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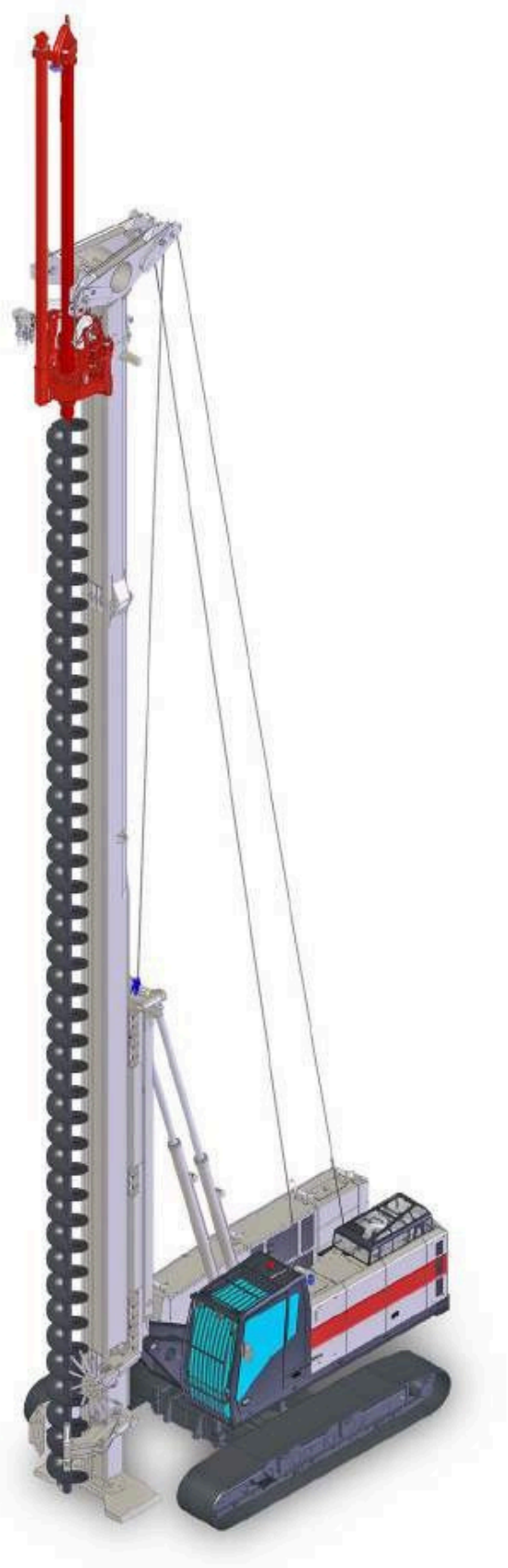

CH 500

CFA

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The CHF 500 is a dedicated CFA rig Like all Geax machines, the EK60 has a long supporting boom and a sliding mast. This allows a great variety of tool positioning for drilling like: long reach drilling, low headroom and maximized tool height for casing.

With its compact architecture and a proverbial stability, the EK60 can drill in any site including slopes, uneven terrains and tight spaces. The higher maneuverability allows fast movements compared to a traditional rig.

The EK60 can easily be converted in other drilling modes with modular kits. Common set-ups are kelly drilling and CFA, but many others are possible like diaphragm walls, soil mixing, soil displacement hydraulic hammer and customized set-up.

contact our team for more information on the CH500 and to discuss whether it's the most suitable rig for your project. All dimensions are subject to machine configuration.

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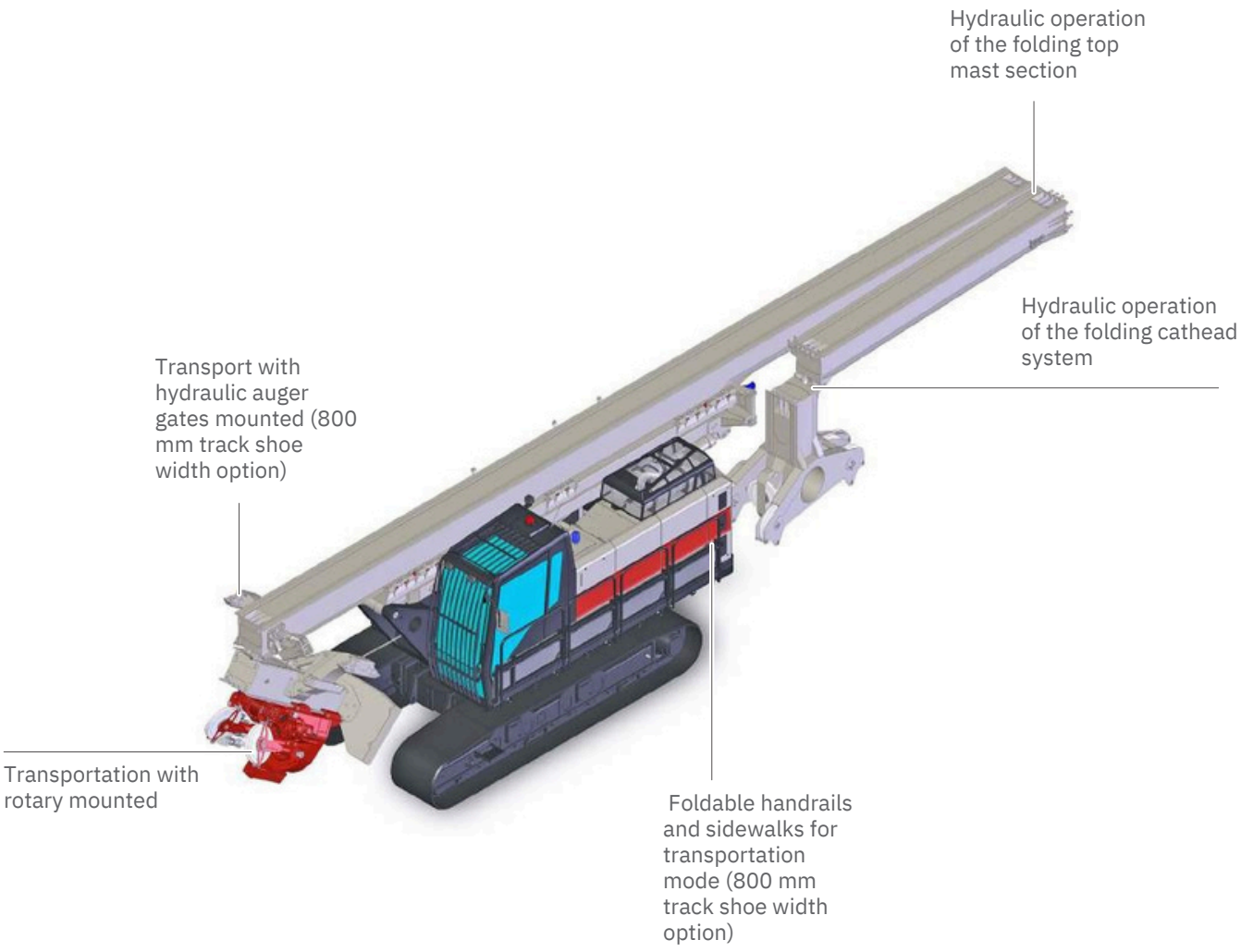
DEDICATED RIG FOR CFA DRILLING

The CHF 500 is a dedicated CFA rig with an operating weight of 46 tons (101,500 lbs). It allows for the construction of CFA piles up to 27 m (89 ft) depth and the ability to drill up to 1.000 mm (3.3 ft) diameter.
The CHF 500 is designed to be robust and reliable, due to the use of special high-resistance steels that translates into lighter weight, increased capacities and improved reliability.
The CHF 500 includes several design features developed to deliver the best possible performance:

- Fully self-erecting system, to facilitate a fast rig-up and rig-down.
- Easy to transport in one piece.
- Mast support frame allowing for the mast to be easily erected to working position.
- Hydraulic operation of the folding top mast section and cathead, simplifying the rig-up and rig-down and reducing the possibility of damage to the mast.
- Auger extension for drilling depth up to 27 m .
- Star type or hydraulic roller type auger cleaner.
- Extended undercarriage and improved footprint for greater stability and extremely low groung pressure during operation.

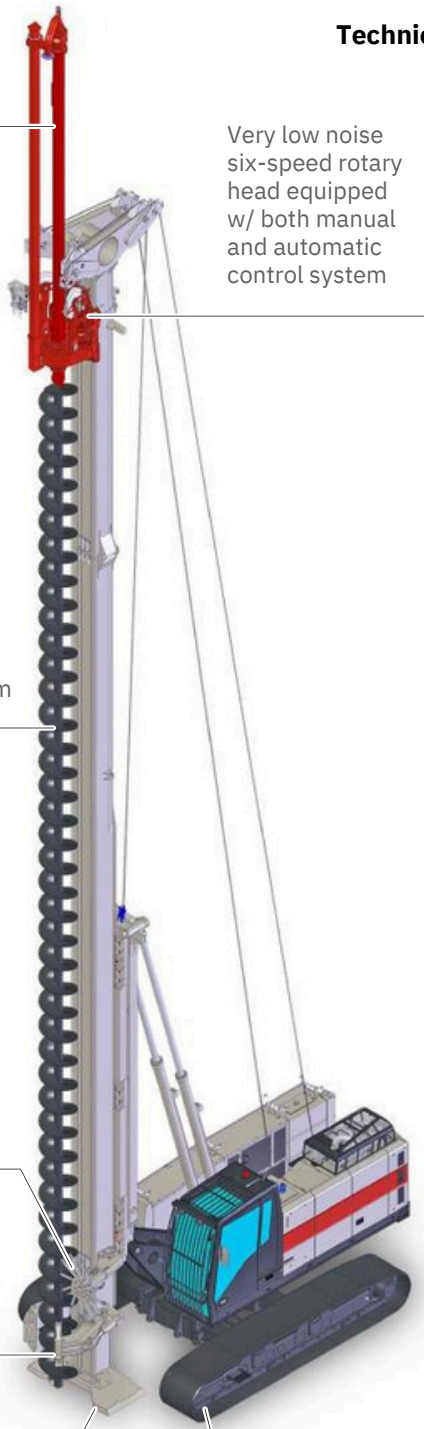
The CHF 500 can be equipped with data logger systems that allows for the control and monitoring of the drilling and concreting parameters, recording the data for subsequent analysis. The safety features of the CHF 500 are fully compliant with EN16228 standards for drilling and foundation equipment.



Technical Features

6 m auger extension

Very low noise six-speed rotary head equipped w/ both manual and automatic control system



Auger length up to 21 m

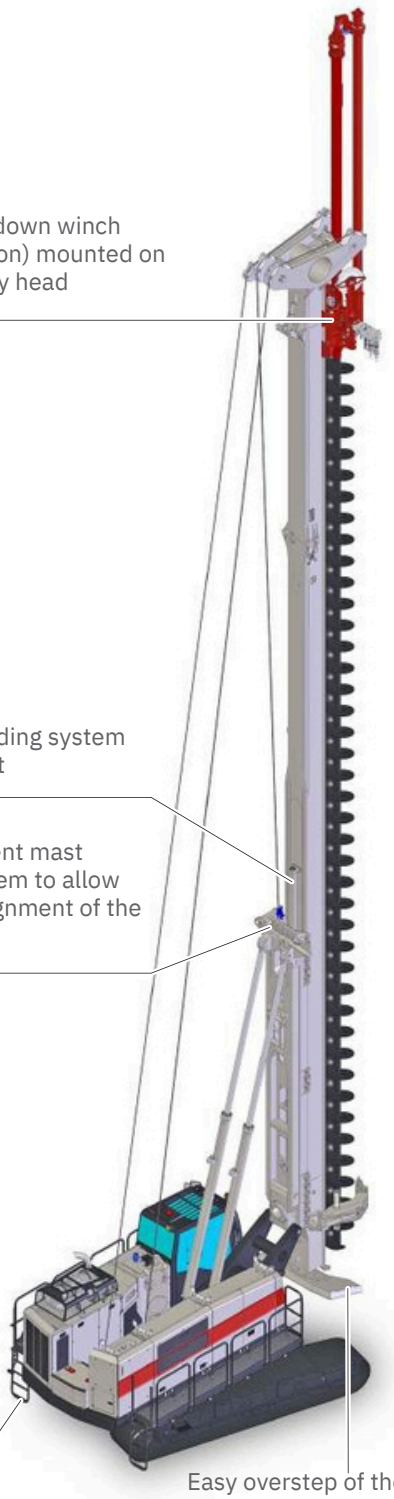
Auger cleaner star type (other types available on request)

Hydraulic openable lower guide

Food pad w/ large foot print

Optimised undercarriage to reduce ground pressure and to enhance both front and rear stability

Pull down winch (option) mounted on rotary head



Vertical sliding system of the mast

Independent mast tilting system to allow correct alignment of the mast

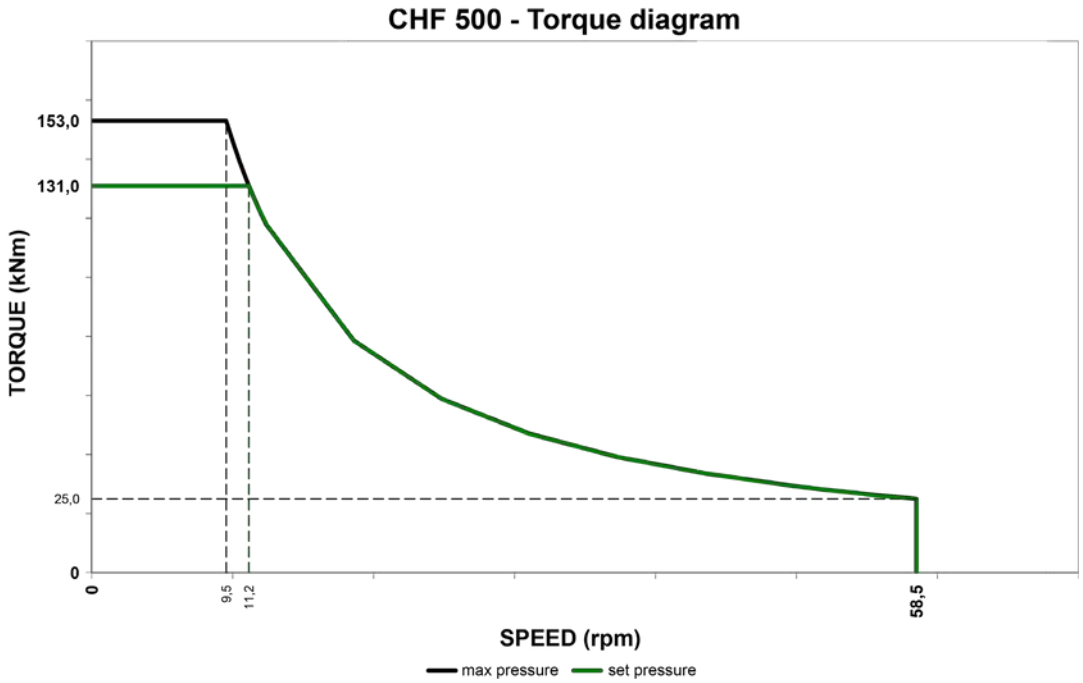
Sidewalks equipped with ladder allowing the safe access to the upperframe in all positions

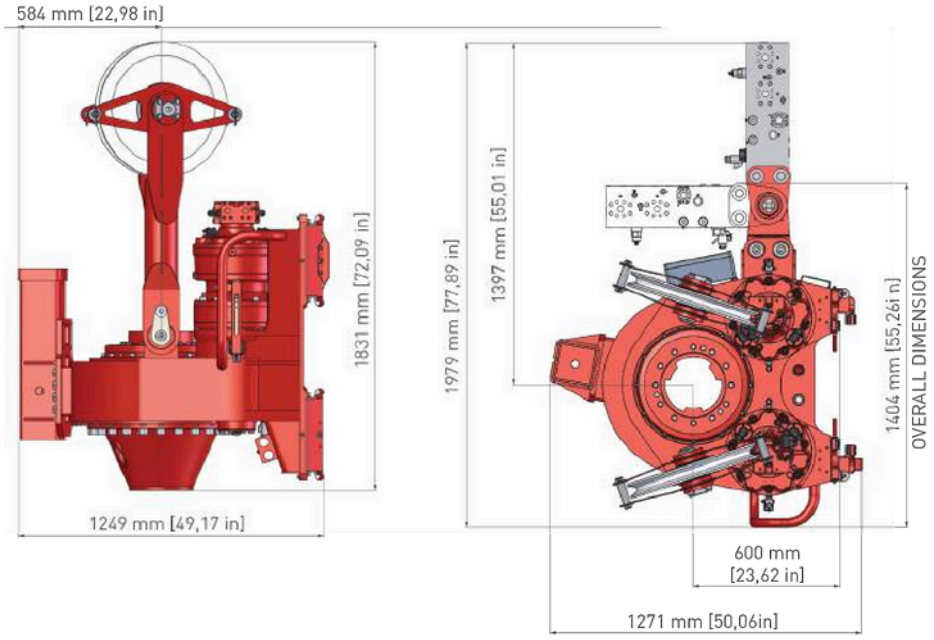
Easy overstep of the track w/o inclination of the mast utilising the vertical sliding system

Technical Data

Undercarriage	m.s.	
Type	–	Variable gauge, telescoping
Track shoe width	mm	600 mm (31 1⅛ in)
Type	–	Triple grouser
Overall width (retracted side frames)	mm	2.550 8' 4⅛"
Overall width (extended side frames)	mm	4.000 13' 1½"
Overall length	mm	5.300 17' 5⅛"
Centre idler to center sprocket	mm	4.480 14' 8⅕
Upperframe		
Width	mm	High Tech Line
Operator's cabin	–	Cummins OSB6.7
Emission certification	–	EU stage IV / US EPA Tier 4f
Aspiration		Turbocharged and charge air cooled
Power rating/rpm	kW	201 kW (270 HP
Fuel tank capacity	in⁴	6.700 (408)
Sound pressure level (EN 16228-1. Annex B)	–	LP. 82 dB (A)
Sound Power Level (2000/14/EC – EN 16228-1	–	LW, 108 dB (A)
Hydraulic system		
Type	l/min	Controllred descent
1st layer line pull	kN	135 kN (19 100
Max speed	m/min	74 ⁴/mix243 ft)
Rope diameter	mm	22 mm ⅜"
Rope layers	3	3
FEM classification		M5-L2-T-T5
Auxiliary winch	type	Controllred descent
1st layer line pull	kN	85 kN (19 100
Max speed	m/min	85 ⁴/mix280 ft)
Rope diameter	19	19 ¾"
FEM classification	3	M5-L2-T-T5

Note If fitted upon request, to drive optional equipment i.e. pull down winch, motor auger cleaners.





Rotary table	m.s.	i.s.		
Nominal max torque	kNm	lbf-ft	153 / 35 MPa	113,000 / 5,080 psi
Set torque	kNm	lbf-ft	131 / 30 MPa	96,600 / 4,350 psi
Max drilling speed	rpm		58,5	
Hydraulic power	kW	HP	153	205
Hex joint passage	-		4” o 5”	

Options and Accessories

Standard equipment

Hoist limit switch on main rope and service rope	On board lighting set
Service rope parking point	Diagnostic panel for hydraulic, electrical and electronic functions
Mast inclination measurement on X & Y axes (digital and analog display)	Electric refuelling pump and hydraulic oil refilling
Automatic vertical mast alignment	Front and top cabin protective grate (FOPS-1 certified)
Depth measuring device on main winch	TOPS certified cabin
Rpm measuring device on rotary	Radio and music player c/w bluetooth
Air conditioning system & heating	Phone charger
Emergency mode of operation for engine	CCS Comacchio Controlling System
Engine diagnostic panel	Rotary auto speed managemment & interactive multiple gear
Transport securing lugs on crawler unit	Tools box kit

Optional equipment

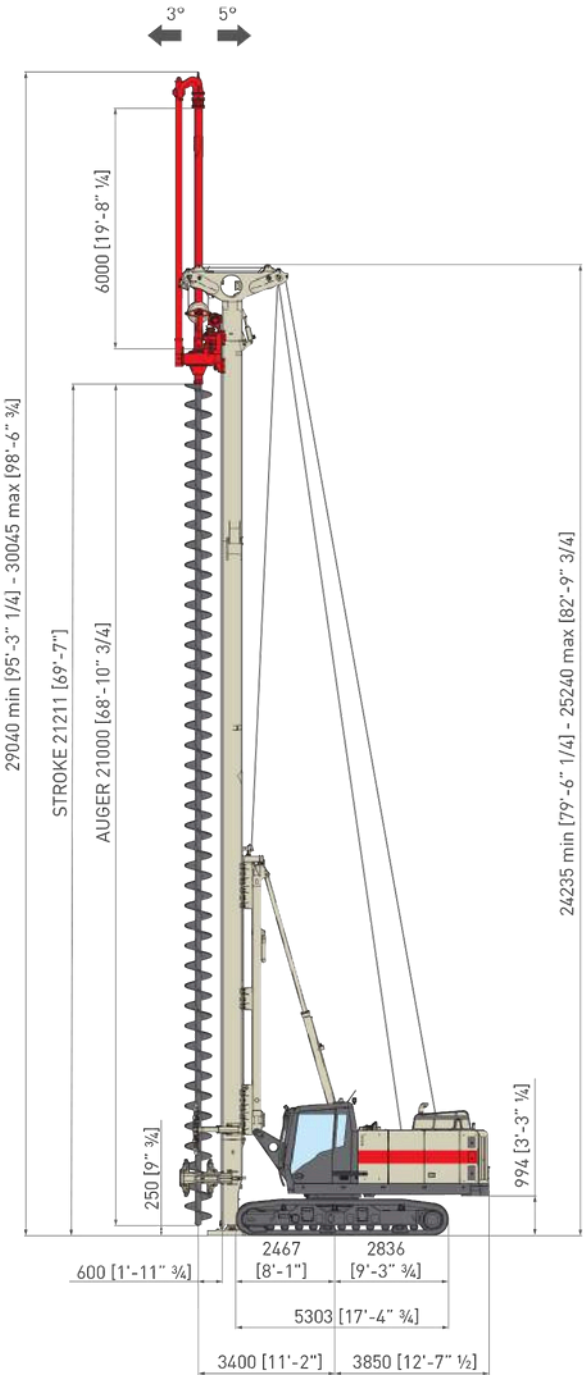
Biodegradable oil	Rubber skirt on auger guide
Pull down winch on rotary	Vibratory equipment for steel cage
Central lubrication system	Washing kit
Swivel for auxiliary rope	Welding equipment & generator
Main and aux winch load cell	Automatic lubricator for rotary guide slides
Auger cleaner (hydraulic roller type or star type)	Data logger

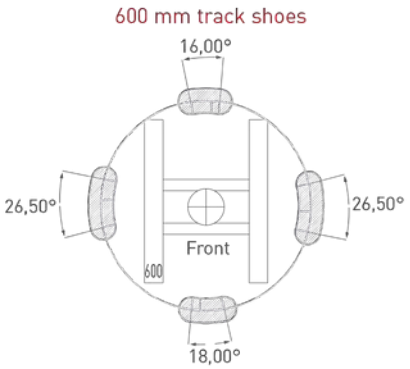
CE conformity kit

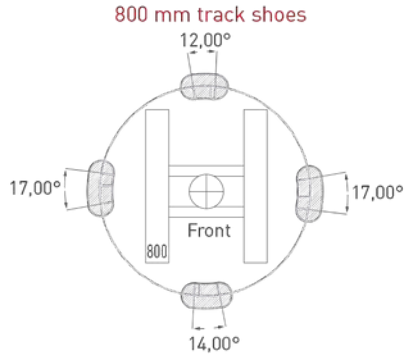
Remote Radio for tracking	Videocamera set
Load Cells Side walkways	Auger cleaner
w/handrails	Rubber skirt on auger guide

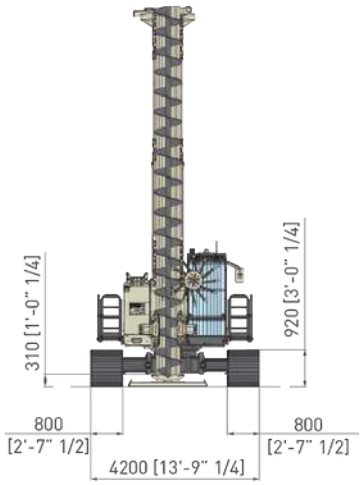
TOPS & FOBS cabin

Overall dimensions





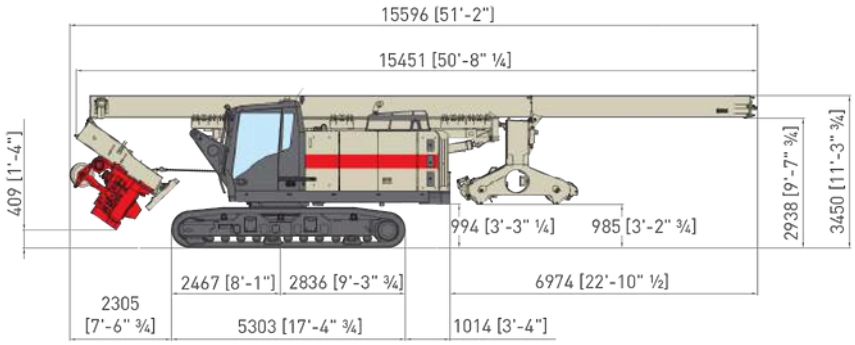


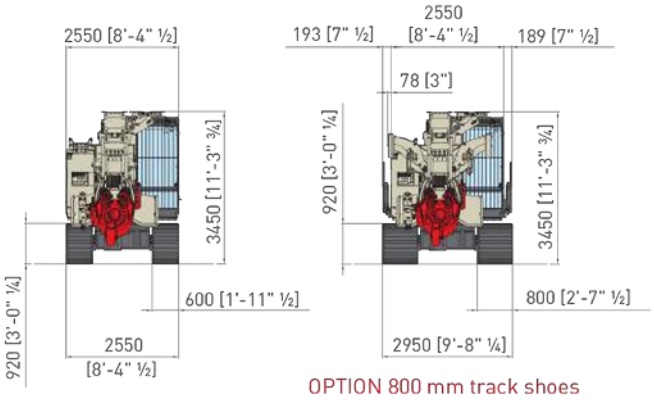


OPTION 800 mm track shoes

CFA (Continuos Flight Auger)	m.s.	i.s.	
Max pile diameter	mm	ft-in	1.000 3’ 3”
Max length of augers	m	ft-in	21 69’
Max length of auger extension	m	ft-in	6 19’ 8”
Max pile depth	m	ft-in	21 + 6 = 27 69’ + 19’ 8” = 89’
Exatraction force	kN	lbs	540 121,396
Crowd force on auger (option)	kN	lbs	45 10,113
Max drill string weight	kg	lbs	4.500 9,900

Overall dimensions





OPTION 800 mm track shoes

Weights and dimensions	m.s.	i.s.		
Transport weight 1	kg	lbs	43.700(2)	96,500
Transport weight 2	kg	lbs	37.350(3)	(2)
Operating weight approx.	kg	lbs	46.000(4)	82,300 (4) (3)
Note				101,50 0

(2) auger extension, star cleaner and auger guide removed

(3) same as Transport weight 1 but rotary and counterweight also removed

(4) with 6 m (19' 8") auger extn, bottom gate & star cleaner; without auger

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