

CHANGES	DETAILS	DATE	WRITTEN	APPROVED

SD320P

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1.GENERAL SPECIFICATION						
ITEMS		UNIT	STANDARD	OPTION (1)	OPTION (2)	OPTION (3)
OPERATING WEIGHT		kg	17,900	18,360	18,160	17,980
BUCKET CAPACITY (SAE HEAPED)		m³	3.2	3.3	2.7	4.0
ENGINE	RATED POWER (Gross)	kW/rpm	162/2,000			
	MAX. TORQUE (Gross)	N.m/rpm	1050/1300~1500			
SYSTEM PRESSURE (WORK/STEER)		kg/cm²	180/140			
TRAVEL SPEED	FORWARD	km/h	6.8/13.2/24/36			
	REVERSE	km/h	7.1/13.7/25			
FRONT SPEED (RAISE/DUMP/LOWER)		sec	5.8/2.6/1.2			
GRADEABILITY		%(°)	58 (30)			
TIRE SIZE			23.5-25-16PR	23.5-25-16PR	23.5-25-16PR	23.5-25-16PR
BREAKOUT FORCE		Ton	16.5	14.7	16.8	15.0
WORKING RANGE	DUMP HEIGHT AT 45° (w/ tooth)	mm	3,066	3,428	2,953	3,010
	DUMP REACH AT 45° (w/ tooth)	mm	1,322	1,296	1,418	1,279
	MAX. DUMP ANGLE (fully raised)	deg	49	49	49	49
	MAX. TILT ANGLE (on ground)	deg	45	45	45	45
	MAX. TILT ANGLE (fully raised)	deg	60	62	60	60
	MAX. TILT ANGLE (at carry)	deg	49	51	49	49
	BUCKET HINGE HEIGHT	mm	4,150	4,451	4,150	4,150
	DIGGING DEPTH (0° level)	mm	121	192	129	89
TRAVEL DIMENSION	OVERALL LENGTH	mm	8,170	8,387	8,181	8,194
	OVERALL WIDTH	mm	2,992	2,944	2,978	3,092
	OVERALL HEIGHT	mm	3,592	3,592	3,592	3,592
	GROUND CLEARANCE	mm	420	420	420	420
	WHEELBASE	mm	3,300	3,300	3,300	3,300
	TREAD	mm	2,150	2,150	2,150	2,150
MAX. STEERING ANGLE		deg	40	40	40	40
TURNING RADIUS	Out tire edge	mm	5,950	5,950	5,950	5,950
	Bucket edge	mm	6,600	6,700	6,610	6,640
SOUND LEVEL in CAB (ISO 6396)		dB(A)	73	73	73	73
EXTERNAL SOUND POWER LEVEL (ISO 6395)		dB(A)	109	109	109	109
FUEL TANK CAPACITY		Liter	300	300	300	300
OPTION ATTACHMENTS		● STANDARD BUCKET (3.2m³) ● CUTTING EDGE BUCKET (3.3m³) ● ROCK BUCKET (2.7 m³) ● LIGHT MATERIAL BUCKET (4.0 m³)				
● Standard is STANDARD BUCKET (3.2m³ Mono Tooth Bucket) , STANDARD ARM, 23.5-25-16PR TIRE ● OPTION(1) is 3.3 m3 CUTTING EDGE BUCKET, LONG ARM , 23.5-25-16PR TIRE ● OPTION(2) is 2.7 m3 ROCK BUCKET, STANDARD ARM , 23.5-25-16PR TIRE ● OPTION(3) is 4.0 m3 LIGHT MATERIAL BUCKET , STANDARD ARM , 23.5-25-16PR TIRE						
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2. SPECIFICATION COMPARISON

ITEMS		UNIT	Liugong	SEM	SDLG	XCMG
			856H	658D	L958F	ZL50G
OPERATING WEIGHT		kg	17,900	17,158	17,400	17,500
ENGINE (SAE J1995)	MODEL	-	Cummins 6LTAA9.3	Weichai WD10G220E21	Weichai WD10G220E21	Weichai WD10G220E21
	EMISSION CONTROL	-	T2	T2	T2	T2
	FUEL CONTROL	-	Mechanical	Mechanical	Mechanical	Mechanical
	Displacement	Liter	9.3	9.7	9.7	9.7
	RATED POWER (Gross)	kW/rpm	162/2,200	162/2,200	162/2,200	162/2,200
	MAX. TORQUE (Gross)	N.m	984/1,400~1600	950/1,400~1600	950/1,400~1600	950/1,400~1600
SYSTEM PRESSURE (FRONT/STEER)		bar		180/-		
TRAVEL SPEED	FORWARD (1/2)	km/h	11.9/38.8			
	REVERSE (1)	km/h				
FRONT SPEED (RAISE/DUMP/LOWER)		sec	9.8	9.3	10.6	
TIRE SIZE		-	23.5-25	23.5-25	23.5-25	23.5-25
BREAKOUT FORCE		kN	165	178	175	170
WORKIN G RANGE	BUCKET CAPACITY	m3	3.5	3.3	3.2	3.2
	DUMP HEIGHT AT 45°	mm	2,978	3,113	3,100	3,100
	DUMP REACH AT 45°	mm	1,231		1,120	
	MAX. DUMP ANGLE (fully raised)	deg				
	MAX. TILT ANGLE (on ground)	deg				
	MAX. TILT ANGLE (fully raised)	deg				
	MAX. TILT ANGLE (at carry)	deg				
	BUCKET HINGE HEIGHT	mm				
	DIGGING DEPTH (0° level)	mm				
TRAVEL DIMENSI ON	OVERALL LENGTH	mm	8390	8541	8280	8225
	OVERALL WIDTH (bucket)	mm	2970	3200	3024	3016
	OVERALL HEIGHT	mm	3500	3458	3410	3515
	GROUND CLEARANCE	mm	412	442	436	405
	WHEELBASE	mm	3370	3300	3300	3300
	TREAD	mm	2150	2250	2250	2250
MAX. STEERING ANGLE		deg	38	37	38	38
TURNING RADIUS (Tire edge/ Bucket edge)		mm	6,308/-			
SOUND LEVEL in CAB (ISO 6396)		dB(A)				
EXTERNAL SOUND LEVEL (ISO6395, 2000/14/EC)		dB(A)				
FUEL TANK CAPACITY		Liter	300	252	300	

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3. ENGINE SYSTEM

1) ENGINE

MAKER & MODEL /EMISSION	Weichai WP10G220E343 / TIER-III Certified
MAX POWER at SAEJ1995 gross	162kW / 2,000rpm
MAX TORQUE at SAEJ1995 gross	1050 N.m / 1,300 ~ 1,500 rpm
FUEL CONSUMPTION (min. ~ rated)	225 g/kw.h @ RATED SPEED
TYPE	Electronically controlled high pressure common rail
INJECTION SYSTEM	TURBO, DIRECT INJECTION
AFTER TREATMENT	Non
DISPLACEMENT	9,726 cc
No. OF CYLINDER	6
BORE DIA. & STROKE	Φ126 x 130 mm
HIGH IDLE SPEED	2150~2200 rpm
LOW IDLE SPEED	750 ± 50 rpm
STARTING MOTOR	24 V x 7.5 kW

2) ALTERNATOR

VOLTAGE	28 V
RATING AMPERES	70 A

3) BATTERY

SYSTEM VOLTAGE	24 V (12 V x 2)
CAPACITY (AMP)	120 AH
COLD CRANKING AMPERES	900 CCA

4) AIR CLEANER

TYPE	DRY, DOUBLE ELEMENT
SIZE (DIA X LENGTH)	600 mm X 400 mm X 900 mm
FILTRATION AREA (OUTER)	11.21 m2 (MAIN Element), 1.49 m2 (Safety Filter Element)

5) MUFFLER

DESCRIPTION	SIDE INLET, VERTICAL TAIL PIPE
SIZE	Φ400 mm X 600 mm

6) FAN (Driven by hydraulic motor)

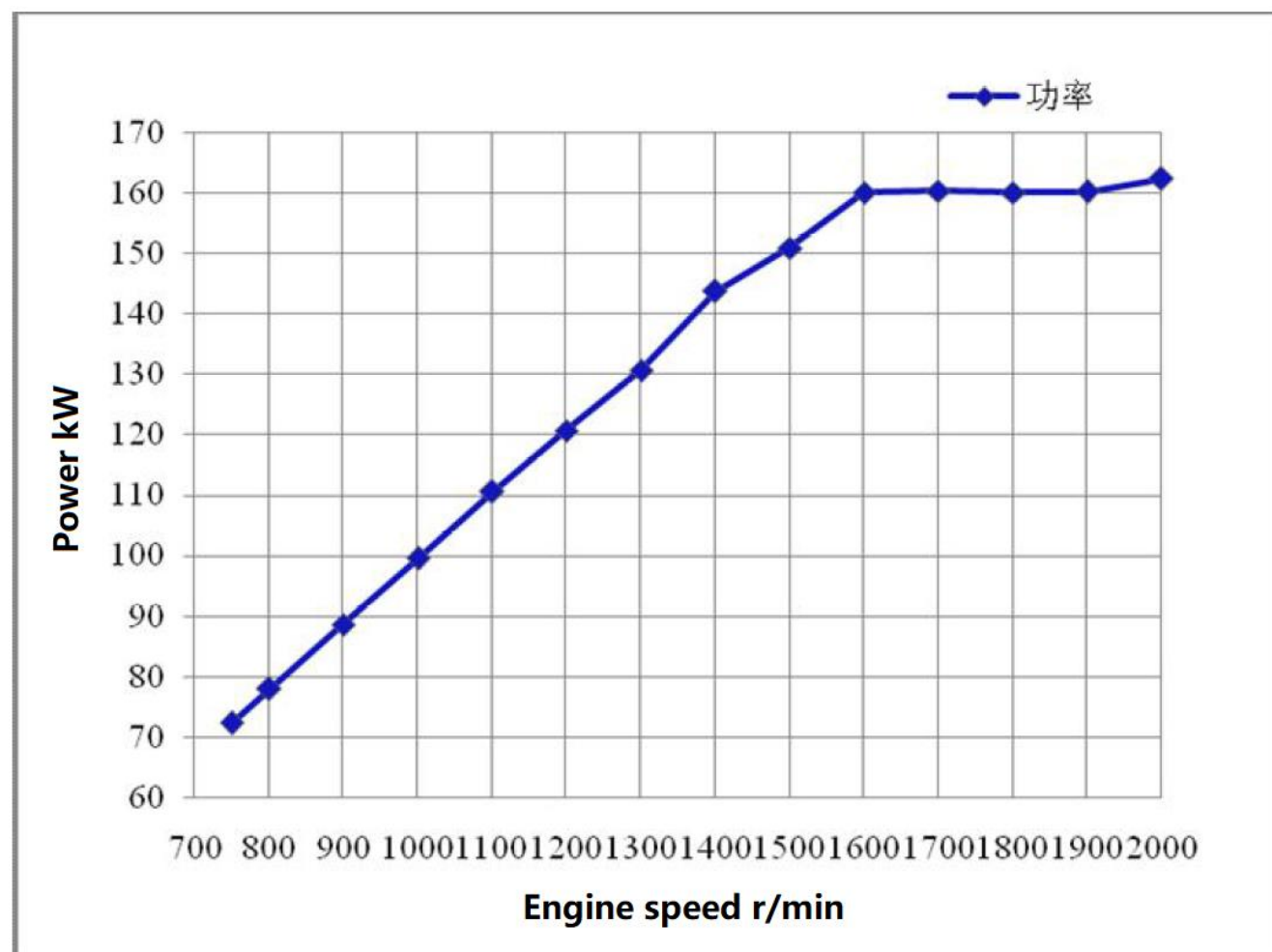
TYPE	BLOWING, 6 BLADE, PLASTIC
SIZE	Φ812 mm
FAN MAX SPEED	1,800 ±50 rpm

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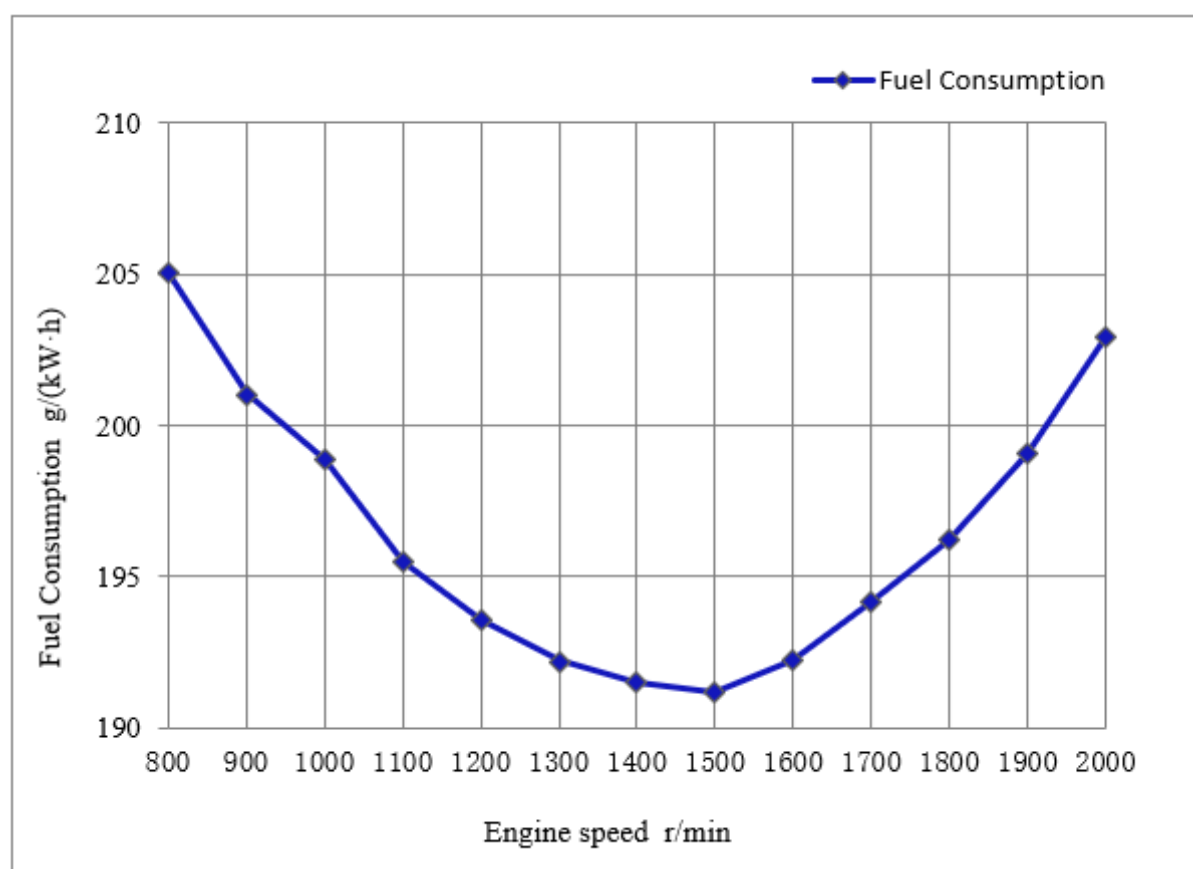
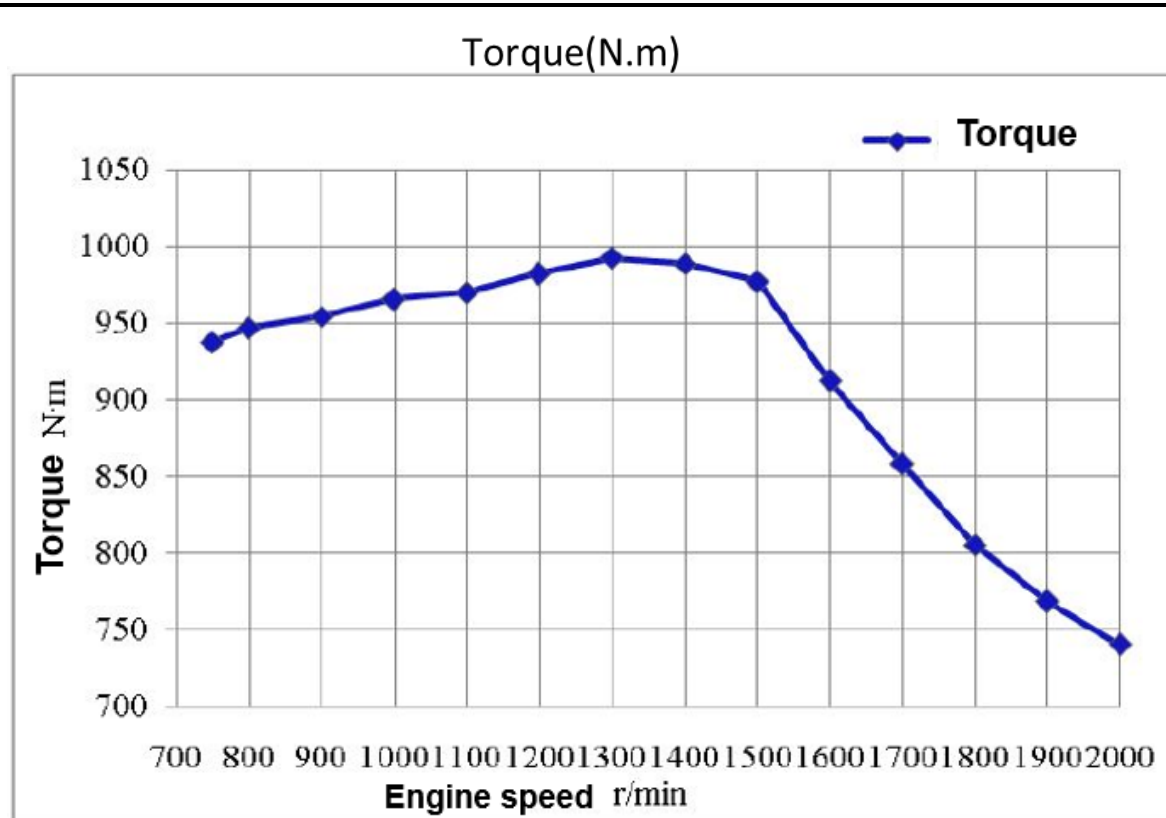
7) ENGINE PERFORMANCE CURVE

CONDITION (SAE J1995)	SPECIFICATION
ATMOSPHERIC PRESSURE	100 kPa (25 ℃)
WARMING UP	SUFFICIENT
COOLING FAN	NOT INSTALLED
ALTERNATOR	INSTALLED
AIR CLEANER	INSTALLED
MUFFLER	INSTALLED

Power Output(KW)



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DEVELON

4. HYDRAULIC SYSTEM

1) MAIN PUMP

TYPE	fixed displacement gear pump
QUANTITY	1
DISPLACEMENT	100 cc/rev
MAX. FLOW RATE	200 L/min (ENGINE SPEED AT 2150RPM)
RATED FLOW RATE	186 L/min (ENGINE SPEED AT 2000RPM)
TANK PRESSURIZING DEVICE	SEMI PRESSURIZED (AIR BREATHER)
PUMP CUT-OFF PRESSURE	—

3) MAIN CONTROL VALVE

TYPE	OPEN
QUANTITY OF SPOOLS	2
SPOOL ARRANGEMENT	ARM - BUCKET
OVERLOAD RELIEF OF BUCKET	200 bar
OVERLOAD RELIEF OF ARM	—

4) 3rd SPOOL CONTROL VALVE (OPTION)

TYPE	OPEN
QUANTITY OF SPOOLS	3
RATED FLOW RATE	300 L/min
OVERLOAD RELIEF	200 bar

5) REMOTE CONTROL VALVE (STANDARD)

TYPE	PILOT OPERATED JOYSTICK WITH MONO LEVER DETENT COILS- ARM RAISE/FLOAT, BUCKET CROWD)
PRESSURE	25 bar
STROKE CHARACTER	19 BAR @ 8 mm STROKE

6) REMOTE CONTROL VALVE (OPTION)

TYPE	PILOT OPERATED JOYSTICK WITH TWO LEVER (DETENT COILS- ARM RAISE/FLOAT, BUCKET CROWD)
PRESSURE	25 bar
STROKE CHARACTER	19 BAR @ 6.5 mm STROKE

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7) BRAKE & PILOT & FAN MOTOR SUPPLY VALVE

BRAKE CHARGING	HYDRAULIC
PILOT REDUCING PRESSURE	28bar (1EA, individual Valve)
SOLENOID VALVE Q'TY	2EA (PILOT CUT-OFF, PARKING)
SOLENOID VOLTAGE	DC 24V

8) ACC. BLOCK

SOLENOID VALVE Q'TY	2EA
SOLENOID VOLTAGE	DC 24V

9) HYDRAULIC FAN MOTOR

TYPE	—
DISPLACEMENT	—
MAX. PRESSURE	—
FAN MAX SPEED	—

10) AIR BREATHER

RELIEF PRESSURE	0.46bar
VACCUM RELIEF	0.04 ~ 0.05 bar

11) ACCUMULATOR; BRAKE

TYPE	—
CHARGE PRESSURE, VOLUME	—

12) ACCUMULATOR; PILOT

TYPE	—
CHARGE PRESSURE, VOLUME	—

13) ACCUMULATOR; LIS

TYPE	—
CHARGE PRESSURE, VOLUME	—

14) FILTERS; SUCK

ELEMENT MATERIAL	GLASS FIBER
FILTRATION RATING	80mesh

15) FILTERS; BRAKE & PILOT & FAN

ELEMENT MATERIAL	GLASS FIBER
FILTRATION RATING	10um (Pilot Filter, Non-Brake & Pilot Filter)

16) DC MOTOR-PUMP; EMERGENCY STEER

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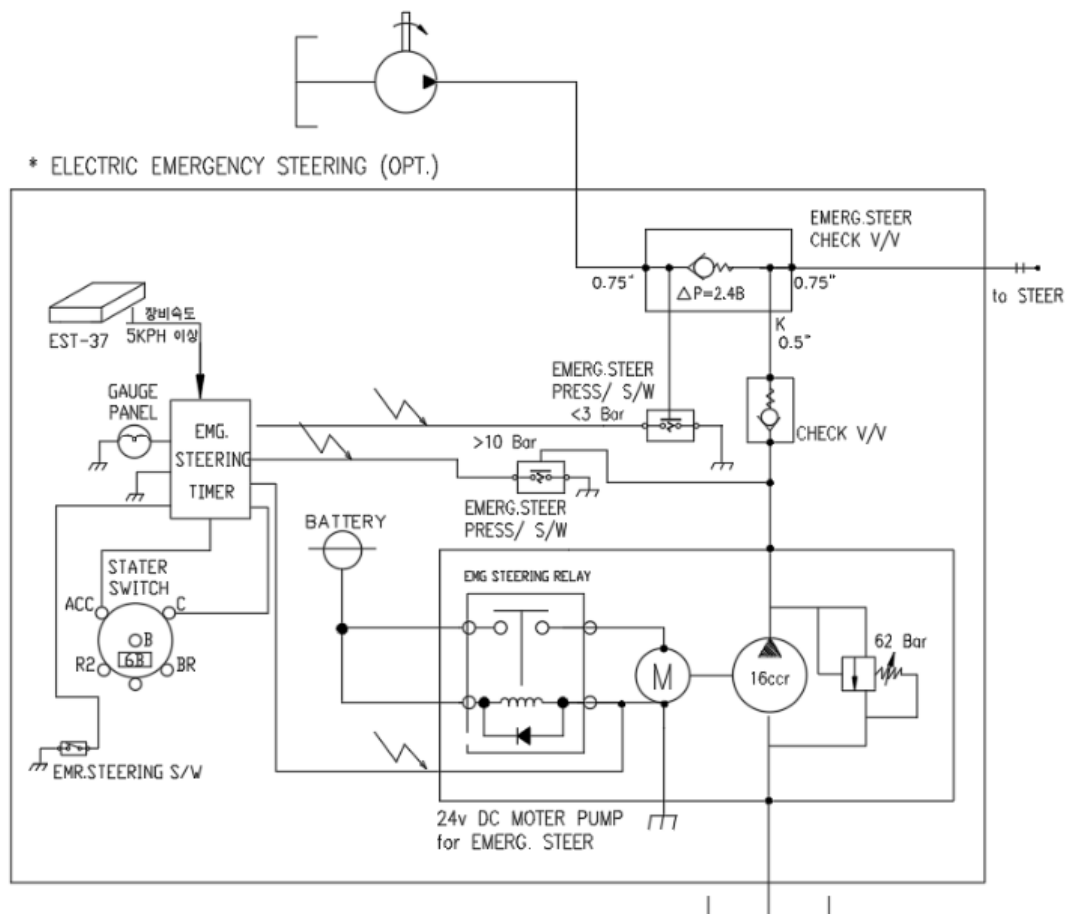
16-1) PUMP

TYPE	GEAR, BUILT IN CHECK & RELIEF
THEORETICAL DISPLACEMENT	16 cc/rev
RELIEF PRESSURE	62 bar
ALLOWABLE SPEED	3,040 rev/min

16-2) ELECTRIC MOTOR

TYPE	24V DC, DOUBLE TERMINAL, WATER SEALED, MEDIUM DUTY w/ FOOT MOUNTING BRACKET BUILT IN STARTER SWITCH
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16-3) EMERGENCY STEER CIRCUIT



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5. DRIVE MECHANISM

5.1 TRAVEL SYSTEM

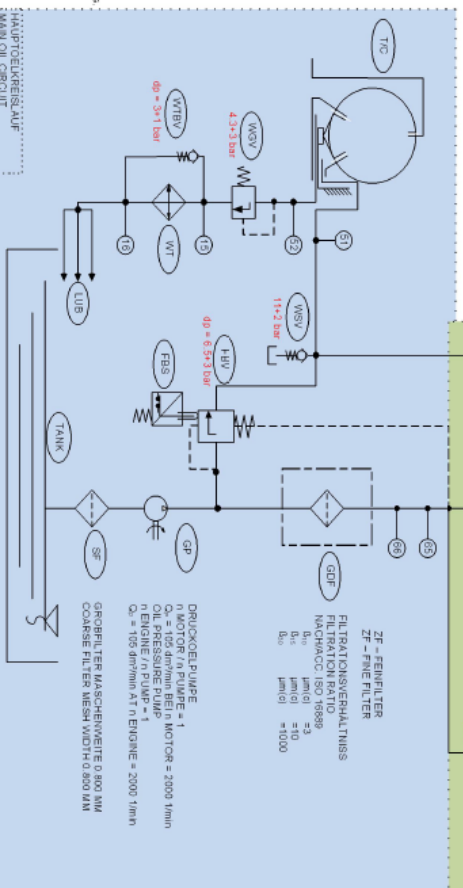
1) TRANSMISSION

TYPE	4 SPEED
	POWER-SHIFT
	ENGINE DIRECT MOUNTED
TORQUE CONVERTER STATOR	FIXED STATOR
TORQUE CONVERTER STALL RATIO	2.28
TORQUE CONVERTER SIZE	340 mm
CHARGING PUMP FLOW	94 L/min at 2,000 rpm
HYDRAULIC PUMP P.T.O RATIO	1/1
POWER SHIFT CONTROL PRESSURE	20 + 2 kg/cm ²
CONVERTER SAFETY RELIEF PRESSURE:	11 bar
MAX. TURBINE ROTATING SPEED	2600 rpm
SHIFT CONTROL	ELECTRONIC TYPE
CONTROL UNIT	—
OUTPUT FLANGE	FRONT –DISC FLANGE
	REAR – 7C MECHANICS
CONTROL CIRCUIT	(NEXT PAGE)

2) PROPELLER SHAFT

	FRONT	CENTER	REAR
MAX. ALLOWABLE TORQUE	5500N.m	5500N.m	3500N.m
MIN. JOINT ANGLE	24°	24°	10°
MAX. PHASE MISALIGNMENT	±1.5°	±1.5°	±3.0°
MAX. SPEED (Critical speed without vibration)	3900 rpm	3900 rpm	3900 rpm
COUPLING DIMENSION	7C/Φ 130 DISC	Φ 130/Φ 155.5 DISC	7C/7C

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HDD	HAUPTRICKVENTIL
T/C	TORQUE CONVERTER
RV/3	PRESSURE REDUCTION VALVE
WSV	WÄRMETAUSCHER CONVECTER HEAT EXCHANGER
WV	WÄRMETAUSCHER RADIATOR
LUB	SCHMIERUNG LUBRICATION
TANK	GETRIEBE OIL SUMMER
YV	PILOT PRESSURE VALVE
NR/S	NACHFOLGESCHIEBER BOOSTER VALVE
BLU	BLENDEN ORIFICE
TEMP	TEMPERATURE SENSOR
WSV	WÄRMETAUSCHER CONVECTER HEAT EXCHANGER
WV/B	WÄRMETAUSCHER RADIATOR BYPASS VALVE
FBS	FILTER BYPASS SWITCH
FBV	FILTER BYPASS VALVE
GRF	GRÖßENKONTAKT TRANSMISSION PRESSURE FLIER
OP	ÖLDRUCKVOLUME SAFETY PUMP
SF	SUCKFILTER SUCTION FILTER

4) FRONT AXLE

TYPE	FULLY FLOATING PLANETARY-TYPE HUB DRIVE FIXED MOUNTING LSD 30%
	Wet Type Axle
OVERALL REDUCTION RATIO	23.334
AXLE LOAD (EMPTY)	8,060 kg
AXLE LOAD (BREAKOUT)	30,770 kg
WHEEL BOLT P.C.D	Φ425 mm
BRAKE TYPE	WET DISC
BRAKE TORQUE per WHEEL	37455 N.m at 60 bar
DRIVE FLANGE	7C MECHANICS

5) REAR AXLE

TYPE	FULLY FLOATING PLANETARY-TYPE HUB DRIVE FIXED MOUNTING LSD 30%
	Wet Type Axle
OVERALL REDUCTION RATIO	23.334
AXLE LOAD (EMPTY)	9,850 kg
AXLE LOAD (EXCAVATING)	1,3340 kg
WHEEL BOLT P.C.D	Φ425 mm
BRAKE TYPE	WET DISC
BRAKE TORQUE per WHEEL	37455 N.m at 60 bar
DRIVE FLANGE	7C MECHANICS

6) TIRE & WHEEL

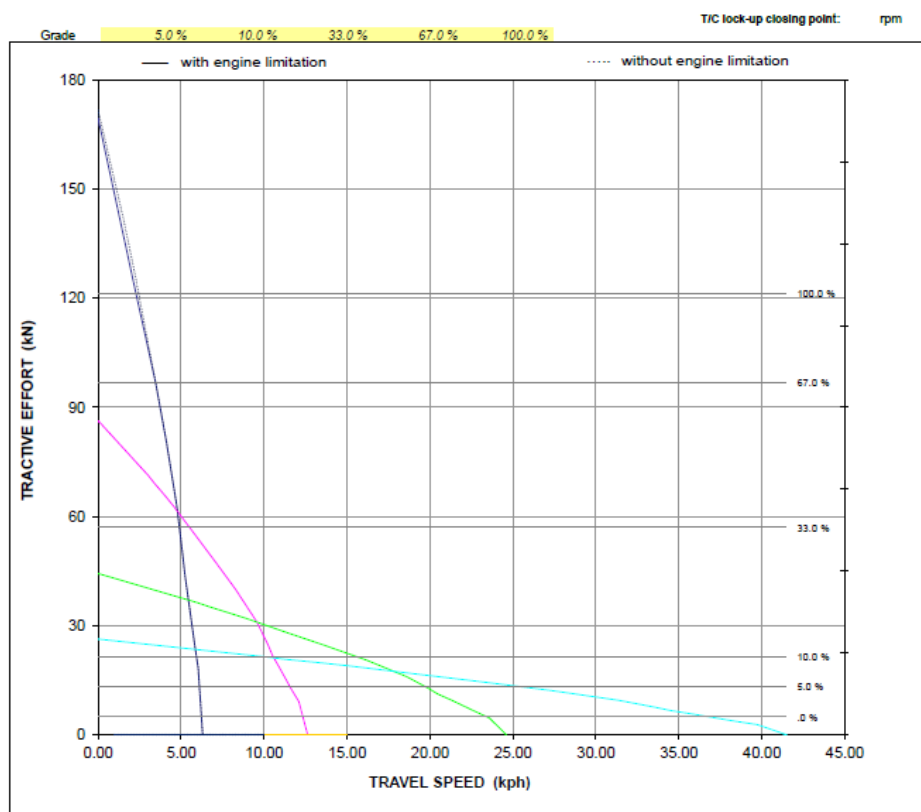
TYPE	TUBELESS
TIRE SPEC.	23.5R25 TRI(L3)
RIM SPEC.	19.5/2.5-25
DISC OFFSET	33.5 mm

7) TRAVELING PERFORMANCE (REFER TO NEXT PAGE)

MAX. SPEED	4 SPEED	36 km/h
MAX. TRACTIVE EFFORT	1 SPEED	167 kN
GRADEABILITY		30° (58%)

- Gear ratio: 4,152/2,089/1.072/0.636

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5.2 BRAKE SYSTEM

1) FAN & BRAKE PUMP

TYPE	Gear pump (Non-Fan Pump)
DISPLACEMENT	15.8 cc/rev
MAX. SUPPLY FLOW	32 l/min

2) SERVICE BRAKE PEDAL VALVE (SINGLE)

SYSTEM	Hydraulic brake
BRAKE PRESSURE	80 kgf/cm ²
PEDAL FORCE	30 kgf at 80 bar, 160 mm RAD

3) PARKING BRAKE

TYPE	SPRING-APPLIED HYDRAULIC-RELEASED SLIDING CALIPER DISC BRAKE ON THE FACE OF TRANSMISSION
RELEASE PRESSURE	120 kgf.m
REQUIRED STAT. BRAKE TORQUE UNLADEN (RATED CLEARANCE)	—
REQUIRED BRAKE TORQUE AT AN EMERGENCY STOP OF 1.50 m/cm ²	—

4) BRAKE PERFORMANCE

BRAKING DISTANCE	8.8 m at 32 km/h
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5.3 STEERING SYSTEM

1) STEERING PUMP

TYPE	fixed displacement gear pump
QUANTITY	1
DISPLACEMENT	81.2 cc/rev
MAX. FLOW RATE	162 L/min (ENGINE SPEED AT 2150RPM)
RATED FLOW RATE	151 L/min (ENGINE SPEED AT 2000RPM)
PUMP CUT-OFF PRESSURE	—

2) STEERING UNIT

TYPE	Hydraulic steering Unit
DISPLACEMENT	125 cc/rev

3) FLOW AMPLIFIER

TYPE	Flow Amplifying VALVE (Option)
AMPLIFICATION FACTOR	—
MAX OIL FLOW TO STEERING	160 L/min
LS RELIEF VALVE SETTING	140 bar

4) ACCUMULATOR; STEER

TYPE	Hydraulic accumulator
CHARGE PRESSURE, VOLUME	35 bar, 0.16 Liter

5) DUAL CROSS RELIEF VALVE

RELIEF VALVE PRESSURE	—
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6) STEERING CYLINDER

CUSHION STROKE	485 mm
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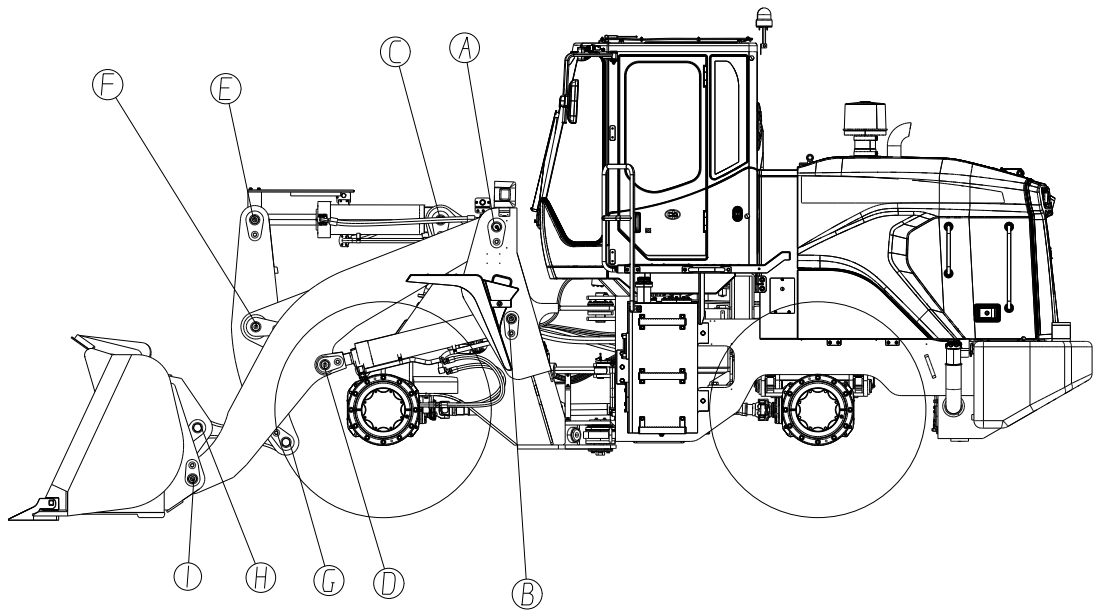
6. HYDRAULIC CYLINDERS

	UNIT	LIFT	BUCKET	STEER
QUANTITY	-	2	1	2
BORE	mm	160	190	90
ROD DIA.	mm	90	90	50
STROKE	mm	823	584	485
CLOSED LENGTH	mm	1,396	1,040	806
RETRACTING CUSHION	-	X	X	X
EXTENDING CUSHION	-	X	X	X

7. FRONT

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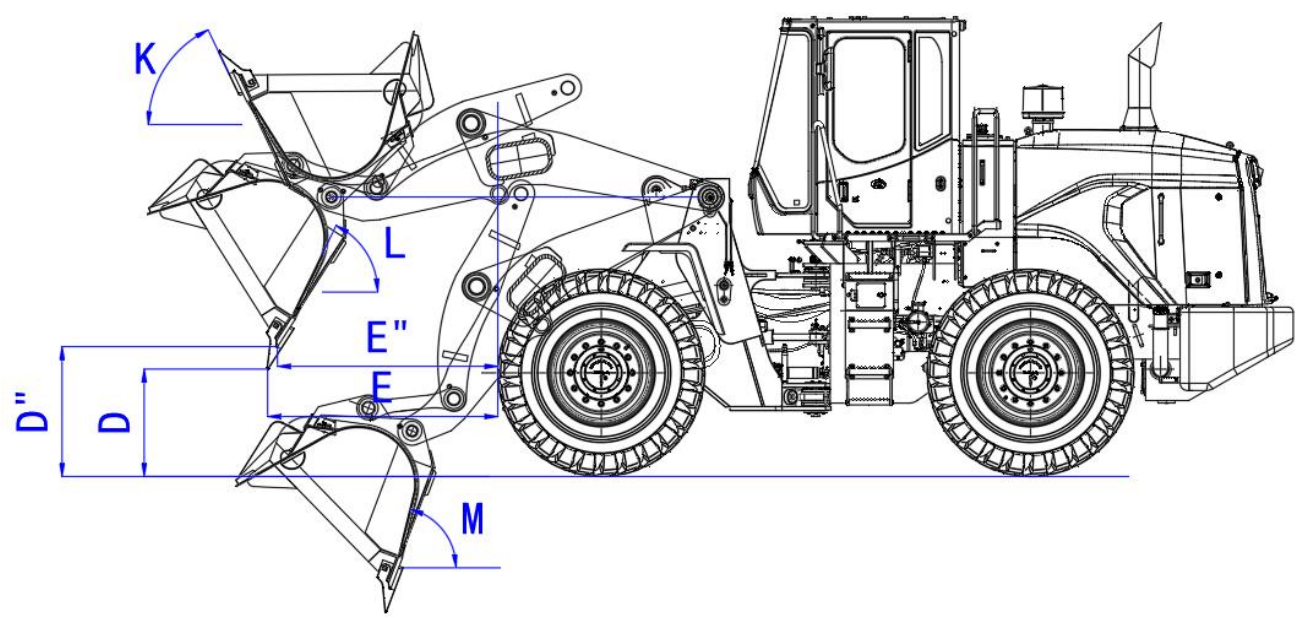
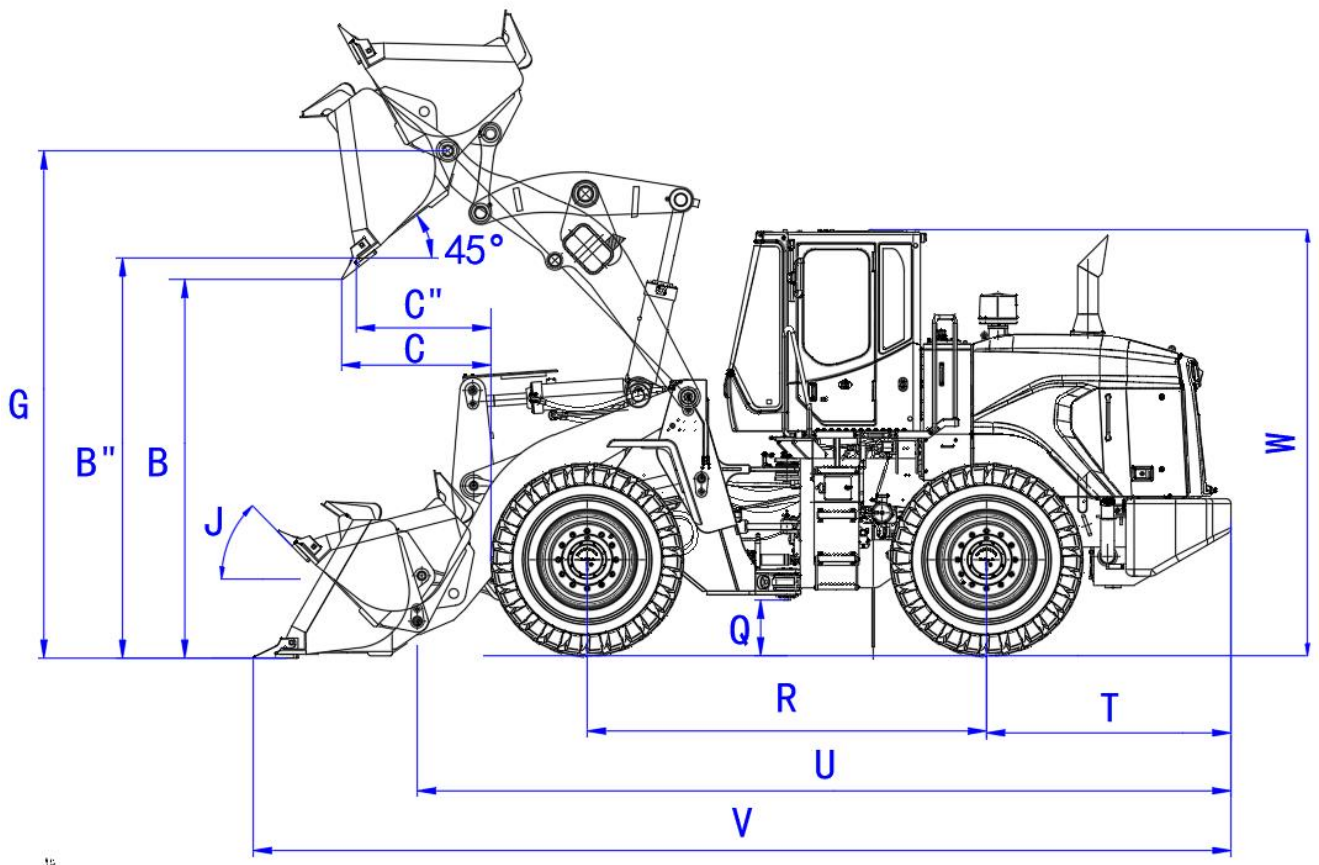
FRONT LINKAGE PIN SIZES



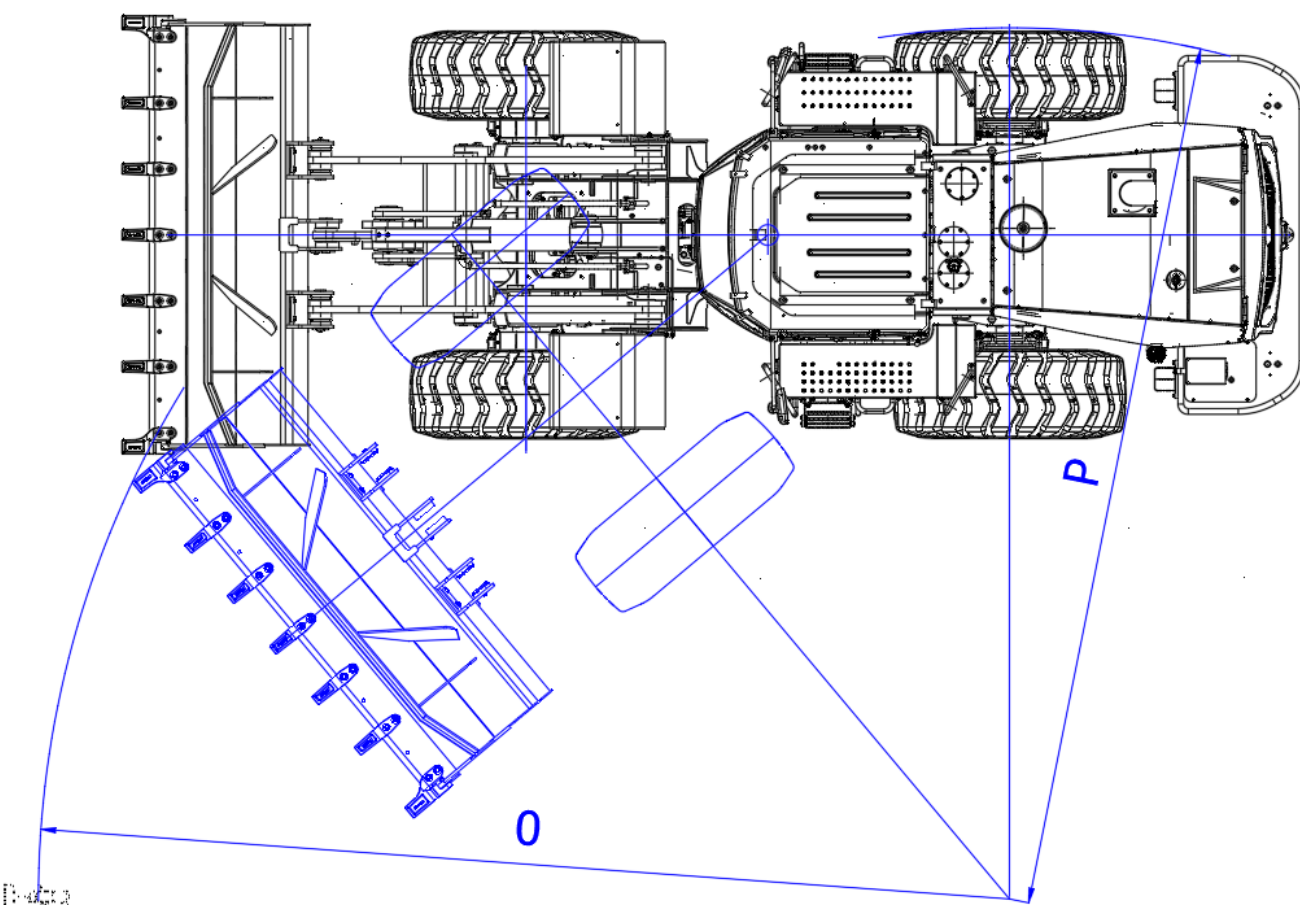
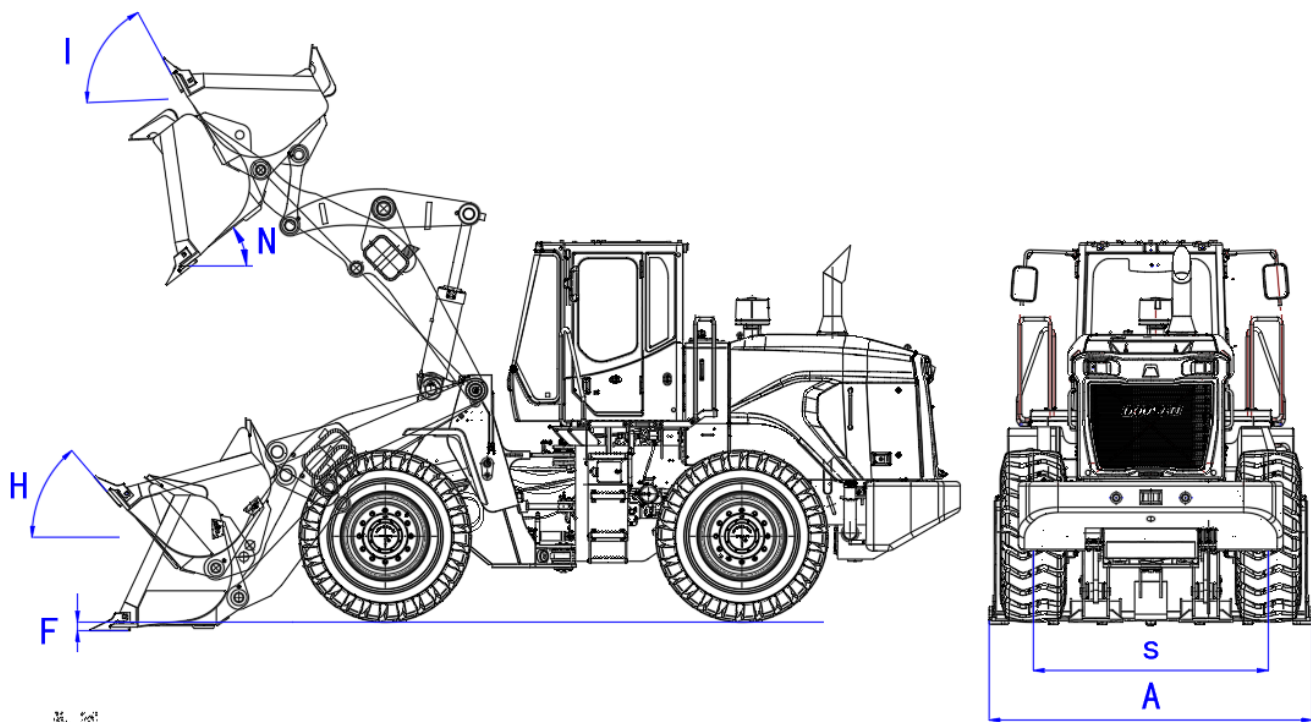
POINT	UNIT	DIA.	LENGTH
A	mm	100	306
B	mm	80	306
C	mm	100	276
D	mm	80	220
E	mm	100	213
F	mm	110	400
G	mm	90	213
H	mm	90	236
I	mm	80	276

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8. DIMENSIONS AND WORKING RANGE



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DEVELON

LOADER TYPE		General purpose				
Configuration	Unit	STANDARD ARM + ROCK Bucket (V- Type)	STANDARD ARM + Mono Tooth Bucket	STANDARD ARM + Mono Tooth Bucket	STANDARD ARM +Cutting Edge	STANDARD ARM + Light Material Bucket
Capacity heaped ISO/SAE	m ³	2.7	3.0	3.2	3.5	4.0
Bucket width A	mm	2,978	2,992	2,992	3,000	3,092
Breakout force	Ton	16.8	16.8	16.5	15.6	15.0
Static tipping load (straight)	kg	13,800	14,000	14,000	13,900	13,900
Static tipping load (at full turn)	kg	11,800	12,000	12,000	11,900	11,900
Dump height (at 45°) (at fully raised)  1	B(B") mm	2,953	3,075	3,066	3,091	3,010
Dump reach (at 45°) (at fully raised)  1	C(C") mm	1,418	1,302	1,322	1,151	1,279
Dump height (at max. dump) (at max. reach)  1	D(D") mm	903	1,024	1,016	1,041	960
Dump reach (at max. dump) (at max. reach)  1	E(E") mm	2,263	2,147	2,167	1,996	2,215
Digging depth F	mm	129	121	121	115	89
Height at bucket pivot point	G	4,150	4,150	4,150	4,150	4,150
Max. tilt angle at carry position	H	deg	49	49	49	49
Max. tilt angle at fully raised	I	deg	60	60	60	60
Max. tilt angle on ground	J	deg	45	45	45	45
Max. tilt angle at max. reach	K	deg	65	65	65	65
Max. dump angle at max. reach	L	deg	64	64	64	60
Max. dump angle on ground	M	deg	76	76	76	72
Max. dump angle at fully raised	N	deg	49	49	49	45
External radius at bucket edge	O	mm	6,610	6,595	6,600	6,570
External radius at tire edge	P	mm	5,950	5,950	5,950	5,950
Ground Clearance	Q	mm	420	420	420	420
Wheelbase	R	mm	3,300	3,300	3,300	3,300
Tread	S	mm	2,150	2,150	2,150	2,150
Rear Axle to Counterweight	T	mm	2,040	2,040	2,040	2,040
Overall length without bucket	U	mm	6,904	6,904	6,904	6,904
Overall length	V	mm	8,181	8,150	8,170	8,044
Overall Height	W	mm	3,592	3,592	3,592	3,592
Operating weight	kg	18,160	17,860	17,900	18,020	17,980
 1) Measured to the tip of the bucket teeth, If there are no teeth, Measured to the cutting edge of the bucket						
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LOADER TYPE		General purpose				
Configuration	Unit	STANDARD ARM +Light Material Bucket	High Lift Arm + Mono Tooth Bucket	High Lift Arm + Cutting Edge	High Lift Arm + Cutting Edge	High Lift Arm + Cutting Edge (GP)
Capacity heaped ISO/SAE	m ³	5.0	3.2	3.3	3.5	4.2
Bucket width A	mm	3,200	2,992	2,944	3,000	3,076
Breakout force	Ton	14.6	15.8	14.7	15.0	12.9
Static tipping load (straight)	kg	13,600	12,800	12,700	12,600	12,500
Static tipping load (at full turn)	kg	11,700	11,000	10,900	10,800	10,700
Dump height (at 45°) (at fully raised)  1	B(B") mm	2,896	3,367	3,428	3,392	3,260
Dump reach (at 45°) (at fully raised)  1	C(C") mm	1,358	1,383	1,296	1,212	1,350
Dump height (at max. dump) (at max. reach)  1	D(D") mm	845	1,016	1,077	1,041	908
Dump reach (at max. dump) (at max. reach)  1	E(E") mm	2,203	2,247	2,340	2,256	2,394
Digging depth F	mm	89	198	198	192	198
Height at bucket pivot point G	mm	4,150	4,451	4,451	4,451	4,451
Max. tilt angle at carry position H	deg	51	51	51	51	51
Max. tilt angle at fully raised I	deg	62	62	62	62	62
Max. tilt angle on ground J	deg	46	46	46	46	46
Max. tilt angle at max. reach K	deg	64	64	64	64	64
Max. dump angle at max. reach L	deg	61	61	61	57	57
Max. dump angle on ground M	deg	83	83	83	79	79
Max. dump angle at fully raised N	deg	45	49	49	45	45
External radius at bucket edge O	mm	6,740	6,750	6,700	6,710	6,800
External radius at tire edge P	mm	5,950	5,950	5,950	5,950	5,950
Ground Clearance Q	mm	420	420	420	420	420
Wheelbase R	mm	3,300	3,300	3,300	3,300	3,300
Tread S	mm	2,150	2,150	2,150	2,150	2,150
Rear Axle to Counterweight T	mm	2,040	2,040	2,040	2,040	2,040
Overall length without bucket U	mm	7,227	7,227	7,227	7,227	7,227
Overall length V	mm	8,329	8,493	8,387	8,367	8,558
Overall Height W	mm	3,592	3,592	3,592	3,592	3,592
Operating weight	kg	18,270	18,300	18,360	18,420	18,560
 1) Measured to the tip of the bucket teeth, If there are no teeth, Measured to the cutting edge of the bucket						
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9. PERFORMANCE DATA

1) PRESSURE SETS

WORKING PUMP	180 ± 5 kg/cm ²
STEERING RELIEF	140 ± 5 kg/cm ²
PILOT CONTROL	28 ± 2 kg/cm ²
BRAKE ACCUMULATOR CHARGING	30 ± 1 kg/cm ²
SERVICE BRAKE	80 ± 3 kg/cm ²
FAN MOTOR MAX.	—
PARKING BRAKE RELEASE	120 ± 5 kg/cm ²
T/M SELECTION PRESSURE	20 + 2 kg/cm ²

2) SPEED & FORCE

OPERATION		UNIT	SPEED-FORCE	REMARKS
ARM	RAISING	sec	5.3 ± 0.5	
	LOWERING	sec	2.8 ± 0.4	
BUCKET	DUMP	sec	1.3 ± 0.3	Max. Height
STEERING	LOCK TO LOCK	turn	5.2 ± 0.5	at high idle Normal operation (60rpm)
E/G RPM	HIGH	rpm	2150 ± 50	(On machine)
	LOW	rpm	750 ± 50	(On machine)
	AUTO	rpm	—	
	T/C STALL	rpm	1950-100	
COOLING FAN	E/G HIGH	rpm	—	
TRAVEL SPEED	1/2/3/4 SPEED	Km/h	6.8/13.2/24/36	
BRAKING DISTANCE		m	8.8 m at 32 km/h	
MAX. TRACTIVE EFFORT	1 SPEED	kN	167	
BREAKOUT FORCE		Ton	16.5	
PAYLOAD		ton	5.5	3.2 Mono Tooth Bucket
RATED OPERATION LOAD		ton	5.5	3.2 Mono Tooth Bucket
STATIC TIPPING LOAD (straight)		kg	14,000	3.2 Mono Tooth Bucket
STATIC TIPPING LOAD (full turn)		kg	12,000	3.2 Mono Tooth Bucket

10. NOISE LEVEL

OPERATOR'S CABIN (Measured/ Guaranteed)	(L _{PA})	73 dB(A) ↓
EXTERNAL (Measured/ Guaranteed)	(L _{WA})	109 dB(A)

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11. USER SERVICE DATA

Service Data										
No.	Items To Check	Service	SD320P							
			Qty.	Service Interval (h)						
				10	50	100	250	500	1000	2000
1	Front Joint Pin	Grease	13	V						
2	Articulation Pin	Grease	2	V						
3	Stabilizer pin	Grease	2	V						
4	Steer Cylinder	Grease	4	V						
5	Drive Shaft	Grease	10	V						
6	Engine Oil	Engine Oil (SAE15W40)	19L	V	F		●			
7	Engine Oil Filter	Cartridge	2		F		●			
8	Fuel Pre-Filter	Cartridge	1					●		
9	Fuel Filter	Cartridge	2					●		
10	Transmission	Engine Oil (SAE15W40)	35L	V		F		●		
11	Transmission Filter	Element	1			F			●	
12	Hydraulic Oil Tank	Hydraulic Oil ISO #46	260L	V						●
13	Oil Tank Filter	Element(return)	1				F		●	
		Element(absorption)	2						C	
14	Oil Tank Breather Filter	Element	1						C	
15	Pilot Filter	Cartridge	1				F		●	
16	Radiator	Coolant	42L	V						●
17	Front Axle	Gear Oil	35L	V		F			●	
18	Rear Axle	Gear Oil	35L	V		F			●	
19	Air Filter	Element (Outer)	1		C			●		
		Element (Inner)	1					●		
20	Brake Pump	Brake Fluid	2.8L	V				●		
21	Fuel Cap Filter	Element	1				C			
22	Fuel Suction Filter	Element	1				C			
V: Maintenance and Fill										
C: Cleaning										
F: First Time Exchange Only										
● Replacement On Every Interval										
NOTE:										

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12. SUB GROUP WEIGHTS

ITEM	UNIT	WEIGHT	REMARKS
COUNTERWEIGHT	Kg	1,530	
FRONT FRAME	Kg	1656	
REAR FRAME	Kg	1460	
OIL TANK	Kg	170	w/o Oil
FUEL TANK	Kg	207	w/o Oil
ENGINE	Kg	960	w/o Oil
TRANSMISSION	Kg	550	w/o Oil
AXLE_FRONT	Kg	1,063	w/o Oil
AXLE_REAR	Kg	1,097	w/o Oil
TIRE (23.5-25-16PR) at Each Tire	Kg	250	
RIM (25 -19.5/25) at Each Rim	Kg	130	
PROPELLER SHAFTS (3EA)	Kg	70	
RADIATOR	Kg	130	w/o Water
MAIN PUMP	Kg	28	
CONTROL VALVE	Kg	57	2-Spool
LIS V/V + ACCMULATOR	Kg	—	
EMEGENCY STEER PUMP	Kg	—	
COVER GROUP	Kg	312	
AXLE PIVOT SUPPORT_FRONT	Kg	—	
AXLE PIVOT SUPPORT_REAR	Kg	—	
CABIN ASS'Y (Non RPPS/ROPS)	Kg	686/890	
LOADER ARM ASS'Y	Kg	1,195	
LEVER ASS'Y	Kg	385	
3.2 m ³ BUCKET ASS'Y	Kg	1,386	
LINK	Kg	45	
CYLINDER_ARM	Kg	180	weight of Arm Cyl. 1EA
CYLINDER_BUCKET	Kg	180	

13. LIFTING CAPACITY

Bucket	UNIT	3.2 m ³ Mono Tooth Bucket		
Lifting Capacity to Max. Height	kgf	12,800		

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