

# Christensen CS1000 P4 Core Drill



# CS1000 P4 PERFORMANCE SPECIFICATIONS

## DEPTH CAPACITY CORING (WIREFLINE OR CONVENTIONAL)

B WIREFLINE	3,500 FT (1,070 M)
N WIREFLINE	2,000 FT (610 M)
H WIREFLINE	1,500 FT (460 M)
P WIREFLINE	1,000 FT (305 M)

DEPTH RATINGS ARE BASED ON VERTICAL AND DRY HOLE

## MAIN HOIST

SINGLE LINE CAPACITY: BARE DRUM 9,000 LB (4,082 KG)  
 DOUBLE LINE CAPACITY: BARE DRUM 18,000 LB (8,164 KG)  
 LINE SPEED: BARE DRUM 148FT/MIN (45M/MIN)  
 CABLE SIZE: 110 FEET (33.5 M) x 9/16IN (14.3MM)

## WIREFLINE

CAPACITY: 3,200 FT (975 M) OF 3/16 IN (4.76 MM)  
 LINE PULL BARE DRUM: 2,500 LB (1,134 KG)  
 LINE PULL FULL DRUM: 840 LB (381 KG)  
 LINE SPEED: BARE DRUM 390 FT/MIN (119 M/MIN)  
 FULL DRUM 1,260FT/MIN (384 M/MIN)

## MAST AND FEED SYSTEM

FEED TRAVEL: 6 FT (1,830 MM)  
 FEED SPEEDS: FAST AND SLOW WITH VARIABLE CONTROL  
 THRUST: 13,300 LB (6,030 KG)  
 PULL: 20,000 LB (9,070 KG)  
 DRILLING ANGLE: 45 TO 90 DEGREES  
 ROD PULL LENGTH: 20 FT (6.09 M)

## POWER UNIT

MFG.: CUMMINS  
 MODEL: 4BTA 3.9 LITER 4 CYLINDER  
 POWER: 116 HP (86.5 KW)  
 RPM: 2,500  
 ENGINE TYPE: DIESEL TURBOCHARGED/AFTER COOLED  
 COOLING: WATER  
 OTHER ENGINES AVAILABLE ON REQUEST

## HYDRAULIC SYSTEM

PRIMARY PUMP: 3,500 PSI-43 GPM (24.1MPA-162 LPM)  
 SECONDARY PUMP: 3,000 - 15GPM (20.6 MPA - 56 LPM)  
 AUXILIARY PUMP: 2,500 PSI - 8 GPM (17.2 MPA - 30 LPM)  
 HYDRAULIC OIL COOLING: AIR

## DRILLHEAD AND SPINDLE SPEEDS

POWER: HYDRAULIC MOTOR -VARIABLE SPEED/REVERSIBLE  
 FINAL DRIVE: 4 IN HV CHAIN DRIVE IN OIL BATH-2.5 RATIO  
 SPINDLE: 4 5/8IN (117MM)

GEAR RATIO	SPEED (RPM)	TORQUE, FT LB (NM)
1 ST 6.63:1	130-196	3,232-2,218 (4,382-3,007)
2ND 3.17:1	270-410	1,545-1,060 (2,095-1,437)
3RD 1.72:1	500-756	839-575 (1,138-780)
4TH 1.00:1	857-1,300	488-335 (662-454)

RANGE SELECTION: MANUAL CONTROL FROM OPERATOR'S STATION  
 HINGED HEAD: SWING AWAY

## CHUCK ASSEMBLY

TYPE: HYDRAULIC OPEN, SPRING CLOSED  
 MAXIMUM INSIDE DIAMETER: 4 5/8 IN (117MM)  
 HOLDING CAPACITY: 40,000 LB (18,143 KG)

## DRILL BASE SUPPORTS

QUANTITY: 4  
 PAD DIAMETER: 12 IN (305 MM)  
 TRAVEL LENGTH: 12 IN (305 MM)

## WEIGHT

HIGHWAY TOTAL WET	FLY-IN TOTAL WET	MAJOR COMPONENTS WET
7,255 LB (3,291 KG)	7,000 LB (3,175 KG)	6,515 LB (2,955 KG)

## DRILLHEAD:

1,040 LB (472 KG)      1,040LB (472KG)      1,040LB (472KG)

## DRILL BASE:

680 LB (309 KG)      680 LB (309 KG)      680 LB (309 KG)

## LOWER MAST:

1,100 LB (500 KG)      1,100 LB (500 KG)      1,100 LB (500 KG)

## MIDDLE AND UPPER MAST:

750 LB (340 KG)      750 LB (340 KG)      750 LB (340 KG)

## ENGINE COMPONENT WET:

1,125 LB (511 KG)      1,125 LB (511 KG)      1,125 LB (511 KG)

## HYDRAULIC COMPONENT WET:

900 LB (408 KG)      900 LB (408 KG)      900 LB (408 KG)

## DRAW WORKS COMPONENT INCLUDING CABLE:

920 LB (417 KG)      920 LB (417 KG)      920LB (417 KG)

## TOWING PACKAGE & MISCELLANEOUS:

### FUEL TANK WET:

125 LB (57 KG)      125 LB (57 KG)

### BATTERY BOX & BATTERY:

134 LB (61 KG)      134 LB (61 KG)

### DRILL BASE SUPPORTS (4):

100 LB (45 KG)      100 LB (45 KG)

### OPERATOR'S PLATFORM:

22 LB (10 KG)      22 LB (10 KG)

### MUD TANK OUTRIGGERS (4):

104 LB (47 KG)      104 LB (47 KG)

### WHEELS & STUB SHAFT (4):

200 LB (91 KG)

### HITCH:

55 LB (25 KG)

## DIMENSIONS

	LENGTH	WIDTH	HEIGHT
DRILL BASE:	114 IN (2,896 MM)	64 IN (1,626 MM)	58 IN (1,473 MM)
LOWER MAST:	131 IN (3,328 MM)	26 IN (660 MM)	33 IN (838 MM)
MIDDLE MAST:	129 IN (3,277 MM)	23 IN (584 MM)	22 IN (559 MM)
UPPER MAST:	110 IN (2,794 MM)	21 IN (533 MM)	29 IN (737 MM)
ASSEMBLED MAST:	30.8 FT (9.4 M)		

DRILL HEAD: HORIZONTAL VIEW 31 IN (787 MM) x 44 IN (1,118 MM)  
 VERTICAL VIEW 21 IN (533 MM) x 44 IN (1,118MM)

ENGINE COMPONENT:  
 43.5 IN (1,105 MM) x 49 IN (1,245MM) x 29 IN (737 MM)

HYDRAULIC COMPONENT:  
 37.5 IN (953 MM) x 49.5IN (1,257 MM) x 29 IN (737 MM)

DRAW WORKS COMPONENT:  
 27.8 IN (706 MM) x 56.5 IN (1,435 MM) x 26 IN (660 MM)

## STANDARD EQUIPMENT

-HYDRAULIC MAST RAISE	-DERRICK IN THREE SECTIONS
-TOWING PACKAGE	-FUEL TANK 34 GAL (125 L)
-HYDRAULIC OIL RESERVOIR FILL PUMP & FILTRATION	-FUEL FILTER & WATER SEPARATOR

## OPTIONS

-HYDRAULIC P-SIZE HOLDING CLAMP	-HYDRAULIC MUD MIXER
-SINGLE, LARGE DIAMETER MAIN HOIST SHEAVE	-HIGH CAPACITY WIREFLINE HOIST
-HYDRAULIC DRIVEN MUD PUMP FMC	-MAST LIGHTING KIT
W1122BCD MAX FLOW: 37 GPM (140 LPM)	-SKID MOUNTING
MAX PRESSURE: 700 PSI (4.9 MPA)	-CRAWLER MOUNTING

ALL WEIGHTS AND DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE



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