

# WIRTH ECOdrill 40

Rotary Hydraulic Foundation Drill Rig



## MAIN FEATURES:

Carrier:	Crawler Type undercarriage w/ expandable tracks
Undercarriage Footprint:	Length - 20 ft. (5950 mm) x Width 16.5 ft. (5000 mm) (Extended)
Operating Weight:	180,000 – 200,000 lbs (100 Ton Class)
Torque:	89,000 – 290,000 lbft-ft. (123 - 400 kNm)
Depth:	200 ft. (76 M)
Max. Diameter:	10 ft. (3000 mm)
Optimal Diameter:	48" - 72" (1200 mm – 1830 mm)
Material:	All
Crowd Pressure:	91,000 lbf. (405 kN)
Tower Height:	79 ft (24.125 Meters)



## ECOdrill 40

### Carrier (with extending/retracting device)

Crawler type, hydraulic driven, weight	64 to.	63 t
Engine power	364 kW/2200 rpm	364 kW/2200 min <sup>-1</sup>
Oil delivery main pumps	2 x 100 USG	2 x 380 l/min
Operating pressure	4550 psi	320 bar

(Technical data with cable-operated excavator WT 40)

### Drilling mast, standard

Mast height	79'	ca. 24 m
Hook load	59 to.	580 kN
Hook load jib	12,2 to.	120 kN
Pulling force at rotary gear with mast supported	59 to.	580 kN

### Mast support

Stroke	71"	1800 mm
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### Advance system

Stroke	25'	7,7 m
Thrust	32 to.	315 kN
Pull	42,7 to.	420 kN
Speed: drilling push down	1,1"/sec	2,7 cm/s
drilling return stroke	1,9"/sec	4,7 cm/s
rapid push down	9,84"/sec	25 cm/s
rapid return stroke	17,7"/sec	45 cm/s

### Rotary gear

1st speed: torque (casing)	290.000 ft lb	400 kNm
speed	9 rpm	9 min <sup>-1</sup>
2nd speed: torque (drilling)	257.000 ft lb	355 kNm
speed	19 rpm	19 min <sup>-1</sup>
3rd speed: torque	89.000 ft lb	123 kNm
speed	55 rpm	55 min <sup>-1</sup>
Pass (I.D.)	24"	600 mm

### Main winch

Pulling force: 1st rope layer	30 to.	290 kN
Rope speed: 1st rope layer	269'/min	82 m/min
Reeling capacity	dia. 1 <sup>1</sup> / <sub>8</sub> " 344'	Ø 30 mm 105 m

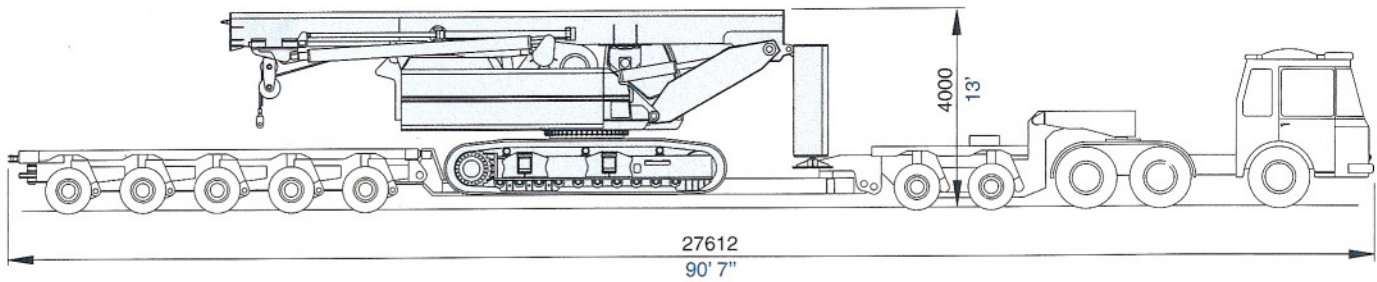
### Auxiliary winch

Pulling force: 1st rope layer	12,2 to.	120 kN
Rope speed: 1st rope layer	466'/min	136 m/min
Reeling capacity	dia. 5/8" 344'	Ø 22 mm 110 m

### Transport weight

without kelly-bar, power swivel, counterweight and pull-down cylinder	approx. 66 to.	ca. 65 t
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### Casing oscillator on request (VRM 150-KL)



**Drilling data with standard mast without casing oscillator**

drilling dia. max.	118 "	3000 mm
Kelly-bar for drilling depth	85 ' 118 '	26 m 36 m
casing joint length max.	23 ' 23 '	7 m 7 m

**with casing oscillator**

drilling dia. max.	59 "	1500 mm
Kelly-bar for drilling depth	85 ' 118 '	26 m 36 m
casing joint length max.	20 ' 20 '	6 m 6 m

**with continuous flight-auger (CFA)**

drilling dia. max.	47 "	1200 mm
drilling depth, continuous cycle	57 '	17,5 m

