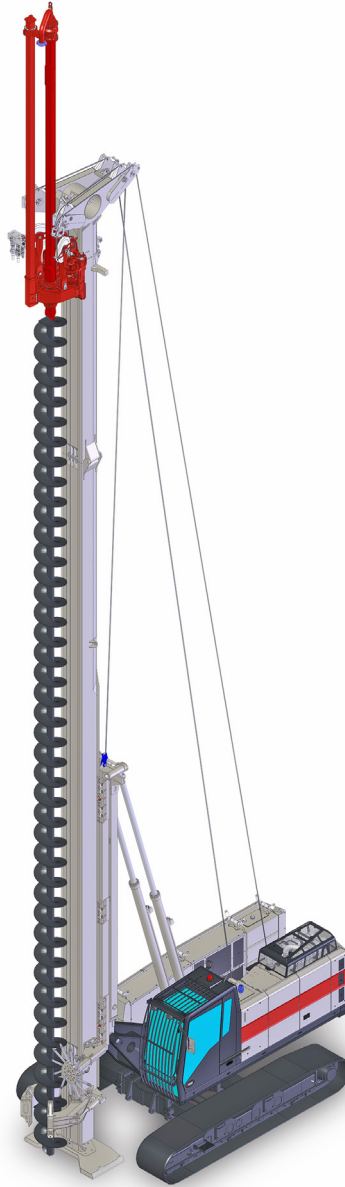


# CHF 500

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Self-Erecting hydraulic piling rig for CFA



**COMACCHIO**

DRILLING HI-TECH

# CHF 500

## DEDICATED RIG FOR CFA DRILLING

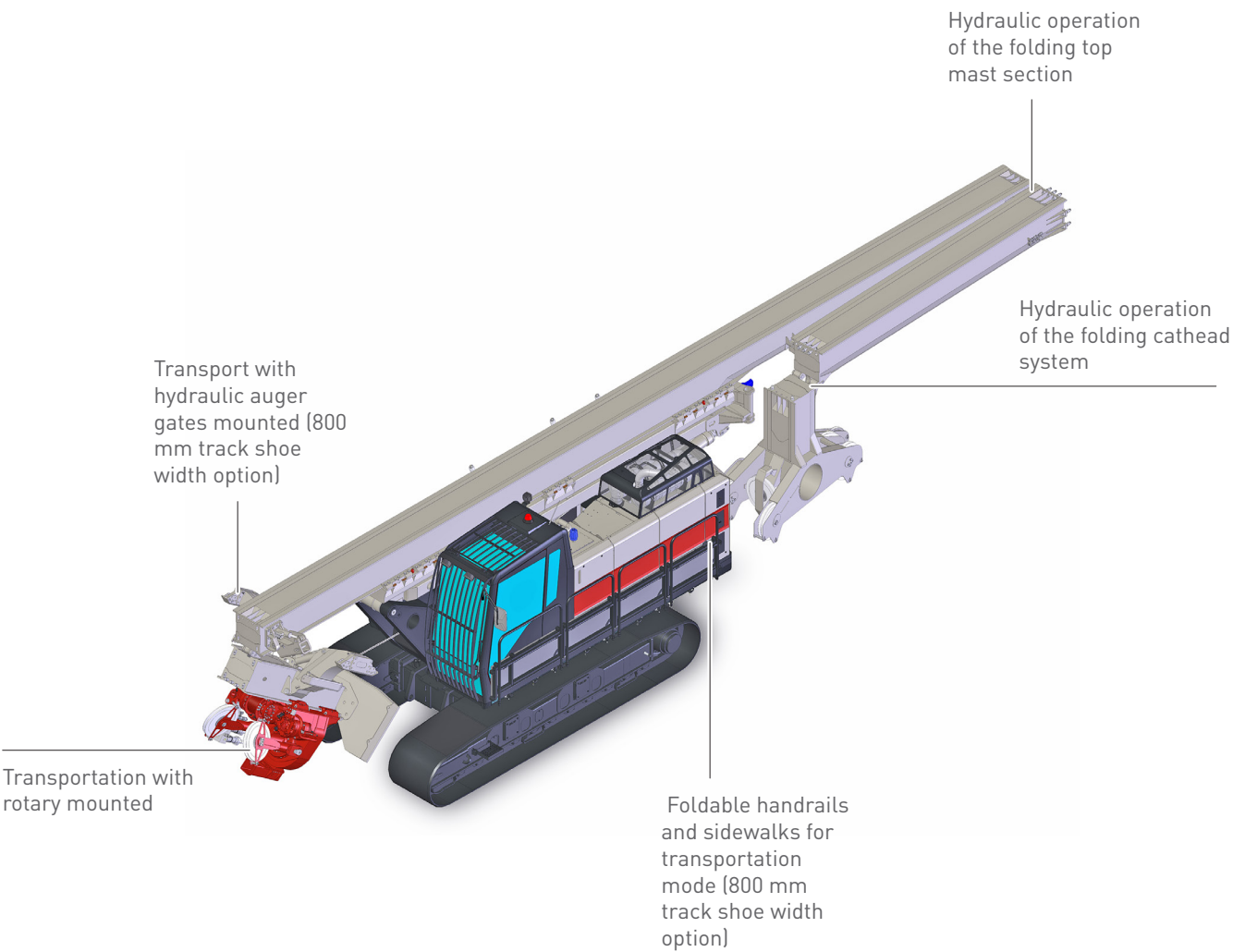
The CHF 500 is a dedicated CFA rig with an operating weight of 46 tons (101,500 lbs). It allows for the construction of CFA piles up to 27 m (89 ft) depth and the ability to drill up to 1.000 mm (3.3 ft) diameter.

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:

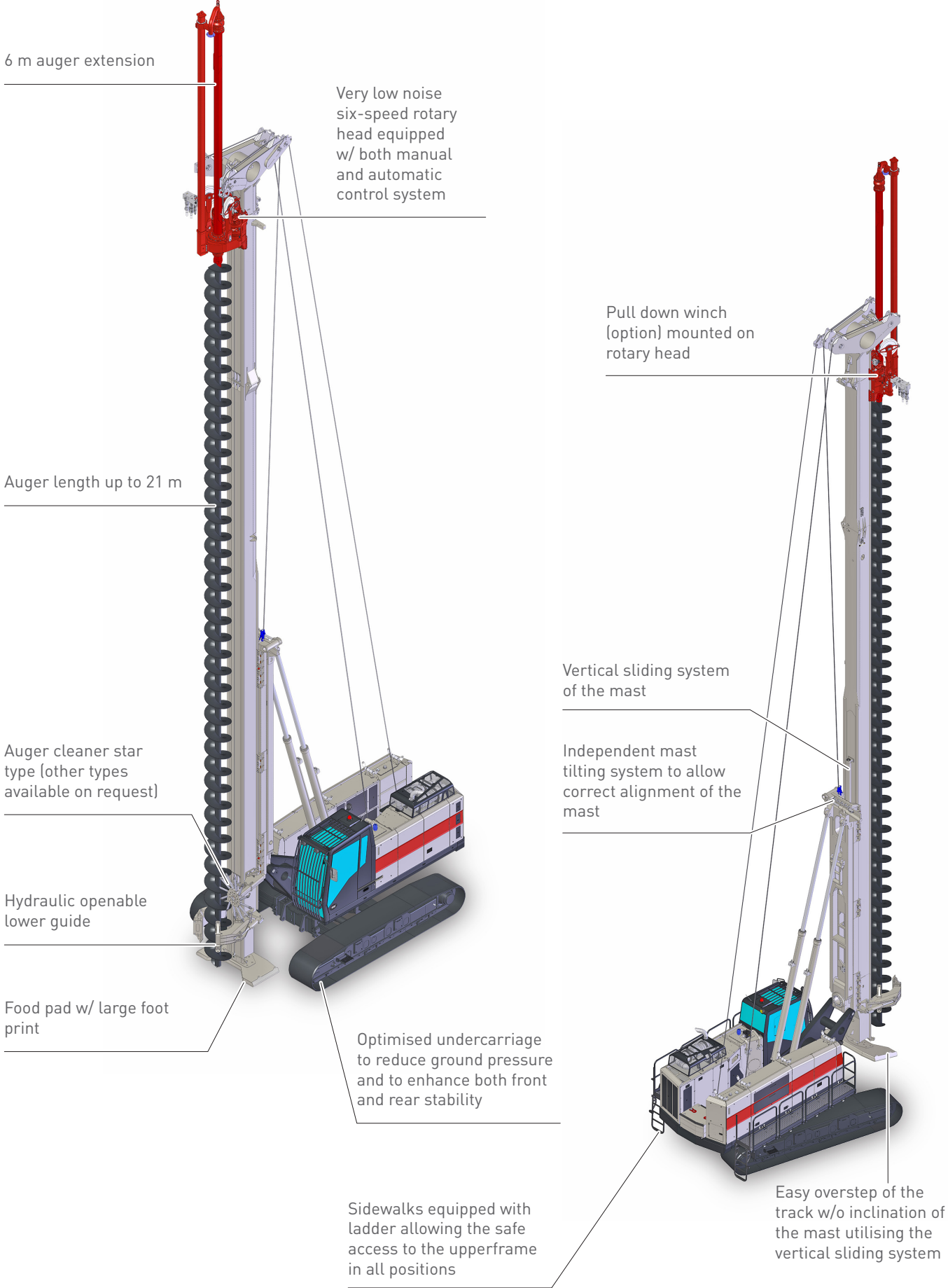
- Fully self-erecting system, to facilitate a fast rig-up and rig-down.
- Easy to transport in one piece.
- Mast support frame allowing for the mast to be easily erected to working position.
- Hydraulic operation of the folding top mast section and cathead, simplifying the rig-up and rig-down and reducing 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 ground 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.



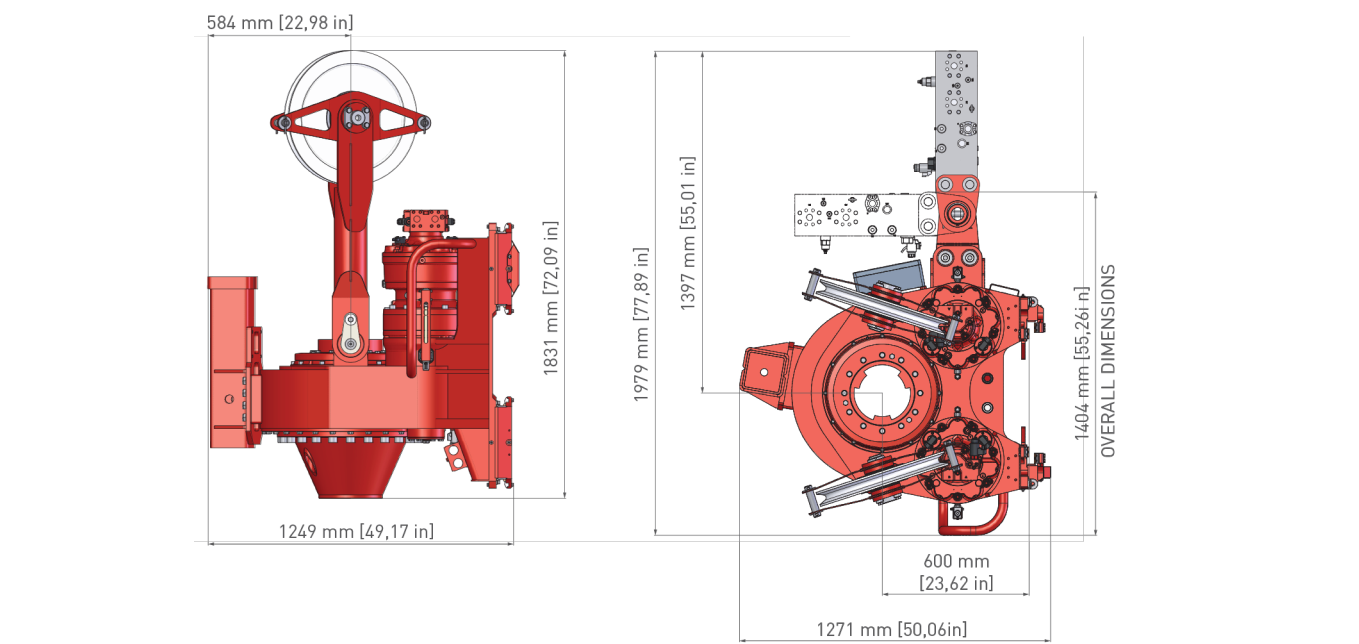
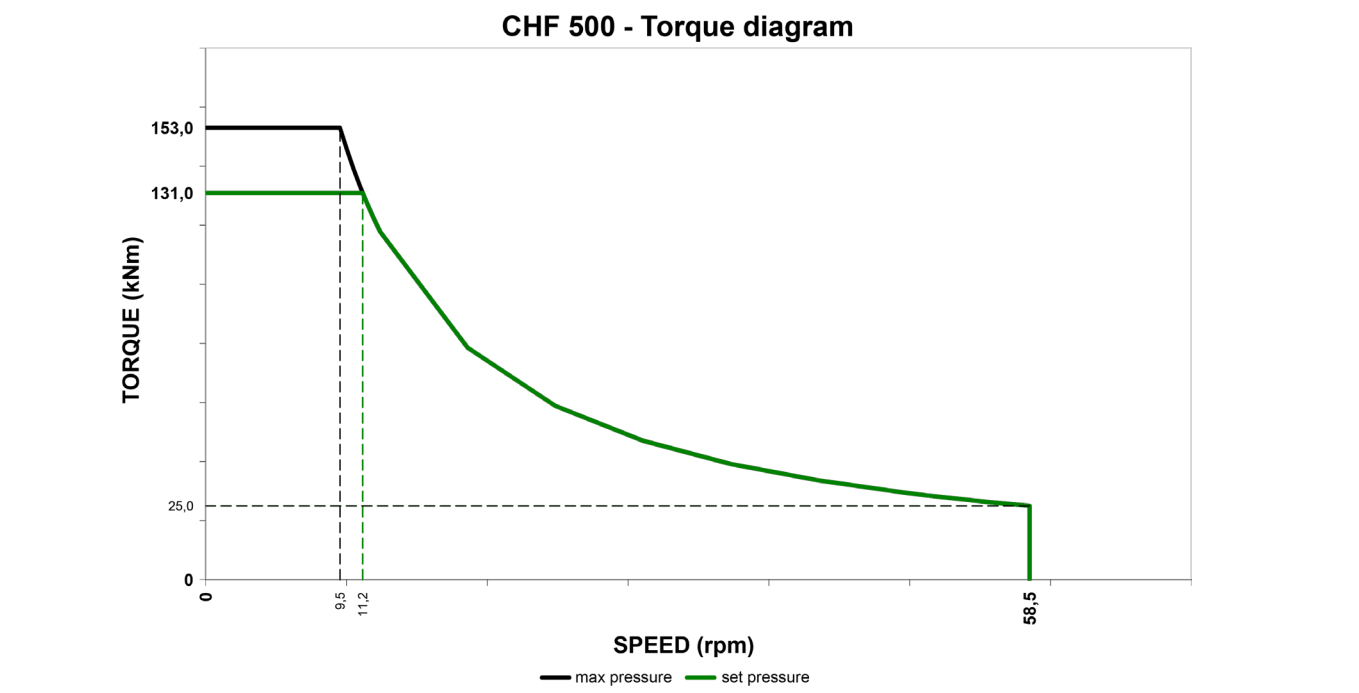
# CHF 500

## Technical Features



Undercarriage		m.s.	i.s.		
Type	-				
		Variable gauge, telescoping side frames			
Track shoe width	mm	ft-in	600	23" 5⁄8	800
31" 1⁄2					
Type	-				
		Triple grouser			
Overall width (retracted side frames)	mm	ft-in	2.550	8' 4" 1⁄2	2.950
9' 8" 1⁄4					
Overall width (extended side frames)	mm	ft-in	4.000	13' 1" 1⁄2	4.200
13' 9" 1⁄4					
Overall length	mm	ft-in	5.300		17' 5"
Centre idler to centre sprocket	mm	ft-in	4.480		14' 8" 1⁄2
Upperframe					
Width	mm	ft-in	2.550		8' 4" 1⁄2
Operators' cabin	-				
		TOPS & FOPS-1 certified, 980 mm (3' 3") wide			
Control system type	-				
		CAN-BUS			
User interface	-				
		12" Touch Screen			
Tail swing radius	mm	ft-in	3.865		12' 8"
Diesel engine					
		High Tech Line			
Make and model	-				
		Cummins QSB6.7			
Emission certification	-				
		EU stage IV / US EPA Tier 4f EU stage IIIA / US EPA Tier 3			
Aspiration	-				
		Turbocharged and charge air cooled			
Power rating (2000 rpm)	kW	HP	201		270
Displacement	cc	in³	6.700		408
Fuel tank capacity	l	gal	500		135
Sound pressure level in cabin (EN 16228-1, Annex B)	-		LP <sub>A</sub> 82 dB (A)		
Sound Power level (2000/14/EC - EN 16228-1, Annex B)	-		LW <sub>A</sub> 108 dB (A)		
Hydraulic system					
Main pumps flow	l/min	gal/min	2 x 214		2 x 56.5
Service pump flow	l/min	gal/min	45 <sup>(1)</sup>		12 <sup>(1)</sup>
Hyd raulic oil tank capacity	l	gal	600		158
Main winch					
Type	-				
		Controlled descent			
1 <sup>st</sup> layer line pull	kN	lbs	135		30,350
Max speed	m/min	ft/min	74		243
Rope diameter	mm	ft-in	22		7⁄8"
Rope layers	-				
		2			
FEM classification	-				
		M5-L2-T5			
Argano Ausiliario					
Type	-				
		Controlled descent			
1 <sup>st</sup> layer line pull	kN	lbs	72		16,200
Max speed	m/min	ft/min	55		180' 5"
Rope diameter	mm	ft-in	18		11⁄16"
Rope layers	-				
		3			
FEM classification	-				
		M5-L2-T5			
Note					

(1) 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"	



# CHF 500

## 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

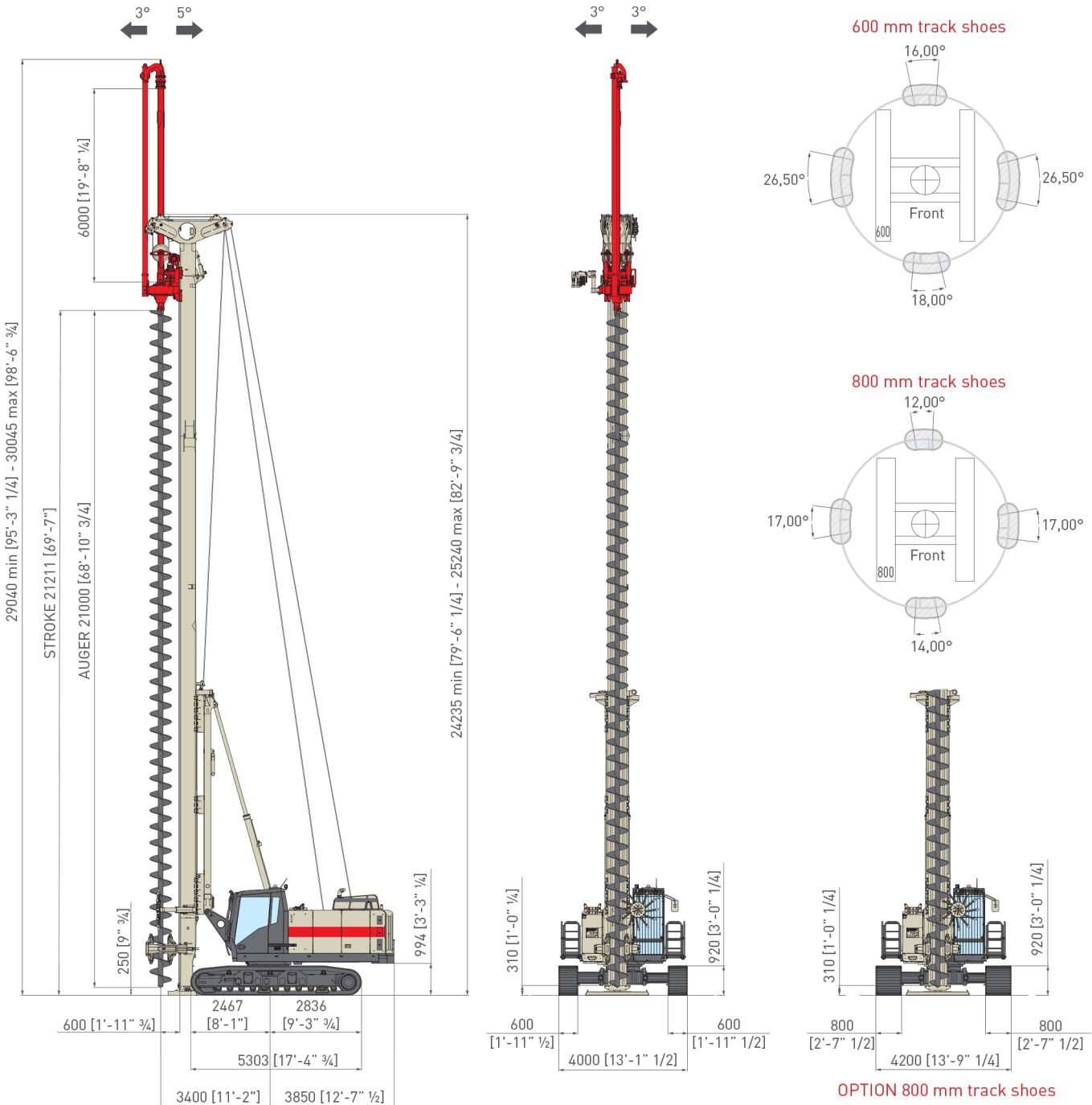
Remote Radio for tracking	Videocamera set
Load Cells	Auger cleaner
Side walkways w/handrails	Rubber skirt on auger guide

## TOPS & FOBS cabin



# CHF 500

## Overall dimensions

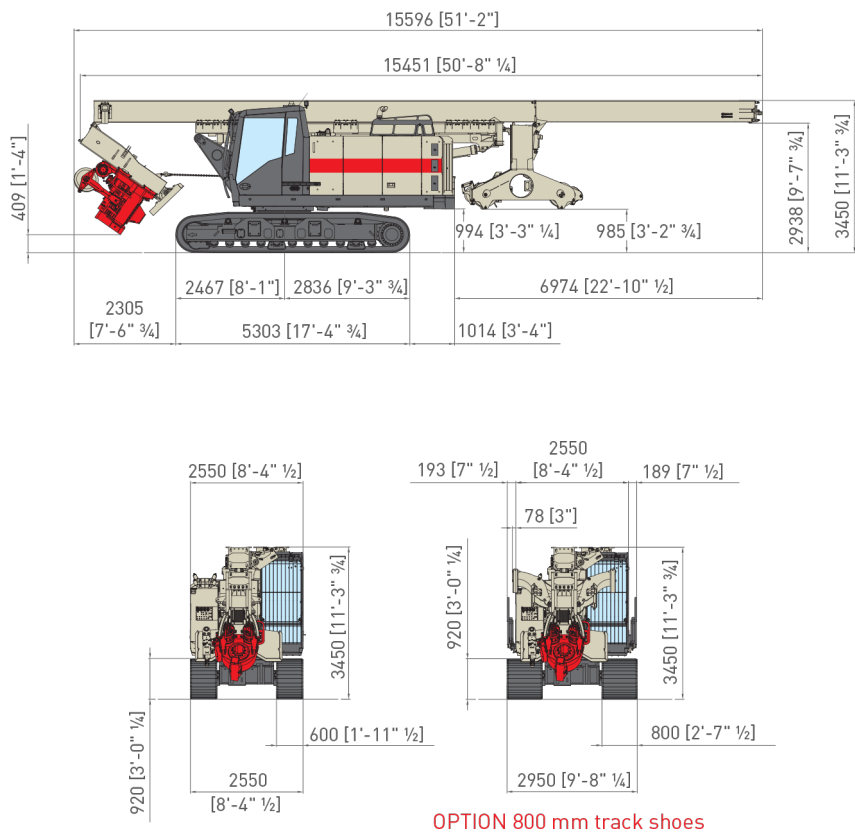


CFA (Continuos Flight Auger)	m.s.	i.s.		
Max pile diameter	mm	ft-in	1.000	3' 3"
Max length of augers	m	ft-in	21	69'
Max length of auger extension	m	ft-in	6	19' 8"
Max pile depth	m	ft-in	21 + 6 = 27	69' + 19' 8" = 89'
Exatraction force	kN	lbs	540	121,396
Crowd force on auger (option)	kN	lbs	45	10,113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

# CHF 500

## Overall dimensions

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

### Note

- (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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