



Canrig Top Drives

Over the last 35 years, Canrig has become the most recognized brand in the top drive market, with over 3000 systems delivered worldwide.

Comprised of both Canrig and Tesco models, our company designs and manufactures top drive systems for sale or for rent and we stand behind our products with a globally established, dedicated parts and service team available to our customers through Rigline 24/7™.

Canrig offers a full range of critically engineered, portable and integrated top drive systems for most land and offshore rigs. This includes top drives in every size and configuration to meet any drilling application whether marine, desert, jungle or arctic environments. Our top drive systems have built-in capabilities for expanded drilling technologies such as ROCKit®, REVit®, Automated Directional Drilling and Equipment Condition Monitoring™, all available on the Rigtelligent™ controls platform.

Canrig top drives are engineered and manufactured to API 8-C standards and carry the API monogram. With the lowest total cost of ownership, over the life of the asset, our quality top drive systems set the standard for safety, reliability and efficiency.

Unparalleled products and technology, coupled with superior after-market service and support have firmly placed Canrig at the forefront of the drilling equipment industry.

SYSTEM CONFIGURATIONS

▶ LAND

PORTABLE SYSTEMS

- Exclusive folding torque guide for fastest and safest rig-up
- Independent VFD house can easily be connected to the rig power source
- Optional engine-generator system for mechanical or underpowered rigs
- Land configuration skid with Top Drive Support Unit (TDSU), Grasshopper, cable tray and additional spare parts storage
- Complete system transports in two self-contained loads

INTEGRATED SYSTEMS

- Integrated and stand-alone VFD options
- All electric and hydraulic controls can be fully integrated into the rig's master control system
- Torque can be reacted through mast legs, eliminating the need for torque guide
- Top drive can be permanently fixed into the mast eliminating the need for removal during transport
- Multiple operator console options

▶ OFFSHORE

- Fixed torque guide sized with mast or wide flange track
- Highly adaptable to a variety of torque tracks
- Retract feature for pipe handling
- Design includes work platforms for easy, safe access to the top drive
- Corrosion-resistant coatings and sub assemblies
- Load capabilities to 1250 tons
- ABS and ATEX certification available

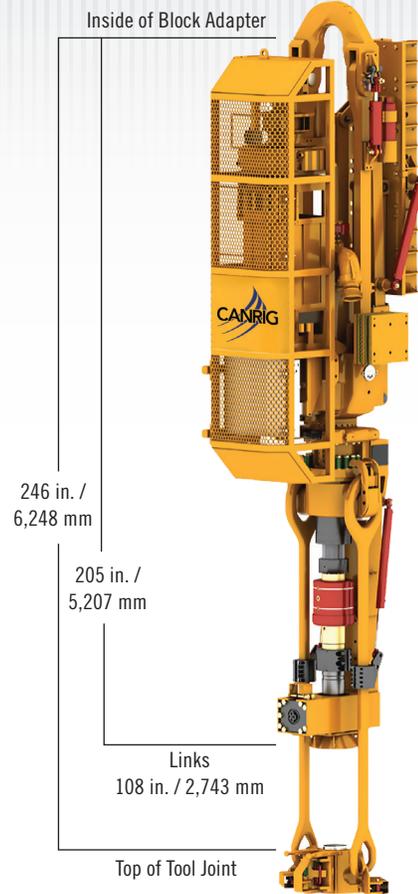
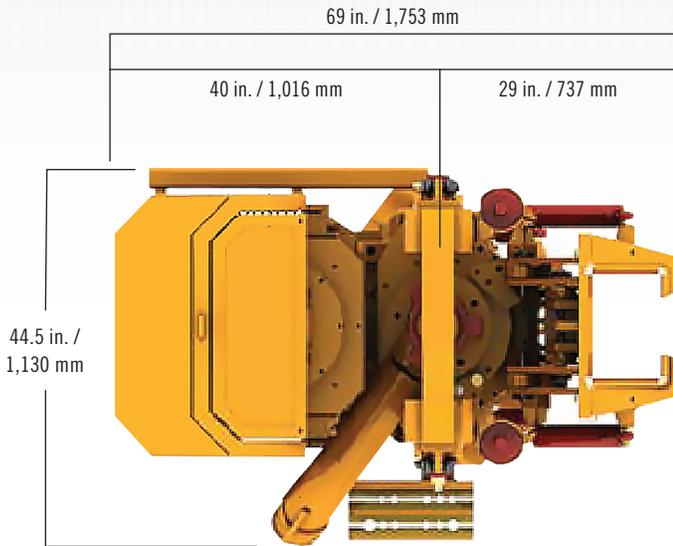
► FEATURES AND BENEFITS

Each top drive is equipped with premium features that deliver both safety and reliability. These features make the Canrig top drive the only one of its kind in the industry and creates a system that ensures maximum efficiency.

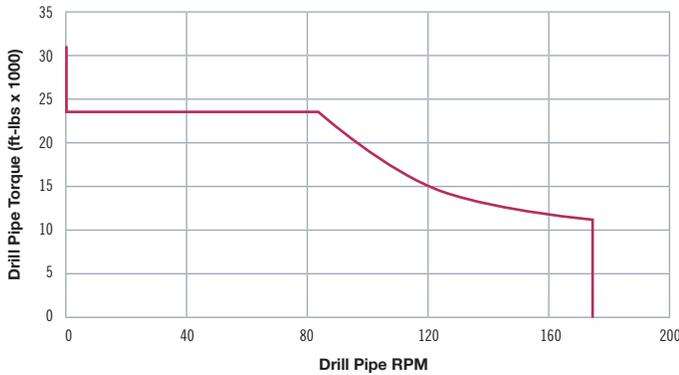
FEATURES	DESCRIPTION	BENEFITS
RIGTELLIGENT™	The Rigtelligent™ controls platform is designed to further enhance drilling performance through intuitive, icon-based navigation screens that adjust based on current rig activity.	<ul style="list-style-type: none"> Optimizes the drillers ability to navigate between operations Enables the automation of repetitive tasks and alerts the driller of any potential issues. Ability to integrate with other downhole technologies for streamlined management
FLOATING QUILL*	The industry exclusive floating quill allows for soft stabbing and passive thread compensation without external systems.	<ul style="list-style-type: none"> Simplifies driller's task during connections Shorter connection times and improved thread life Simplified quill replacement
INTEGRATED SWIVEL & COUNTERBALANCE SYSTEM*	The integral swivel and counterbalance system eliminates the need for a swivel and hook. It allows for easy connection to the travelling block with no external counterbalance system required.	<ul style="list-style-type: none"> Reduces installation time and does not require expensive modification to the travelling block. No moving parts reduce maintenance & repair cost
HYDRAULIC TORQUE BOOST*	The hydraulic torque boost provides additional make-up or break-out torque when combined with the motor torque.	<ul style="list-style-type: none"> Provides up to 50% more torque when needed Continuous rotation up to 5 RPM
POLYMER SLIDE GUIDE RUNNERS*	The polymer slide guide runners replace the wheel and bogie systems. The polymer acts as a sound and shock absorber during drilling operations.	<ul style="list-style-type: none"> Reduces noise level Eliminates moving parts for reduced maintenance and repair costs
PRESSURIZED UPPER SEAL*	The pressurized upper seal has redundant sealing with pressurized lube oil to keep out contaminants.	<ul style="list-style-type: none"> Extends top drive bearing and gear life Reduced maintenance and repair cost
ADVANCED DIAGNOSTICS SYSTEM (ADS)*	Monitors strategic points on the top drive unit and its associated control and power system, making intelligent assessments of malfunctions and reporting possible causes.	<ul style="list-style-type: none"> Reduces downtime and streamlines troubleshooting Allows for easy shutdown of non-essential functions in case of equipment failure
TRAVELING EQUIPMENT ANTI-COLLISION (TAC) SYSTEM	The TAC system sounds an alarm and can stop motion whenever contact between certain rig components (travelling equipment and crown, floor, racking board) is about to occur.	<ul style="list-style-type: none"> Improves safety and prevents equipment damage by stopping the travelling equipment before a collision occurs
ECM	Using sophisticated sensors, purpose built software and web-based data archiving, ECM monitors top drive conditions. A feature of Canrig's ECM systems is the lube oil sensor which safely monitors oil conditions in real time unlike conventional oil sampling.	<ul style="list-style-type: none"> Reduces downtime and costs by allowing for condition based maintenance. Enhances equipment reliability and performance through a customizable tiered escalation and notification system
ROCKit®	ROCKit® is an automated directional steering control system that oscillates drill pipe to reduce friction. Parameters are set on an operator interface terminal and displayed in real time.	<ul style="list-style-type: none"> Increased rate of penetration/sliding efficiency Improves marketability of rig
REViT®	REViT® is a proven real-time stick slip mitigation system.	<ul style="list-style-type: none"> Extends top drive life by reducing wear and tear Provides significant savings in drilling time and overall cost Improves marketability of rig
HAMMERLESS™ WASHPIPE	The HammerLess™ Washpipe is designed for effortless replacement of the top drive wash pipe without the use of power tools or hammers.	<ul style="list-style-type: none"> Extended life through reduced barrel wear and even compression of packing Quick and Easy installation and removal Multiple packing options including aramid fiber packing for rigs operation at high speeds/pressures

*Only available on Canrig model top drives.

T250 TOP DRIVE

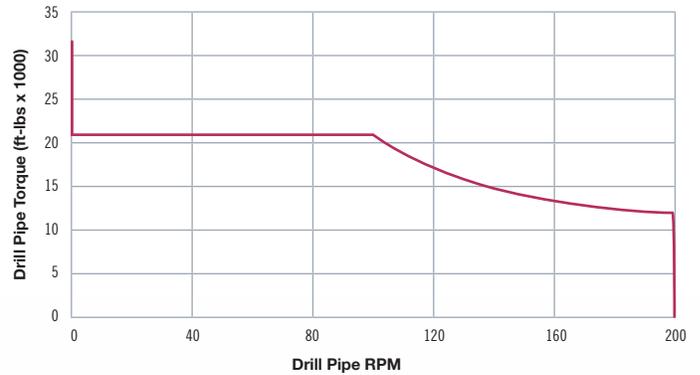


▶ PERFORMANCE CURVE: CANRIG T250 TOP DRIVE TORQUE VS. SPEED - 12.47:1 GEAR RATIO



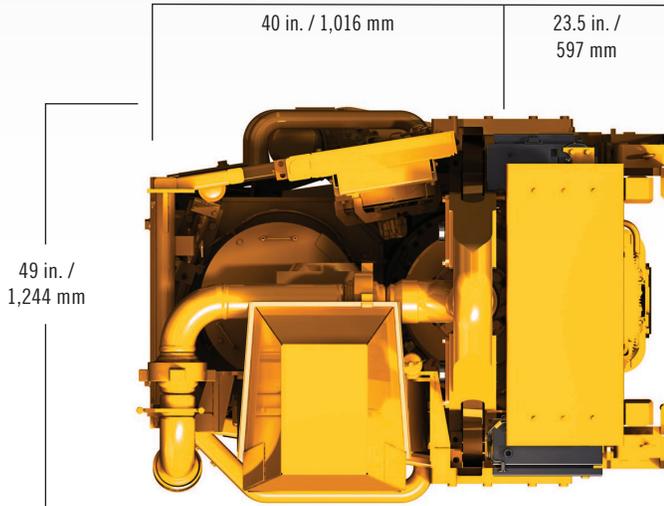
12.47	PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
	Certified Capacity (API 8C)	150 or 250 ton	136 or 227 tonne
	Output Power (Continuous)	380 HP	283 kW
	Max Speed	176 rpm	176 rpm
	Continuous Drill Torque	23,000 ft-lb	3,118 daN-m
	Maximum Torque	35,000 ft-lb	4,745 daN-m
	Temperature Configurations	-40°F to +131°F	-40°C to +55°C
	Weight	13,684 lb	6,207 kg

▶ PERFORMANCE CURVE: CANRIG T250 TOP DRIVE TORQUE VS. SPEED - 10.96:1 GEAR RATIO



10.96	PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
	Certified Capacity (API 8C)	150 or 250 ton	136 or 227 tonne
	Output Power (Continuous)	380 HP	283 kW
	Max Speed	200 rpm	200 rpm
	Continuous Drill Torque	21,000 ft-lb	2,847 daN-m
	Maximum Torque	32,000 ft-lb	4,338 daN-m
	Temperature Configurations	-40°F to +131°F	-40°C to +55°C
	Weight	13,684 lb	6,207 kg

C275 TOP DRIVE

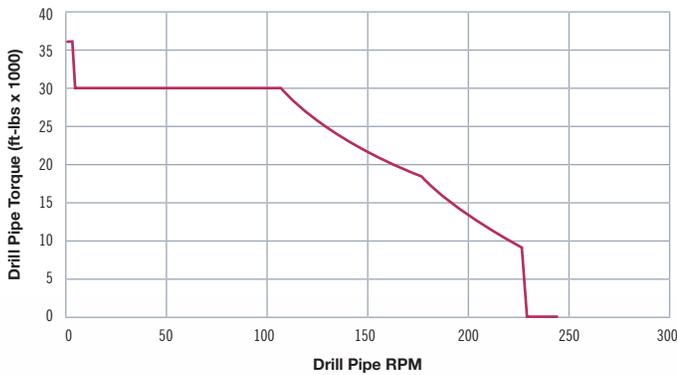


Inside of Block Adapter

200 in. / 5,080 mm

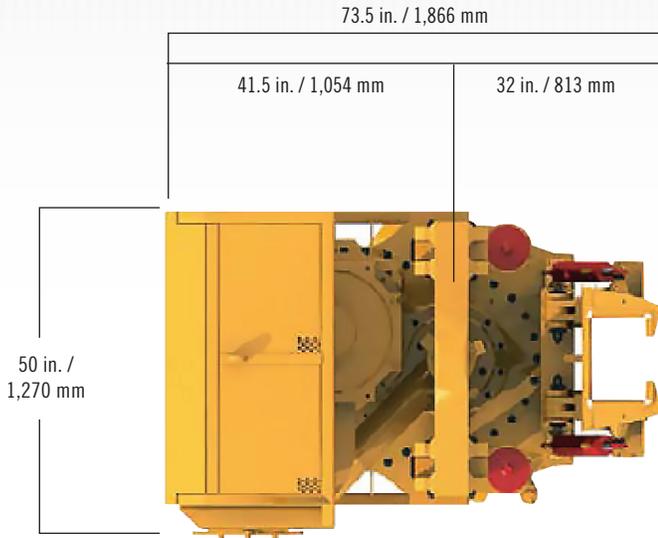


▶ PERFORMANCE CURVE: CANRIG C275 TOP DRIVE TORQUE VS. SPEED - 9.38:1 GEAR RATIO

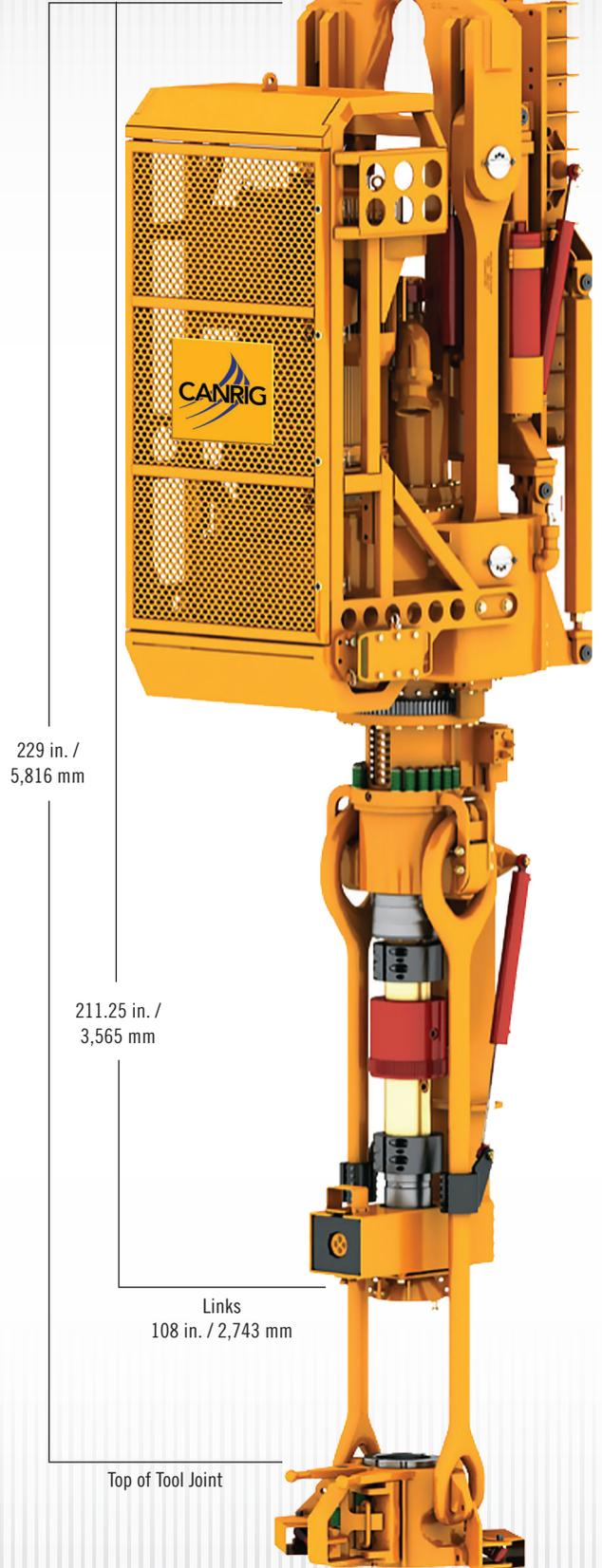


PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
Certified Capacity (API 8C)	275 ton	249 tonne
Output Power (Continuous)	600 HP	450 kW
Max Speed	225 rpm	225 rpm
Continuous Drill Torque	30,000 ft-lb	4,067 daN-m
Maximum Torque	60,000 ft-lb	8,130 daN-m
Temperature Configurations	-49°F to + 131°F	-45°C to + 55°C
Weight	18,000 lb.	8,200 kg

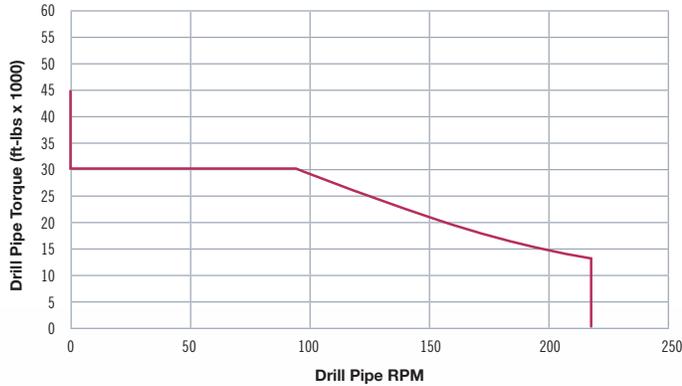
T350/400 TOP DRIVE



Inside of Block Adapter

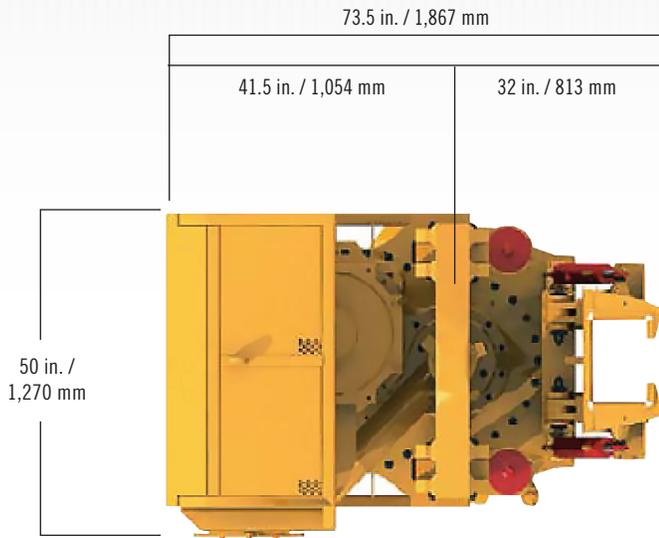


▶ PERFORMANCE CURVE: CANRIG T350/400 TOP DRIVE TORQUE VS. SPEED - 11.11:1 GEAR RATIO

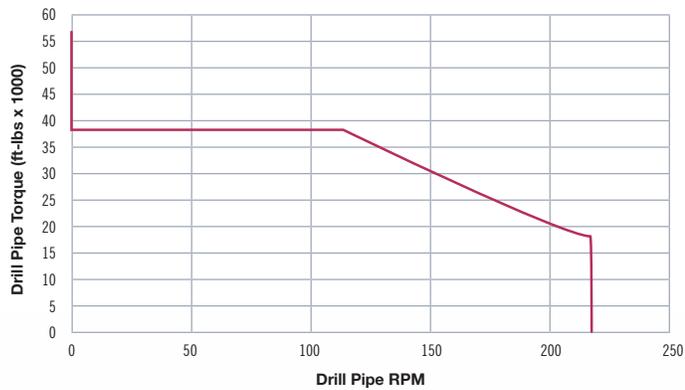


PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
Certified Capacity (API 8C)	350/400 ton	317/362 tonne
Output Power (Continuous)	570 HP	425 kW
Max Speed	220 rpm	220 rpm
Continuous Drill Torque	30,000 ft-lb	4,067 daN-m
Maximum Torque	45,000 ft-lb	6,101 daN-m
Temperature Configurations	-40°F to +131°F	-40°C to +55°C
Weight	25,000 lb	11,340 kg

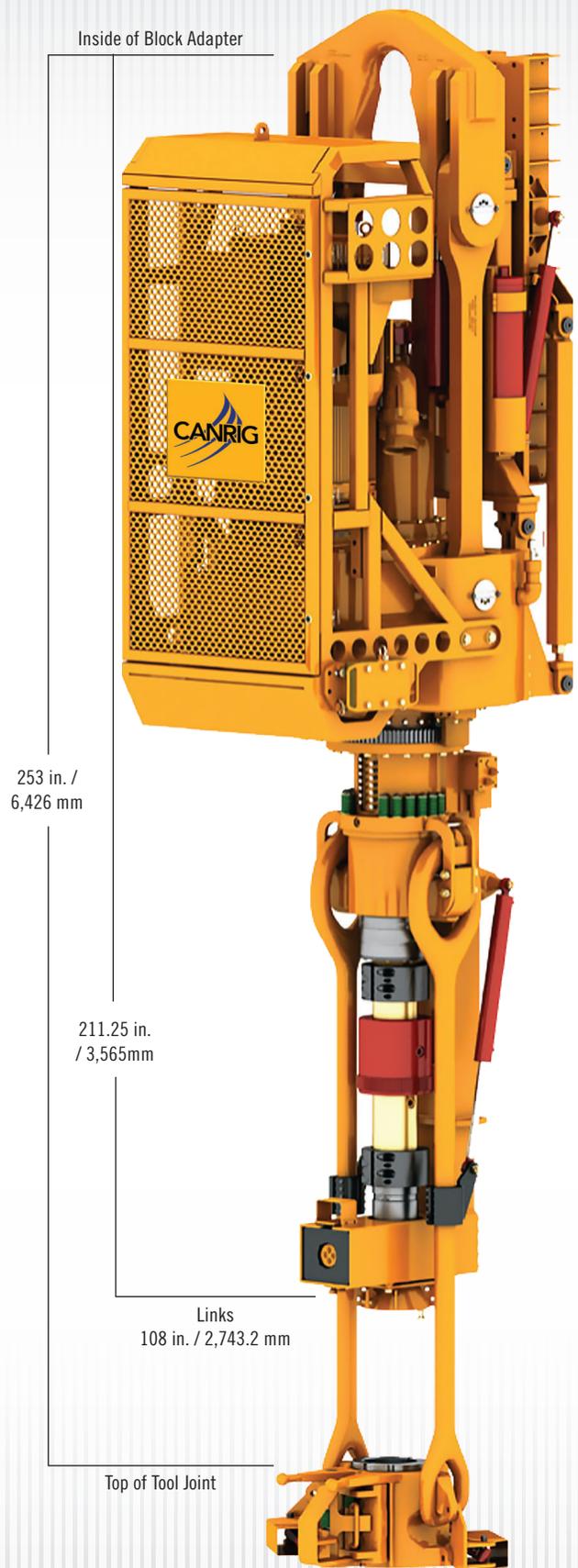
T350/400 HT TOP DRIVE



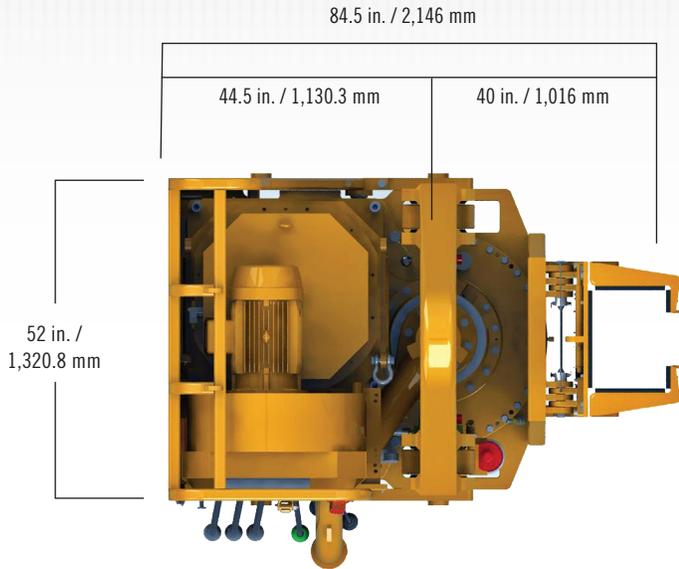
▶ PERFORMANCE CURVE: CANRIG T350/400 HT TOP DRIVE TORQUE VS. SPEED - 11.11:1 GEAR RATIO



PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
Certified Capacity (API 8C)	350/400 ton	362 tonne
Output Power (Continuous)	770 HP	597 kW
Max Speed	220 rpm	220 rpm
Continuous Drill Torque	37,500 ft-lb	5,084 daN-m
Maximum Torque	58,000 ft-lb	7,592 daN-m
Temperature Configurations	-40°F to +131°F	-40°C to +55°C
Weight	27,000 lb	12,247 kg



T500 TOP DRIVE



Inside of Block Adapter

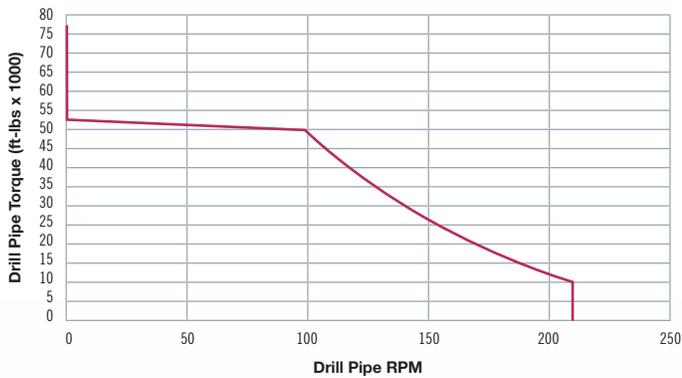
250 in. / 6,350 mm

225 in. / 5,715 mm

Top of Tool Joint

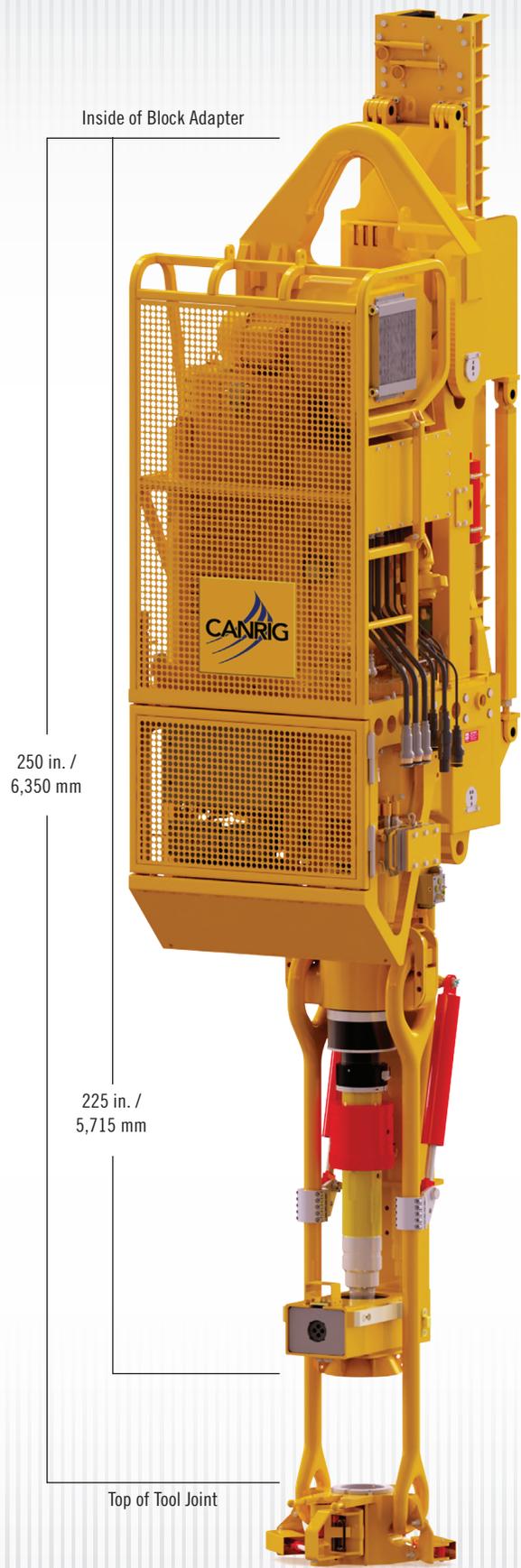
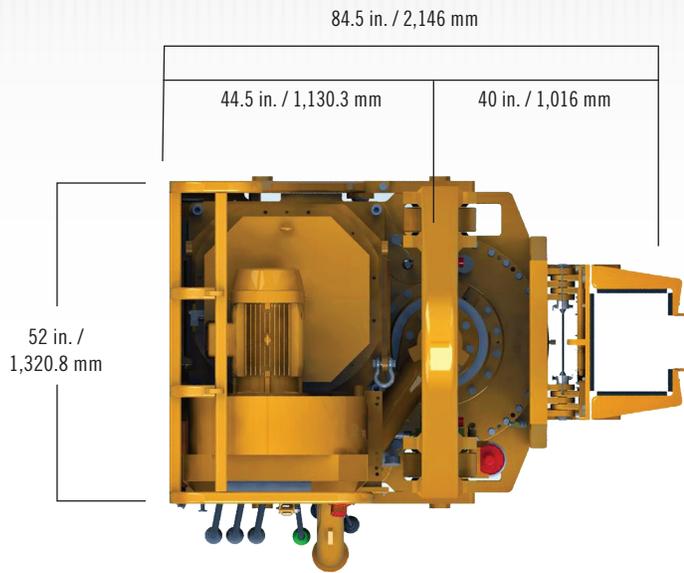


▶ PERFORMANCE CURVE: CANRIG T500 TOP DRIVE TORQUE VS. SPEED - 8:1 GEAR RATIO

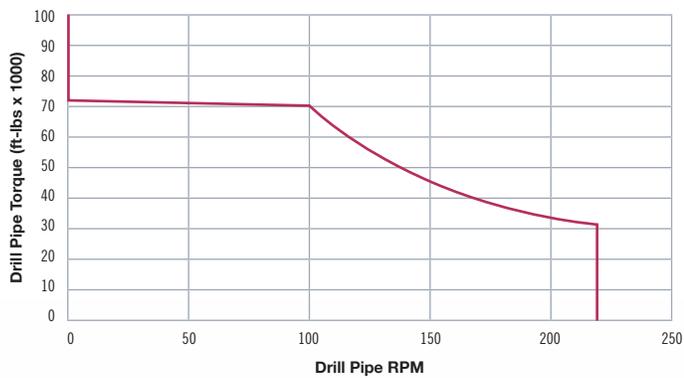


PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
Certified Capacity (API 8C)	500 ton	454 tonne
Output Power (Continuous)	940 HP	700 kW
Max Speed	220 rpm	220 rpm
Continuous Drill Torque	52,000 ft-lb	7,050 daN-m
Maximum Torque	65,000/78,000 ft-lb	8,813/10,575 daN-m
Temperature Configurations	-40°F to +131°F	-40°C to +55°C
Weight	40,000 lb	18,144 kg

T500 HT TOP DRIVE

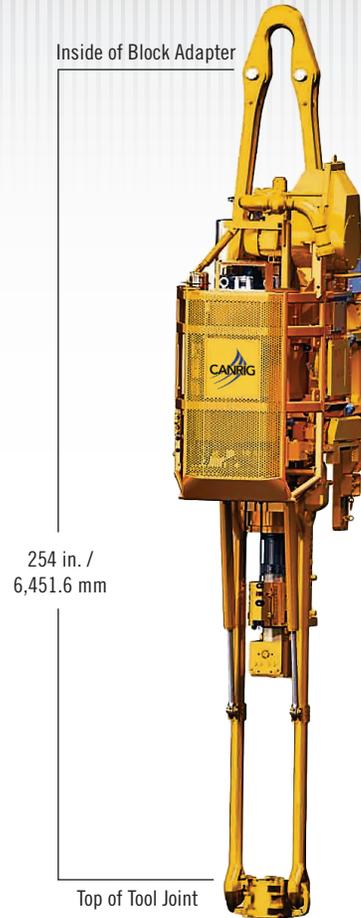
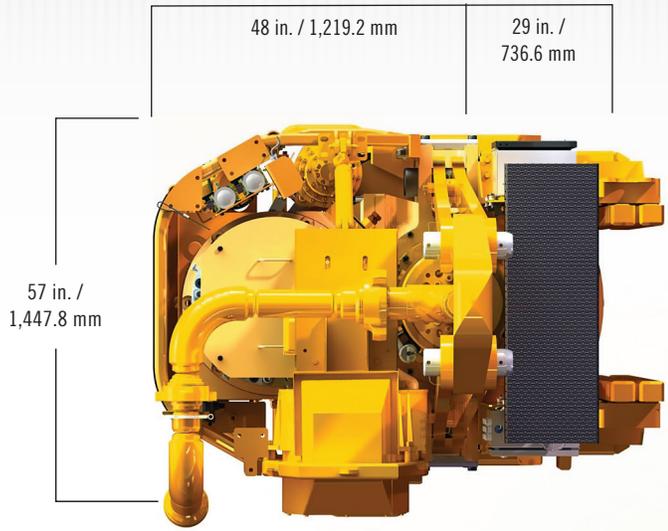


▶ PERFORMANCE CURVE: CANRIG T500 HT TOP DRIVE TORQUE VS. SPEED - 8:1 GEAR RATIO



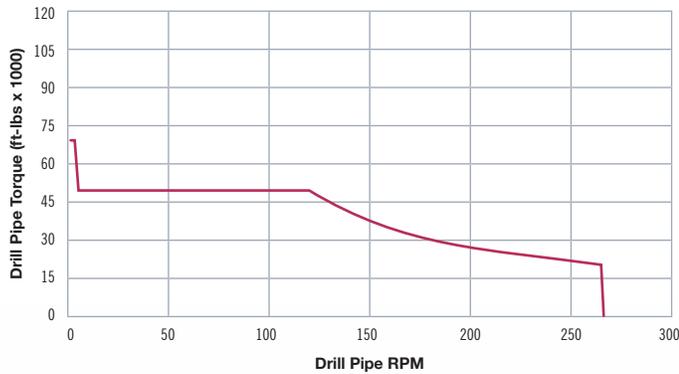
PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
Certified Capacity (API 8C)	500 ton	454 tonne
Output Power (Continuous)	1270 HP	947 kW
Max Speed	220 rpm	220 rpm
Continuous Drill Torque	70,000 ft-lb	9,491 daN-m
Maximum Torque	100,000 ft-lb	13,558 daN-m
Temperature Configurations	-40°F to +131°F	-40°C to +55°C
Weight	41,000 lb	18,597 kg

C500 TOP DRIVE

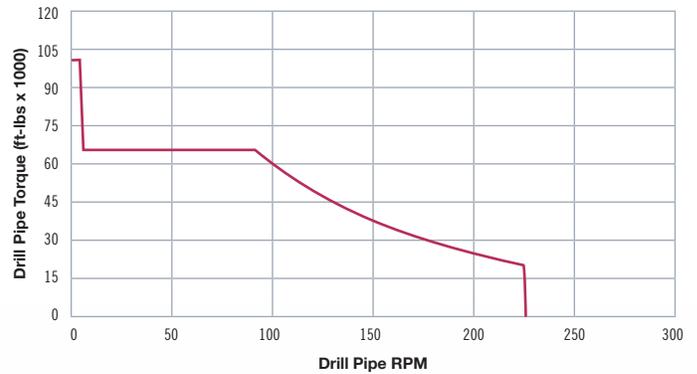


▶ PERFORMANCE CURVE: CANRIG C500 TOP DRIVE

TORQUE VS. SPEED - 6.81 GEAR RATIO



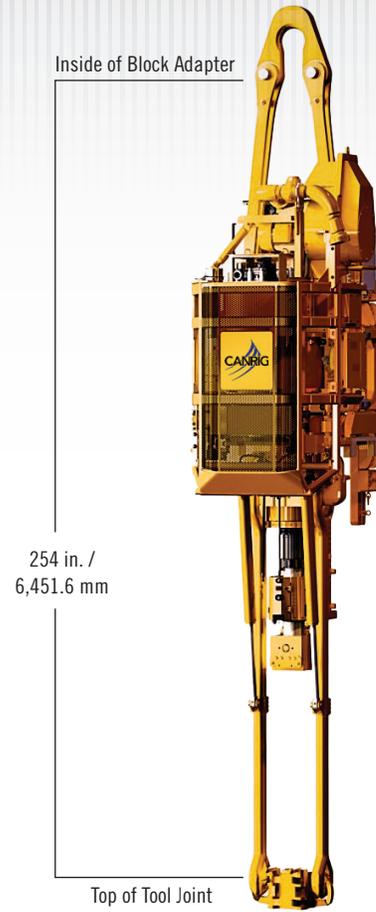
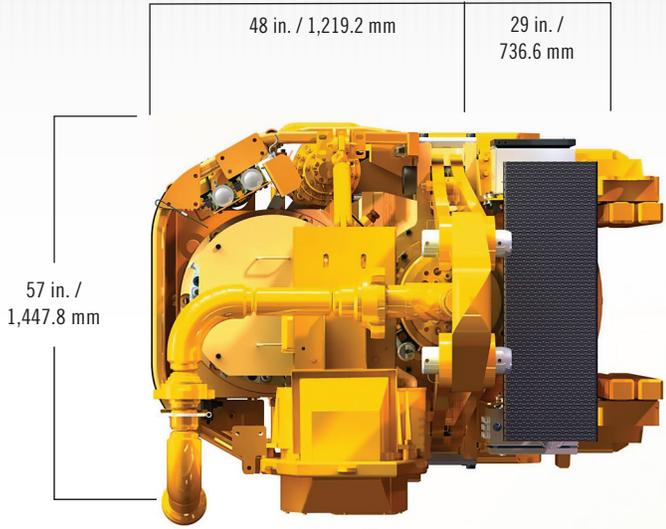
TORQUE VS. SPEED - 8.65 GEAR RATIO



6.81	PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
	Certified Capacity (API 8C)	500 ton	454 tonne
	Output Power (Continuous)	1,150 HP	860 kW
	Max Speed	265 rpm	265 rpm
	Continuous Drill Torque	51,400 ft-lb	6,970 daN-m
	Maximum Torque	95,000 ft-lb	12,880 daN-m
	Temperature Configurations	-49° F to +131° F	-45°C to +55°C
	Weight	29,000 lb	13,200 kg

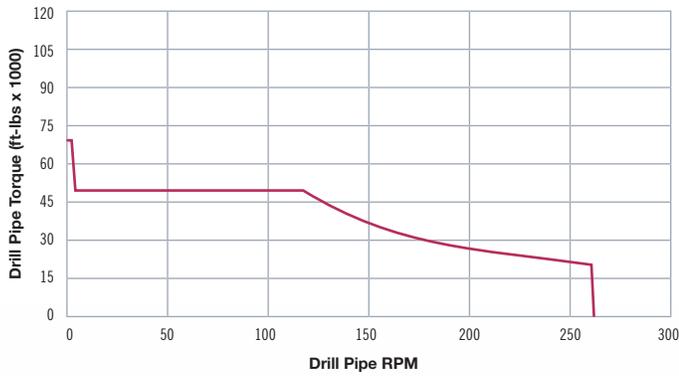
8.65:1	PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
	Certified Capacity (API 8C)	500 ton	454 tonne
	Output Power (Continuous)	1,150 HP	860 kW
	Max Speed	225 rpm	225 rpm
	Continuous Drill Torque	65,300 ft-lb	8,860 daN-m
	Maximum Torque	95,000 ft-lb	12,880 daN-m
	Temperature Configurations	-49° F to +131° F	-45°C to +55°C
	Weight	32,000 lb	15,500 kg

C750 TOP DRIVE

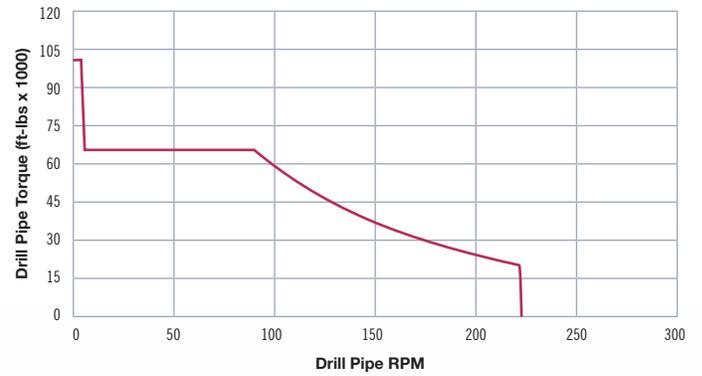


▶ PERFORMANCE CURVE: CANRIG C750 TOP DRIVE

TORQUE VS. SPEED - 6.81 GEAR RATIO



TORQUE VS. SPEED - 8.65 GEAR RATIO



6.81	PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
	Certified Capacity (API 8C)	750 ton	680 tonne
	Output Power (Continuous)	1,150 HP	860 kW
	Max Speed	265 rpm	265 rpm
	Continuous Drill Torque	51,400 ft-lb	6,970 daN-m
	Maximum Torque	95,000 ft-lb	12,880 daN-m
	Temperature Configurations	-49° F to +131° F	-45°C to +55°C
	Weight	30,000 lb	13,600 kg

8.65:1	PERFORMANCE SPECIFICATIONS	IMPERIAL	METRIC
	Certified Capacity (API 8C)	750 ton	680 tonne
	Output Power (Continuous)	1,150 HP	860 kW
	Max Speed	225 rpm	225 rpm
	Continuous Drill Torque	65,300 ft-lb	8,860 daN-m
	Maximum Torque	95,000 ft-lb	12,880 daN-m
	Temperature Configurations	-49° F to +131° F	-45°C to +55°C
	Weight	32,000 lb	14,500 kg

MODEL PERFORMANCE

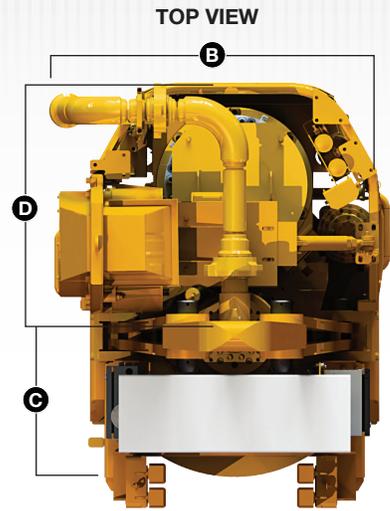
		T250		C275	T350	T400	T500
Gear Ratio		12.47:1	10.96:1	9:39	11.11:1	11.11:1	8:1
Certified Capacity (API 8C)	ton	150/250	150/250	275	350	400	500
	tonnes	136/227	136/227	249	317	362	454
Output Power (Continuous)	HP	380	380	600	570	800	940
	kW	283	283	450	425	597	700
Max Speed	rpm	176	200	225	220	220	220
Continuous Drill Torque	ft-lb	23,000	21,000	30,000	30,000	37,500	52,000
	daN-m	3,118	2,847	4,067	4,067	5,084	7,050
Maximum Torque	ft-lb	35,000	32,000	60,000	45,000	56,000	65,000/78,000
	daN-m	4,745	4,338	8,130	6,101	7,592	8,813/10,575
Temperature Configurations	°F	-40 to + 131	-40 to + 131	-49 to + 131	-40 to + 131	-40 to + 131	-40 to + 131
	°C	-40 to + 55	-40 to + 55	-45 to + 55	-40 to + 55	-40 to + 55	-40 to + 55
Weight	lb.	13,684	13,684	18,000	25,000	27,000	40,000
	kg	6,207	6,207	8,200	11,340	12,247	18,144

		T500HT	C500		C750	
Gear Ratio		8:1	6.81	8.65:1	6.81	8.65:1
Certified Capacity (API 8C)	ton	500	500	500	750	750
	tonnes	454	454	454	680	680
Output Power (Continuous)	HP	??	1,150	1,150	1,150	1,150
	kW	??	860	860	860	860
Max Speed	rpm	220	265	225	265	225
Continuous Drill Torque	ft-lb	72,000	51,400	65,300	51,400	65,300
	daN-m	9,762	6,970	8,860	6,970	8,860
Maximum Torque	ft-lb	100,000	95,000	95,000	95,000	95,000
	daN-m	13,558	12,880	12,880	12,880	12,880
Temperature Configurations	°F	-40 to + 131	-49 to + 131			
	°C	-40 to + 55	-45 to + 55			
Weight	lb.	??	29,000	32,000	30,000	32,000
	kg	??	13,200	14,500	13,600	14,500

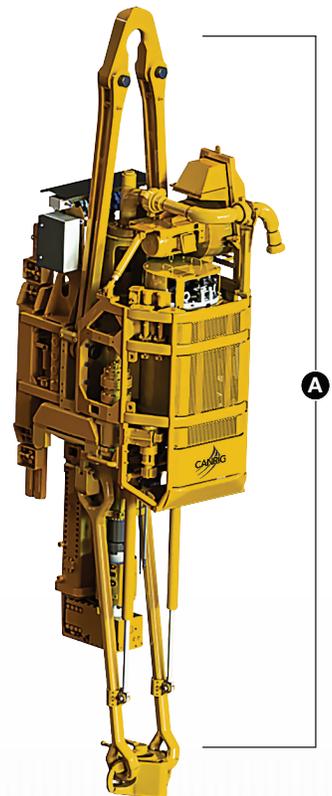
*Canrig internal project reference name only.

FOOTPRINT DIMENSIONS

TD MODEL	A	B	C	D
T250	246 in. 6,248 mm	44.5 in. 1,130 mm	22.5 in. 572 mm	38.6 in. 981 mm
C275 (with 8-ft links)	200 in. 5,080 mm	49 in. 1,245 mm	23.5 in. 597 mm	40 in. 1,016 mm
T350	237 in. 6,020 mm	48.5 in. 1,231 mm	29 in. 737 mm	40 in. 1,016 mm
T400	250 in. 6,350 mm	48.5 in. 1,231 mm	29 in. 737 mm	40 in. 1,016 mm
T500	257 in. 6,528 mm	52 in. 1,321 mm	25 in. 635 mm	44.5 in. 1,130 mm
T500HT	250 in. 6,350 mm	53 in. 1,346 mm	25 in. 635 mm	44.5 in. 1,130 mm
C500 / 681 (with 11-ft links)	254 in. 6,452 mm	57 in. 1,448 mm	29 in. 737 mm	48 in. 1,219 mm
C500 / 865 (with 11-ft links)	268 in. 6,807 mm	57 in. 1,448 mm	29 in. 737 mm	48 in. 1,219 mm
C750 / 680 (with 11-ft links)	254 in. 6,452 mm	57 in. 1,448 mm	29 in. 737 mm	48 in. 1,219 mm
C750 / 865 (with 11-ft links)	268 in. 6,807 mm	57 in. 1,448 mm	29 in. 737 mm	48 in. 1,219 mm



ISOMETRIC VIEW





SALES INFORMATION

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