# Rotary Drilling Rig

# **TR150D**



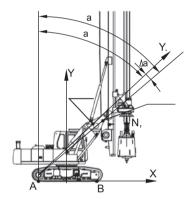


#### **Electric system**

Wireless transmission system and GPS remote service

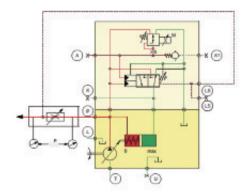


> The stability of drilling rig monitoring system



#### **Hydraulic System**

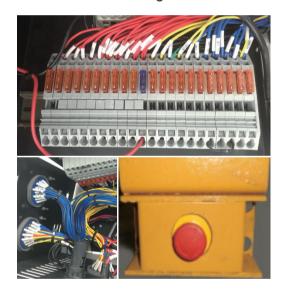
- Caterpillar's main hydraulic system
- > The main pump negative flow control system
- The auxiliary pump load sensitive control system



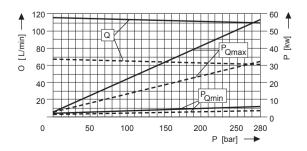
> Construction monitoring system



Emergency switch(optional) and concentration of wiring harness



Main hydraulic tank and auxiliary hydraulic oil tank, the hydraulic oil cooling and cleaning easier

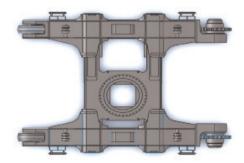


- ➤ The main winch hydraulic oil confluence technology improve the winch speed by 50%
- Crowd force stepless adjustment improve construction efficiency
- ➤ The rotary drive self-adaptive drilling system and high speed spin-off system improve drilling efficiency
- Reducer, motor, pump, valve configuration of the international first-class brand



#### **Mechanical System**

- > Kelly drilling and CFA drilling
- > Caterpillar Undercarriage



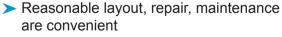
➤ The broken line reel technology and the winch patent technology make the service life of wire rope improve greatly



Caterpillar Undercarriage structure and the mast structure, all materials are special highstrength steel



Rotary Drive multistage damping structure improves the borehole verticality and structural life





Cross roller bearing improves the drilling accuracy significantly



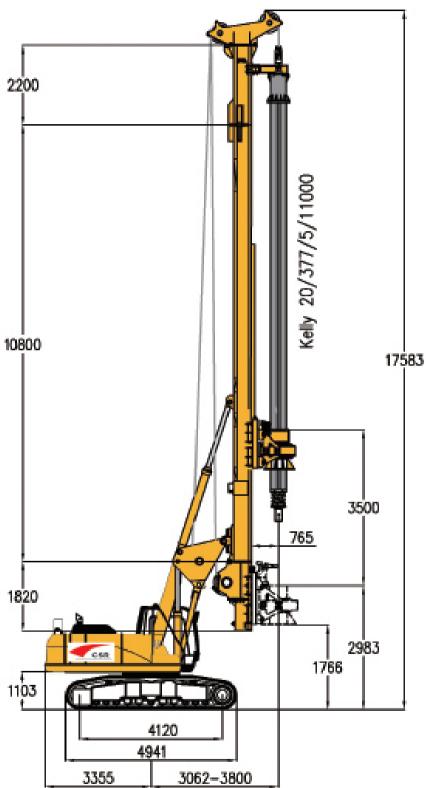
### **Dimensions**

The TR150D rotary drilling rig has an operating weight of approx 51 ton. It is suited for:

- Rotary drilling
- Drilling cased boreholes (installation of casing by rotary drive))

TR150D Rotary Drilling Rig is mainly used in the construction of civil and bridge engineering, which adopts advanced intelligent electronic control system and load sensing type pilot control hydraulic system, the whole machine is safe and reliable.





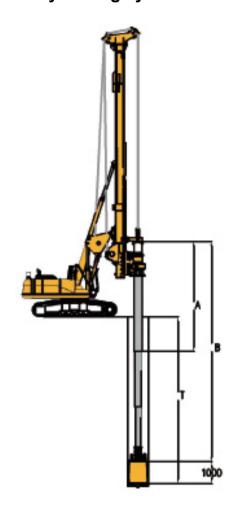
### **Technical parameters**

С	rowd Cylinder
Overall weight	48 ton
Operation weight (with kelly )	51 ton
Rotary Drive	
Nominal torque	150 kNm
Speed of rotation	6-35 rpm
Crowd system	
Crowd force push/pull	100/140 kN
Stroke (kelly system)	3500 mm
Speed down/up	5/6 m/min
Main winch	
Line pull (1st layer)	138 kN
Rope diameter/length	26 mm/76 m
Line speed max	70 m/min
Auxiliary winch	
Line pull (1st layer)	50kN
Enic pan (10t layer)	JUNIA
Rope diameter/length	16 mm/45m
	33
Rope diameter/length	16 mm/45m

# Standard module

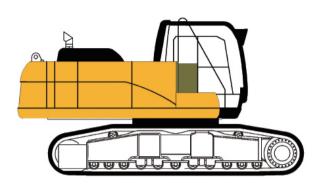
- Rotary drive (two reduction gears), selfadaptive drilling
- Hoist limit switch on main and auxiliary winches
- PLC processor and standard monitor unit
- Display of pump pressures and fault messages
- Mast inclination measurement on X/Y axes
- Display of drilling depth
- Swing caution light and stability monitoring system

#### Kelly drilling system



Drilling depths				
Friction kelly bar	A(m)	B(m)	T(m)	
Ф377-5х11	11	52.8	50.2	
Ф377-5х10	10	48.4	45.8	
Ф377-4х11	11	42.4	40	
Ф377-4х10	10	38.4	36	
Interlocking Kelly bar				
Ф377-4х11	11	42.4	40	
Ф377-4х10	10	38.4	36	
Ф377-3х11	11	32	29.6	
Ф377-3х10	10	28	25.6	
Max. Drilling diameter 1500 mm				

## **Base Carrier CAT323D**

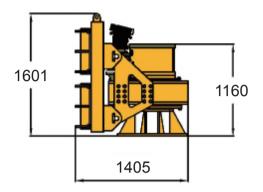


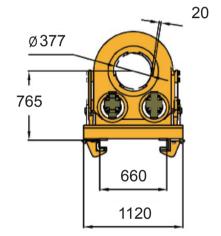
Engine	
Rated output	117kW@1800rpm
Exhaust emission standard	Tier Ⅱ
Diesel tank	400L
Ambient air temperature	-20°up to 40°
Sound pressure level in cabin	76 dB
Sound power level	110 dB

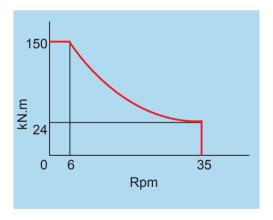
Hydraulic system	
Hydraulic power output	88 kW
Hydraulic pressure	350 bar
Flow rates (main pump)	2x205 l/min
Flow rates (auxiliary pump)	90 l/min
Hydraulic oil main tank capacity	400 I
Hydraulic oil auxiliary tank	200.1
capacity	200

Undercarriage		
Crawler type	TC320VH	
Track width (retracted/extended)	2200mm/3500mm	
Overall width of crawlers	3000mm/4300mm	
(retracted/extended)		
Width of track shoes	800 mm	
Overall length of crawlers	4941 mm	
Traction force	380 kN	
Travel speed	1.6 km/h	

#### **Rotary Drive**



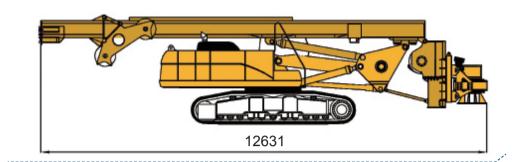




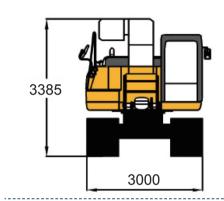
# Rotary Drive Standard equipment

- Integrated Kelly damping system (Four level damping)
- Exchangeable Kelly drive adapter
- Exchangeable Kelly drive keys
- Self-adaptive drilling system

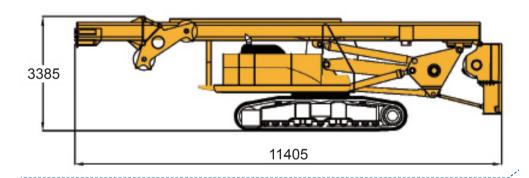
# Transport data



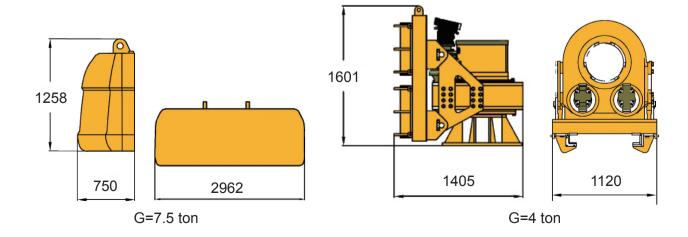
G=45 ton



G=24.8 ton



G=33.5 ton















SKC Mühendislik San. ve Tic. Ltd. Şti.

İMES Makina İhtisas OSB, Küçük Sanayi Sitesi, C5 BLOK, NO: 2 Dilovası-Gebze Kocaeli /TURKEY

Tel: +90 262 502 06 54 Gsm: +90-532 470 30 10 Fax: +90 262 502 06 57

E-mail: info@skcmakina.com Web: www.skcmakina.com







All technical data are purely indicative and subject to change without notice

Other info: