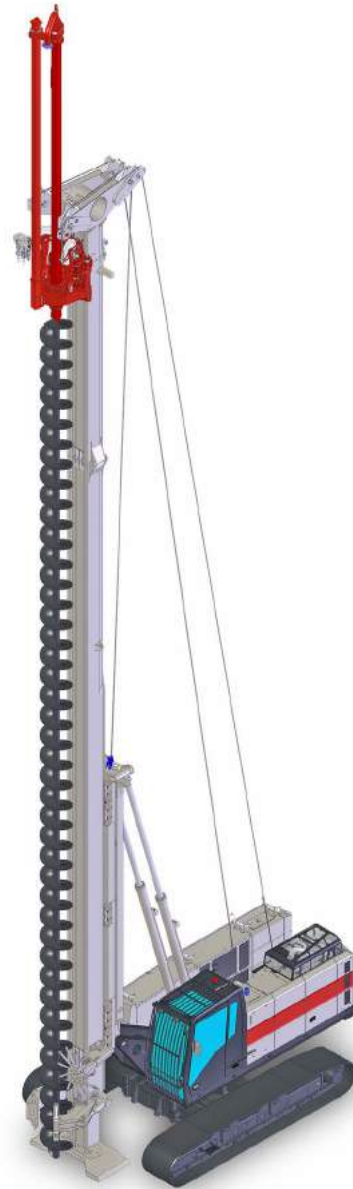


CHF 500

Self-Erecting hydraulic piling rig for CFA



COMACCHIO

DRILLING HI-TECH

CHF 500

DEDICATED RIG FOR CFA DRILLING

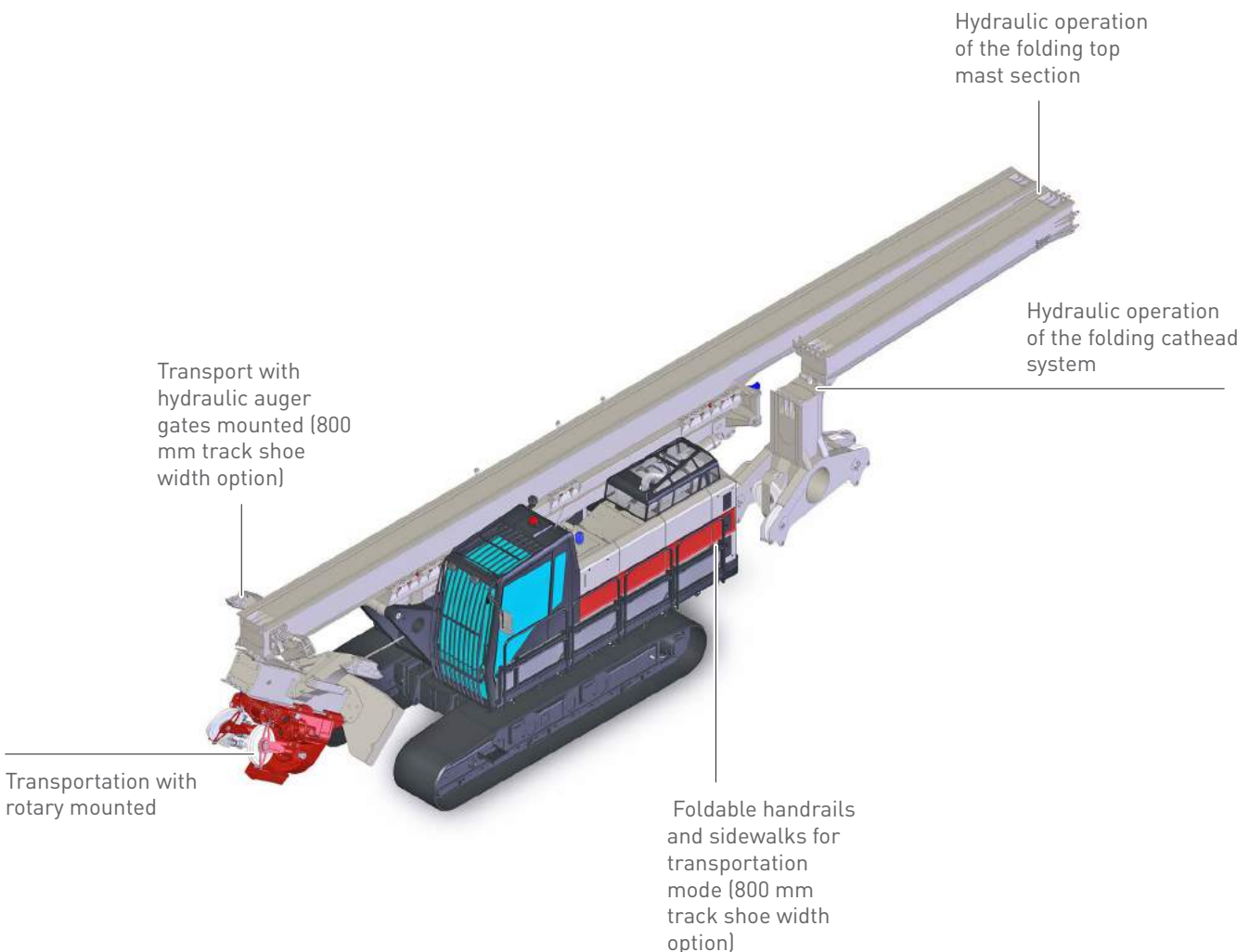
The CHF 500 is a dedicated CFA rig with an operating weight of 46 tons (101,500 lbs). It allows for the construction of CFA piles up to 27 m (89 ft) depth and the ability to drill up to 1.000 mm (3.3 ft) diameter.

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:

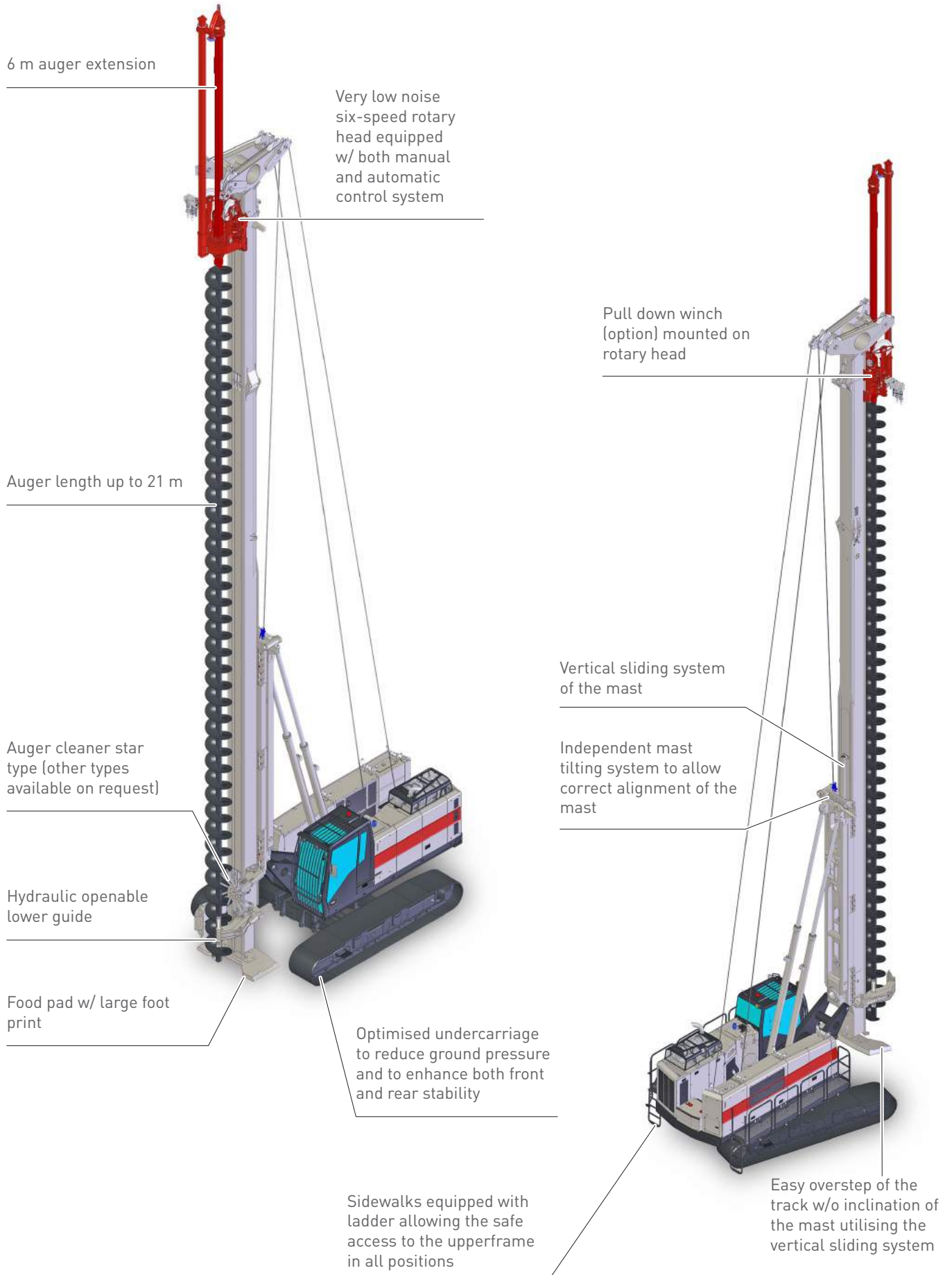
- Fully self-erecting system, to facilitate a fast rig-up and rig-down.
- Easy to transport in one piece.
- Mast support frame allowing for the mast to be easily erected to working position.
- Hydraulic operation of the folding top mast section and cathead, simplifying the rig-up and rig-down and reducing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



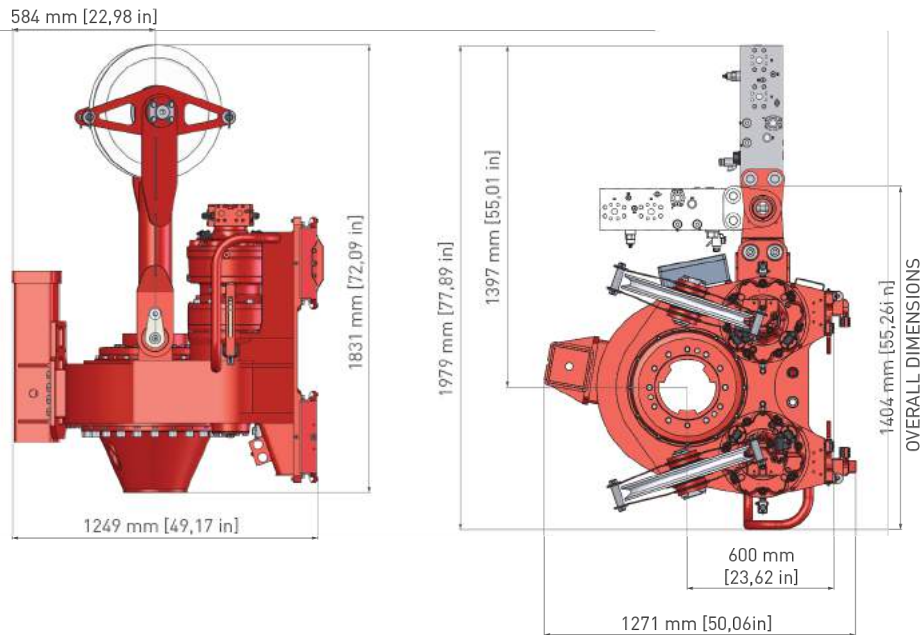
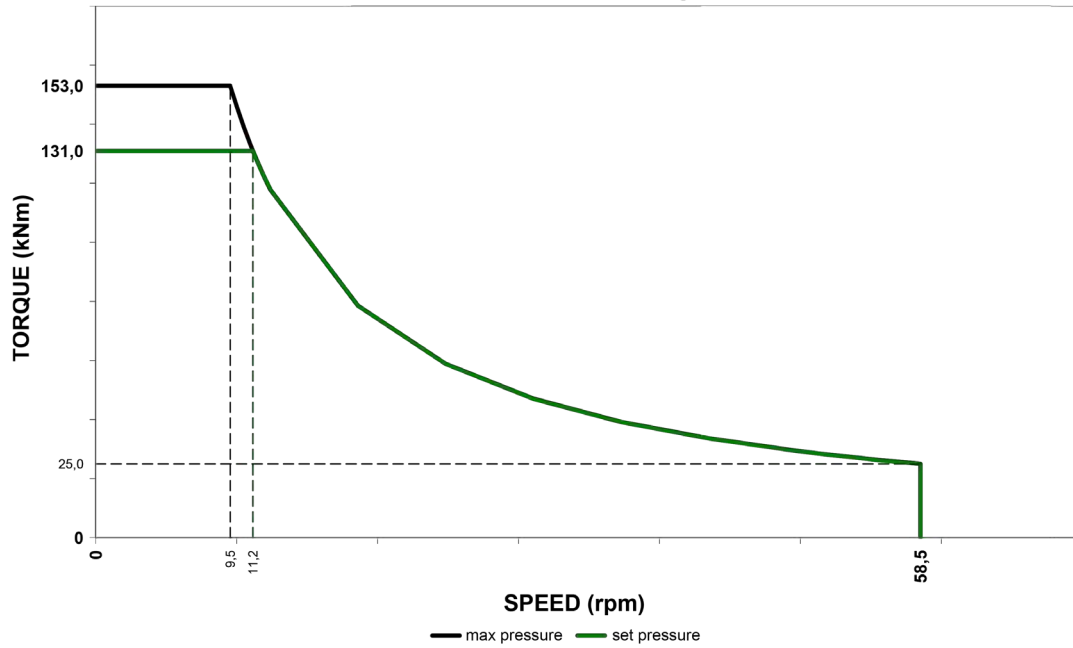
CHF 500

Technical Data

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 <i>High Tech Line</i>					
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	in ³	6.700 408		
Fuel tank capacity	l	gal	500 135		
Sound pressure level in cabin (EN 16228-1, Annex B)	-	LP _A 82 dB (A)			
Sound Power level (2000/14/EC - EN 16228-1, Annex B)	-	LW _A 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 ⁽¹⁾ 12 ⁽¹⁾		
Hydraulic oil tank capacity	l	gal	600 158		
Main winch					
Type	-	Controlled descent			
1 st 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 st 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.

CHF 500 - Torque diagram



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 management & 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

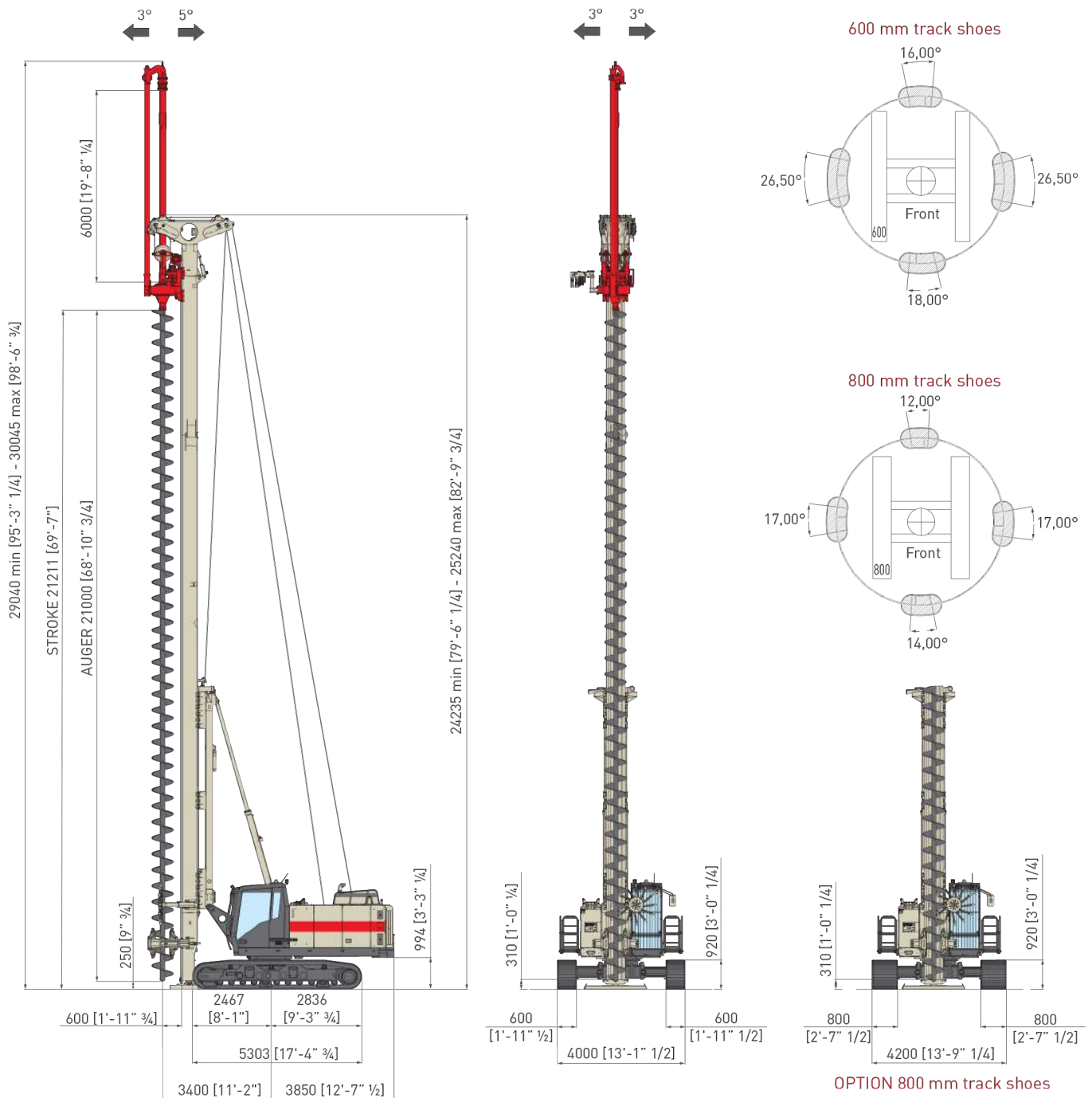
Remote Radio for tracking	Videocamera set
Load Cells	Auger cleaner
Side walkways w/handrails	Rubber skirt on auger guide

TOPS & FOBS cabin



CHF 500

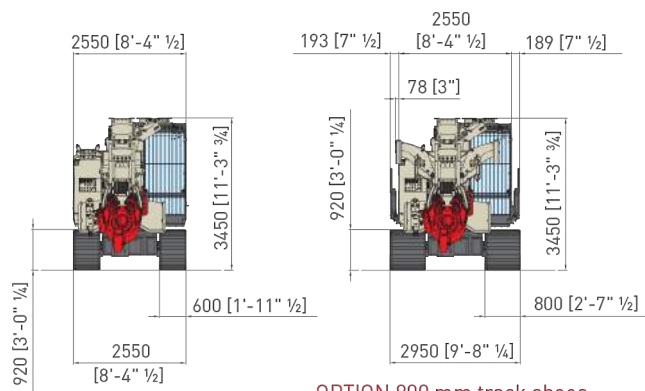
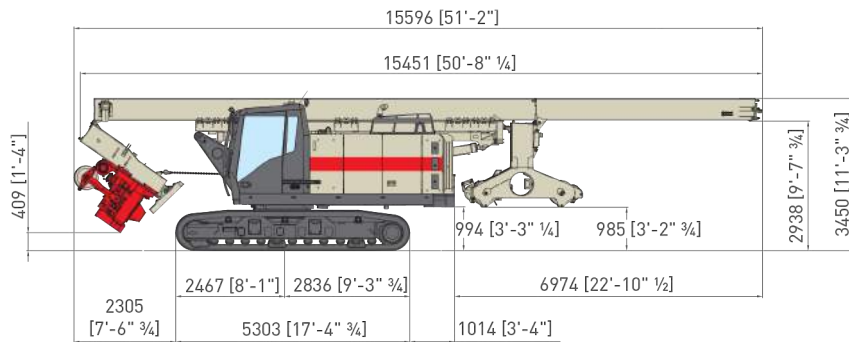
Overall dimensions



CFA (Continuous Flight Auger)	m	s.	ft-in	
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'
Extraction 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



OPTION 800 mm track shoes

Weights and dimensions

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

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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