



The HR 420-800 is our biggest model, and has been specially designed and built for carrying out works requiring large bore diameters at great depths. The powerful drilling torque exerted by the HR 420 - 800, that reaches a maximum nominal torque of 800 KNm, enables the drilling insertion and extraction of casing tubes up to a maximum diameter of 2500 mm and 3000 mm augers and buckets. The HR 420 - 800 is not limited only to the conventional kelly bar drilling system, but is able to perform Continuous Flight Auger (CFA) Diaphragm Walling, and Driven piles by hydraulic hammers. Depending on your requirements, the HR 420 - 800 can be equipped with a cylinder pulldown system (CP), or by our THD system controlling the rotary by a third winch, that allows the rotary to work along the entire length of the mast.

Working Characteristics

Works with Augers & Buckets:

Max diameter	3000 mm	10 ft
Max diameter with casings	2500 mm	8 ft
Depths	40 - 50 - 60 - 80 - 100 m	131 - 164 - 197 - 263 - 328 ft

Works with CFA:

Max diameter	1500 mm	5 ft
Depths	35 m	115 ft

Casing Oscillator:

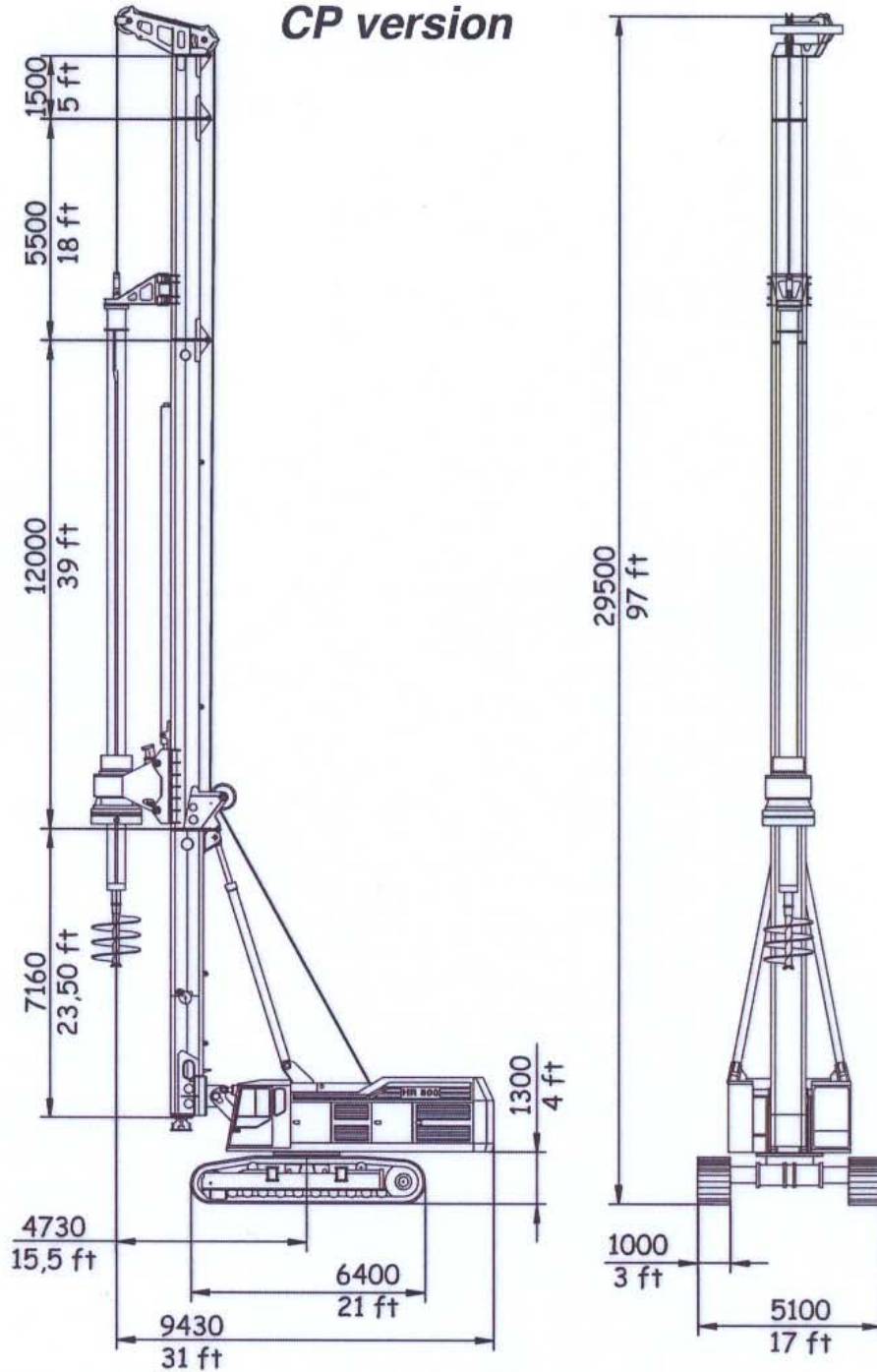
Max. diameter	2500 mm	8 ft
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Diaphragm Walling:

Max size	1200 x 3000 mm	4 x 10 ft
Depths	30 - 50 m	98,5 - 164 ft



CP version



Technical Data

Rotary:

Working torque (nominal)	420 KNm	303,786 ftlbs
Working torque with MCS (nominal)	768 KNm	567,000 ftlbs
Rotary pulldown/pullback	400 KN	67,500 lbs
Unloading speed	130 rpm	
Rotary stroke	7000 mm	23 ft

Winches:

Main winch nominal pullback	25000 / 30000 daN	56,200 / 67,500 lbs
Auxillary winch nominal pullback	10000 / 12000 / 18000 daN	22,500 / 40,500 / 45,000 lbs

Diesel Engine:

CATERPILLAR C15 ACERT

Power	392 KW @ 2,100 rpm	525 HP @ 2,100 rpm
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Hydraulic Installation:

Hydraulic oil tank:	800 liters	211 gal
Fuel Tank	600 liters	159 gal

Expandable Crawlers:

Length	6,400 mm	21 ft
Width	3500 - 5100 mm	11,5 ft - 17 ft
Shoes	1000 mm	3,3 ft

Approx. Weight	135 tons	297,700 lbs
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Working Characteristics

Works with Augers & Buckets:

Max diameter	3000 mm	10 ft
Max diameter with casings	2200 mm	7 ft
Depths	40 - 50 - 60 - 80 - 100 m	131 - 164 - 197 - 263 - 328 ft

Works with CFA:

Max diameter	1500 mm	5 ft
Depths	35 m	115 ft

Casing Oscillator:

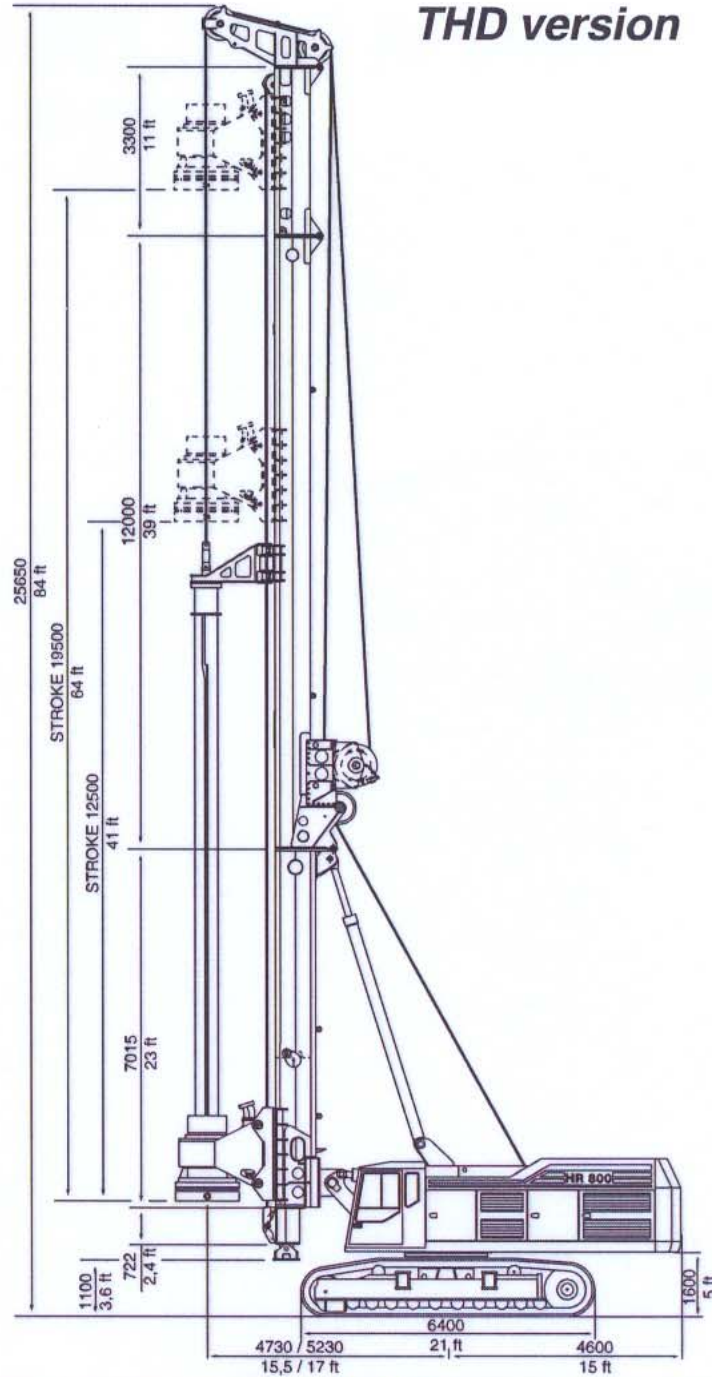
Max. diameter	2500 mm	8 ft
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Diaphragm Walling:

Max size	1200 x 3000 mm	4 x 10 ft
Depths	30 - 50 m	98,5 - 164 ft



THD version



Technical Data

Rotary:

Working torque (nominal)	420 KNm	303,786 lbsft
Working torque with MCS (nominal)	768 KNm	567,000 lbsft
Rotary pulldown/pullback	400 KN	67,500 lbs
Unloading speed	130 rpm	
Rotary stroke	12500 / 19500 mm	41 / 64 ft

Winches:

Main winch pullback	25000 / 30000 daN	56,200 / 67,500 lbs
Auxillary winch pullback	10000 / 12000 / 18000 daN	22,500 / 40,500 / 45,000 lbs

Diesel Engine:

CATERPILLAR C15 ACERT

Power	392 KW @ 2,100 rpm	525 HP @ 2,100 rpm
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Hydraulic Installation:

	6 pumps	
Hydraulic oil tank:	800 liters	211 gal
Fuel Tank	600 liters	159 gal

Expandable Crawlers:

Length	6,400 mm	21 ft
Width	3500 - 5100 mm	11,5 ft - 17 ft
Shoes	1000 mm	3,3 ft
Approx. Weight	135 tons	297,700 lbs

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