



AMPHIBIOUS EXCAVATOR (CAT320)

OCS owned CAT 320D2 Excavator is one of the OCS's new assets added to OCS's trenching equipment spread. OCS owned CAT 320D2 Excavator (*Equipment Number: OCS-E&M-EXC-WAP003*) is a heavy construction unit, which can be used for near shore trenching, material handling, driving piles and also demolition operations. The main intended use of this machine is for excavation work either onshore or offshore.

The OCS CAT 320D2 hydraulic excavator has an excellent control, high stick and bucket forces, impressive lifting capacities, simplified service and a comfortable air conditioned operator station.

The OCS CAT 320D2 hydraulic excavator has a powerful Cat® C7.1 engine meets U.S.EPA Tier 3, EU Stage IIIA equivalent, and China Stage III Non-road emission standards combined with mechanical governed fuel system which is well suited for local fuels in every regions.

The OCS CAT 320D2 excavator has a 14m long reach front that provides 50% larger working envelop than a standard front.

The OCS CAT 320D2 excavator has supplementary pontoons and hydraulic spuds which can be added as an optional module at a later stage if the need arises, thanks to the future-proof design of the pontoon undercarriage system. In situations where the machine is required to operate in shallow and still water the addition of this module helps to overcome buoyancy effect, enhance the machine stability and increases operational safety. The spuds can be laid flat and rest atop the supplementary pontoons when not in use,

CAT320D2 EXCAVATOR

lowering the machine's overall centre of gravity, as well as offering an unobstructed, 360 degree swing operation.

Typical operation of Amphibious Excavator is shown in the following photo:





Details of Amphibious Excavator (CAT320) Specifications can be found on the following pages.

General Specifications

Engine Model	Cat C7.1	
<ul style="list-style-type: none"> The Cat C7.1 meets exhaust emissions equivalent to U.S. EPA Tier 2, EU Stage II. 		
Engine Power – ISO 14396	104 kW	139 hp
Displacement	7.01 L	4.28 in ³
Fuel Tank Capacity	410 L	180.3 gal
Gradeability	30 degree	
Ground Pressure	<0.14 kg/cm ²	<1.99 psi
Maximum Traveling Speed	4 km/h	2.5 mph
<ul style="list-style-type: none"> Travel speed varies with terrain conditions. 		

Final Drive

Dual speeds hydrostatic drive hydraulic motor.

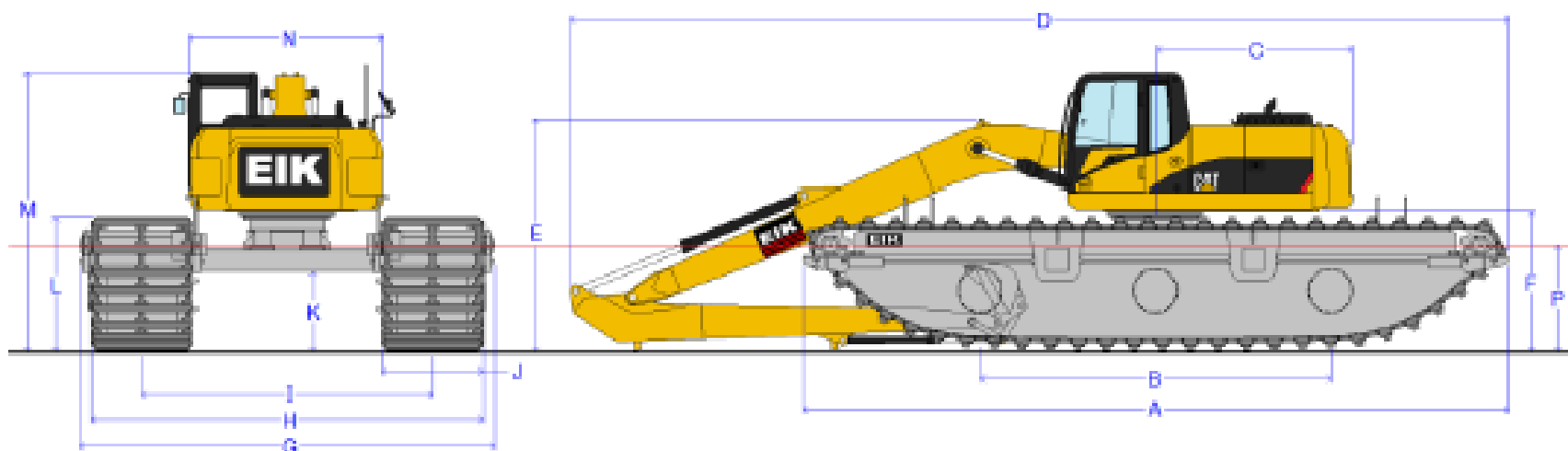
2x hydraulic motors per pontoons, 4x hydraulic motors per complete undercarriage system.

Hydraulic System

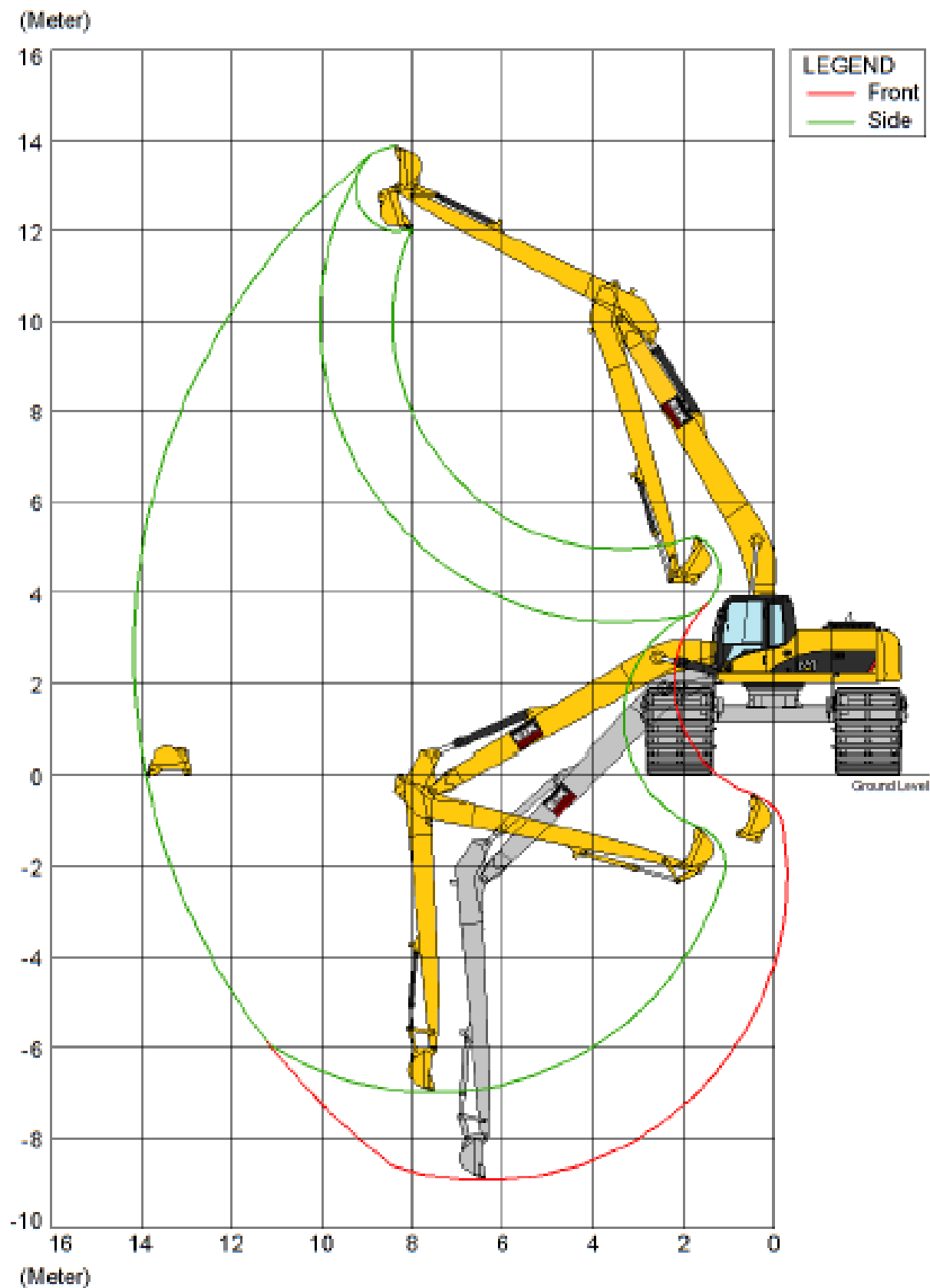
Main System – Max Flow (Total)	404 L/min	106.72 gal/min
Maximum Pressure - Equipment	35,000 kPa	5,076 psi
Maximum Pressure – Equipment (Lift mode ON)	36,000 kPa	5,221 psi
Maximum Pressure – Travel	35,000 kPa	5,076 psi
Maximum Pressure – Swing	25,000 kPa	3,636 psi
Pilot System – Maximum Flow	32.4 L/min	1,977 in ³ /min
Pilot System – Maximum Pressure	3,900 Kpa	556 psi

Weights

Operating Weight	33,000 kg	72,600 lbs
Float Capacity	39,400 kg	86,680 lbs



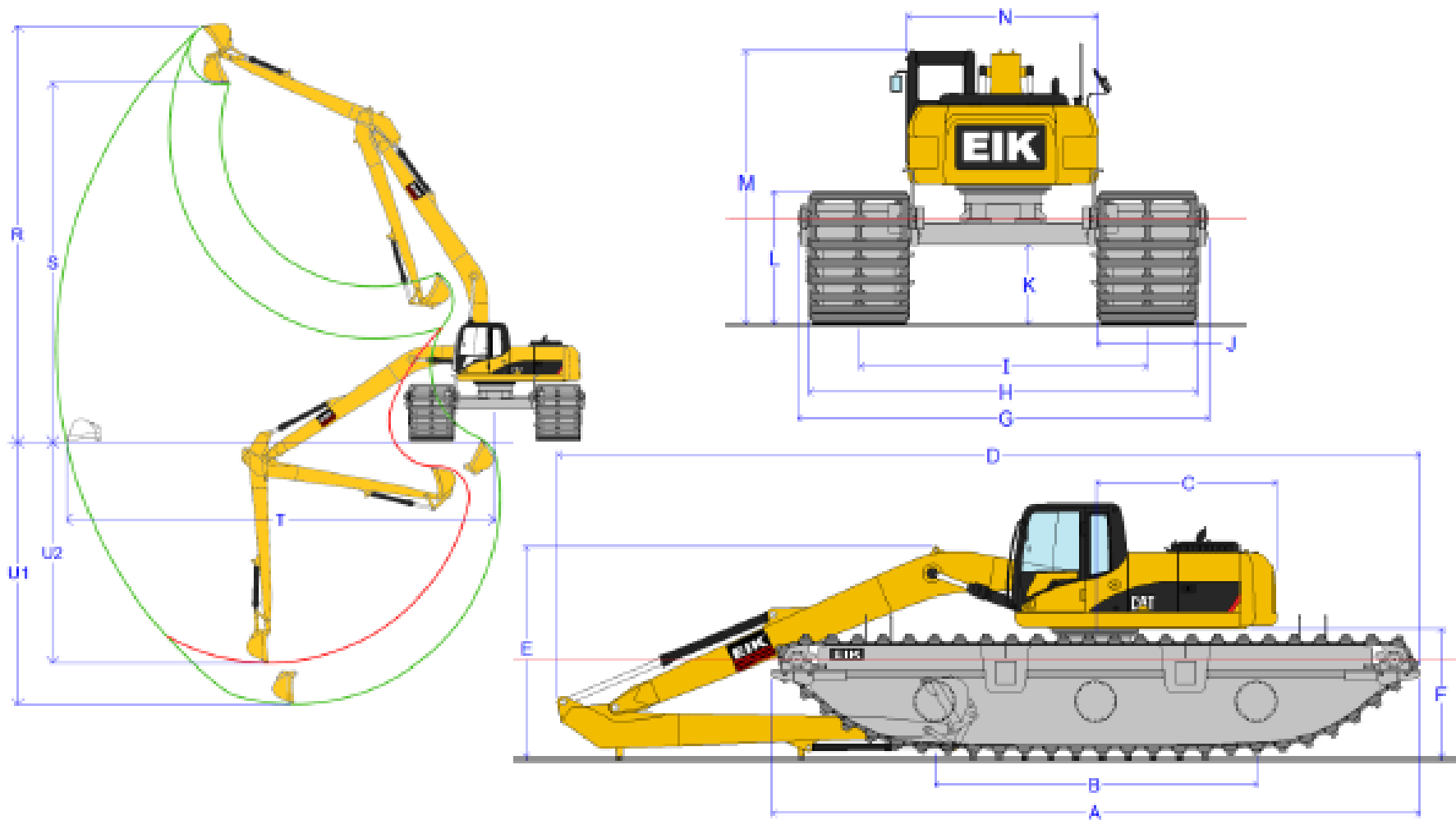
A	Max. Track Length	9.65 m	31'8"
B	Track Length On Ground	4.30 m	14'2"
C	Rear Upper Structure Length	2.75 m	9'0"
D	Overall Length	13.12 m	43'0"
E	Height of Boom	3.23 m	10'8"
F	Counterweight Clearance	2.21 m	7'3"
G	Overall Width, min/max	5.29 / 6.09 m	17'4" / 73'1"
H	Undercarriage Width, min/max	4.78 / 5.58 m	18'8" / 18'4"
I	Track Gauge, min/max	3.38 / 4.18 m	11'1" / 13'9"
J	Track Cleat Width	1.62 m	5'4"
K	Min. Ground Clearance	1.29 m	4'3"
L	Track Height	2.05 m	6'9"
M	Overall Cab Height	4.14 m	13'7"
N	Upper Structure Overall Width	2.71 m	8'11"



Maximum Cutting Height	13.80 m	45'3"
Maximum Loading Height	11.90 m	39'0"
Maximum Outreach	14.00 m	45'11"
Maximum Digging Depth from Front	8.80 m	28'10"
Max. Digging Depth from Side	7.00 m	22'11"
Bucket Capacity	0.50 m ³	0.65 cy

Specifications are subject to change without prior notice.

Notes: (1) The AM200 is not a ship. It is not fitted with equipment for cruising or working on water.
 (2) The AM200 is designed for working on soft terrain. Working or traveling on hard and rough ground is prohibited.



Dim. (m)	Description	Amphibious Undercarriage Models						
		AM80	AM140	AM200	AM250	AM300	AM350	AM400
		For 6 – 8 ton class excavator	For 12 – 14 ton class excavator	For 20 – 23 ton class excavator	For 24 – 27 ton class excavator	For 28 – 30 ton class excavator	For 33 – 38 ton class excavator	For 40 – 45 ton class excavator
A	Max. Track Length	6.28	9.40	9.65	9.65	11.10	11.90	11.77
B	Track Length On Ground	3.17	4.00	4.30	4.30	5.70	6.48	6.50
C	Rear Upper Structure Length	1.50	2.18	2.68	3.00	3.12	3.50	3.65
D	Overall Length	8.87	12.32	13.12	14.40	15.60	16.06	16.50
E	Height of Boom	2.78	2.90	3.23	3.70	4.10	4.00	4.15
F	Counterweight Clearance	1.62	1.75	2.21	2.21	2.35	2.32	2.40
G	Overall Width, min/max (outwardly extendable)	3.38/4.18	4.22/5.32	4.80/6.28	5.87/6.67	6.20/7.00	6.27/7.07	6.33/7.33
H	Undercarriage Width, min/max	3.38/4.18	3.95/5.05	4.47/5.95	5.58/6.38	5.90/6.70	5.97/6.77	5.97/6.97
I	Track Gauge, min/max	2.06/2.86	2.50/3.60	2.85 / 4.33	3.66/4.46	3.98/4.78	4.02/4.82	4.02/5.02
J	Track Cleat Width	1.30	1.45	1.62	1.92	1.92	1.95	1.95
K	Min. Ground Clearance	1.05	1.07	1.29	1.29	1.15	1.13	1.16
L	Track Height	1.50	1.61	2.05	2.05	2.05	2.05	2.19
M	Overall Cab Height	3.46	3.45	4.14	4.20	4.23	4.25	4.37
N	Upper Structure Overall Width	2.17	2.50	2.71	2.85	2.98	3.00	3.20
R	Max. Cutting Height	9.50	12.50	14.50	16.00	17.10	18.20	19.00
S	Max. Loading Height	8.90	8.50	13.00	14.80	15.80	16.50	17.50
T	Recommended Outreach	9.00	12.00	14.00	15.00	16.00	17.00	18.00
U1	Max. Digging Depth from Front	5.00	7.50	8.50	9.50	10.50	11.50	12.30
U2	Max. Digging Depth from Side	2.95	6.95	7.20	8.00	9.00	10.00	10.80
	Bucket Capacity (m ³)	0.25	0.40	0.50	0.70	0.80	0.90	1.10