

# CS1000 P4 PERFORMANCE SPECIFICATIONS

## DEPTH CAPACITY CORING (WIREFLINE OR CONVENTIONAL)

B WIRELINE	3,500 FT (1,070 M)
N WIRELINE	2,000 FT (610 M)
H WIRELINE	1,500 FT (460 M)
P WIRELINE	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)  
SPINDLE SPEEDS:

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 W1122BCD MAX FLOW: 37 GPM (140 LPM)	-MAST LIGHTING KIT
MAX PRESSURE: 700 PSI (4.9 MPA)	-SKID MOUNTING
	-CRAWLER MOUNTING

ALL WEIGHTS AND DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE