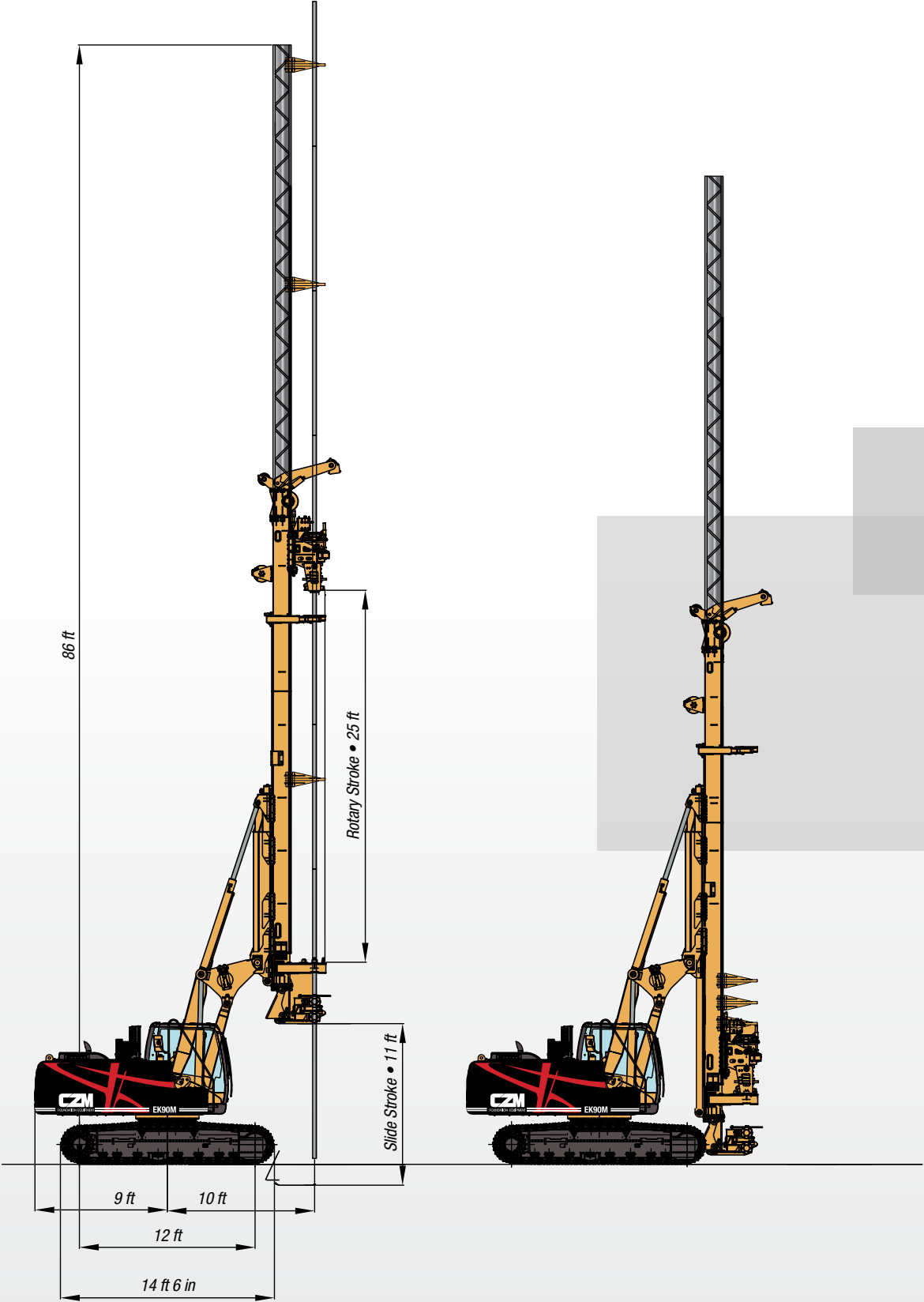


**SEGMENTED FLIGHT AUGER  
AND TIEBACK APPLICATION**



# GENERAL DIMENSIONS

## JET GROUTING VERSION









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**CZM**  
FOUNDATION EQUIPMENT

Specifications are subject to change without notice.

*Courtesy of Crane.Market*