

**Technical Specification Sheet**

model number		CSD200 (8inch)
main body	overall length LOA, m	23
	hull dimension L*B*H, m	16×7×2
	main pontoon size, m×m×m	11.55×3×2
	main pontoon weight, kg	30T
	side pontoon size, m×m×m	14×2×2
	deck/bottom plate/side plate/head sealing plate/tail sealing plate on main ponton, mm	8/8/7/14/12
	deck/bottom plate/side plate/head sealing plate/tail sealing plate on side ponton, mm	8/8/8/12/8
	average draft full load, m	1.4
	displacement full load, m <sup>3</sup>	127
	dredging depth at 45°(bridge length x0.7), m	8
	dredging depth at 60°(bridge lengthx0.86),m	9.5
	min depth of dredging, m	1.5
	max width of dredging calculated as one side at 35°, m	33
	fuel tank capacity, L	26000
	positioning pile diameter mm, wall thickness mm, length m, weight, T	Φ325/20/11/2.5
	material and length of positioning pile (depth of dredging multiplied by 1.4)	seamless tube
	cutter ladder length (depth of dredging multiplied by 1.4), m	11
	total weight ,t	60
	volume, m <sup>3</sup>	205
Warman mud pump	pump inlet and outlet diameter, mm	250/200
	flow rate of clean water,m <sup>3</sup> /h	800
	pump head, m	30
	drain height, m	5
	rotation speed, r/min	830
	shaft power, KW	117
	impeller diameter/quantity of blades, mm	565/3
	material	Cr27
	slurry concentration, %	15-20
	suction/discharge outer diameter, mm	356/325
	suction/discharge inner diameter, mm	344/313
	mud conveying distance, m	600
	yield, cbm/h	120-160
	maximum overflow particle size, mm	178
	sealing type	packing seal
	impeller replacement cycle, month	7
front and rear guard replacement cycle, month	7	
pump casing replacement cycle, month	14	
main engine of mud pump	1.Cummins manufacturer/model/power/speed	NT855-M/224KW/1800
	Cummins cylinder diameter/stroke/quantity/displacementL	140/152/6/14
	type	inline 6-cylinder, turbocharged intercooled, 4-stroke
	torque N.M	1200
	2.Manham manufacturer/model/power/speed	TBD234V6/222KW/1800
	Cummins cylinder diameter/stroke/quantity/displacementL	128/140/6/10.8

hydraulic system	hydraulic pump	type	vane pump
		work theory	to suck in oil from the hydraulic tank, form pressure oil, and discharge it to the actuator
		quantity of pump	2
		number of hydraulic pumps × model × displacement unit/power	1×4525VQ/ (162/55) /85
		number of hydraulic pumps of side winch × model × displacement unit/power	1×25VQ/55/21
		other(landing, oil cylinder) hydraulic pump model × displacement	
		highest speed of cutter	
		side rotation speed×max rope return speed	
		manufacturer	VICKERS
	SIEMENS PLC	valve	REXROTH
		hydraulic control	SIEMENS PLC
		electric control unit	Siemens
		hydraulic working pressure,Mpa	16
	hoisting winch	drum diameter,mm	377
		rope return speed(regulable)	0-25
		motor displacement, ml/r	3261
		working pressure, Mpa	16
		Wire rope diameter (mm)/length (m)	16/100
		pull force, ton	4
		pull force, KN	40KN
		quantity of hoisting winch	1
	side winch	drum diameter,mm	377
		rope return speed(regulable)	0-25
		motor displacement, ml/r	3261
		working pressure, Mpa	16
		wire rope diameter (mm)/length (m)	16/100
		pull force, ton	4
		pull force, KN	40KN
		quantity of side winch	2
	hydraulic cutter	cutter diameter	1300
		cutter motor quantity/power	1/50
		speed rpm	10、 20、 30
		displacement	10170
		torque KN.M	22
		cutting force	1500
		cutting speed, m/s	2.041
		working pressure, Mpa	16
		quantity and material of cutter teeth	
		quantity and material of cutter arm	5/ZG35SiMn
		change frequency, day	180
	hydraulic bucket-wheel	bucket wheel diameter, m	1.7
		torque, N.m	18700
		speed rpm	0-20
		power, KW	40
	oil cylinder	hydraulic cylinder diameter and stroke units	Φ100/2500



auxiliary hydraulic engine	Cummins manufacturer/model/power/speed	/	
	Cummins cylinder diameter/stroke/quantity/displacementL	/	
	type	/	
	torque N.M	/	
	2.Manham manufacturer/model/power/speed	/	
	Cummins cylinder diameter/stroke/quantity/displacementL	/	
	Commins total power, kw	224	
	Manham total power, kw	222	
eg.Comunnis	total oil consumption, L/H	53.33333333	
	continuous running time, h	487.5	
gland pump	model number		
	sealing type	mechanical seal	
	work for	gland pump to inject water into the dredge pump to prevent wear on the dredge pump shaft	
emergency generator	emergency generator model and manufacturer	24GF/Cummins	
	work for	When there is no shore power supply in the berthed state, electricity is provided to the berthed vessel, and maintenance services can also be provided	
deck crane	Deck lifting weight (tons)/turning radius (meters)	1/2.5	
anchor	anchor, kg	200	
	quantity of anchor	2	
battery	voltage	24V DC/220/380V/AC	
	battery capacity	195 Ah	
	battery quantity	4	
anti-corrosive treatment		marine epoxy zinc rich primer+marine chlorinated rubber topcoat+anti-corrosion zinc block	
anti-corrosion zinc block	quantity		
fire protection and lifesaving	fire water gun	1	
	foam extinguisher	4	
	CO2 extinguisher	4	
	life buoy	4	
	axe	2	
options	throwing anchor rod	anchor rod diameter mm, wall thickness mm, length m, weight T	
	trolley	dimension (LxWxH), m	
		travel, m	3m
		drive method	
	anchor boat		
	bucket wheel		
survey			