AMPHIBIOUS EXCAVATOR

AN EXCAVATOR THAT FEARS NO TERRAINS

EIK®



An **AMPHIBIOUS EXCAVATOR** is specifically designed to maneuver through marshes, swampy areas, and soft terrains, with the added safety feature of floating on water. Thanks to the patented 'multi-synchronous hydraulic motor direct drive' system, this pivotal technology positions us at the forefront of amphibious excavator design. The paradigm shift in how modern amphibious machines are being designed has won over the hearts of numerous customers, both new and experienced amphibious excavator users in the industry.

The amphibious excavator is completely self-propelled, it can access virtually any soft terrains where standard excavators fear most. Such a machine has proven itself over and over again and has performed exceedingly well in the followings applications;

PATENTED TECHNOLOGY

MULTI SYNCHRONOUS HYDRAULIC DRIVE SYSTEM

APPLICATION

- Maintenance and cleaning of waterways, lakes, shorelines, ponds, etc.
- Erosion control and prevention.
- Deepening of waterways and river deltas.
- Maintenance and repair of the natural environment.
- Flood protection and flood maintenance works.
- Landscape building and protection.
- Accessing difficult strands of water/soft terrain.
- Swamp and wetland construction.
- Road building through wetlands.

INDUSTRY LEADING FEATURES

FINAL DRIVE SYSTEM

- A breakthrough in final drive design, the patented '**multi-synchronous direct drive**' hydraulic motor on each pontoon. Multiple active motors propelling each pontoon provide superior tracking power, making it virtually undeterred in any terrain.
- Increased reliability. New motor supplier has a strong track record for its quality.
- A leading OEM supplier to global leading excavator manufacturers.

ENHANCED PONTOON DESIGN

- Steel strength increased by 100%.
- Wear resistance properties increased by 100%.
- Rigidity increased by at least 30%.
- Reduced maintenance cycle and operating cost.

HYDRAULICALLY EXTENDABLE

- Innovative technology of undercarriage allows each pontoon to extend outwardly via hydraulic function, providing extra stability whenever the situation calls for.
- Pontoons can be retracted to their narrow position for land transportation
- Control functions can be executed comfortably with ease from the cabin.

MODULAR DESIGN

- Transportation width reduced by 4-7% (depending on the model).
- Floating capacity maintained.
- Floating capacity for AM80-5E has increased by 15%.

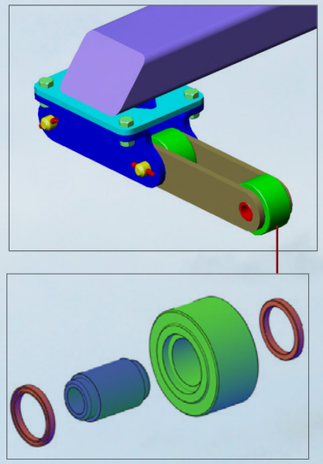
PROPRIETARY TECHNOLOGIES

CENTER FRAME

- Detachable slewing ring adapter design increases flexibility in changing upper body brands and models.
- New internal structural layout enhances the dissipation of stress throughout the center frame.
- Extensive use of high-strength steel.
- Increased rigidity and torsion resistance by at least 30%.

TRACK CHAIN

- *Grease-sealed roller*, a world first for amphibious excavator track chains.
- Entirely in-house designed and manufactured to ensure proper quality control.
- The criterion of a good design is that it has to perform reliably under various working conditions.
- The track chain is laser-trimmed to extremely tight tolerances.
- Improved track link design minimizes direct contact with the sprocket, extending the sprocket lifespan.

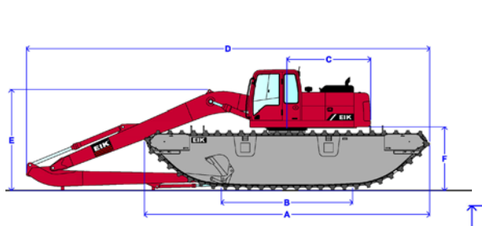


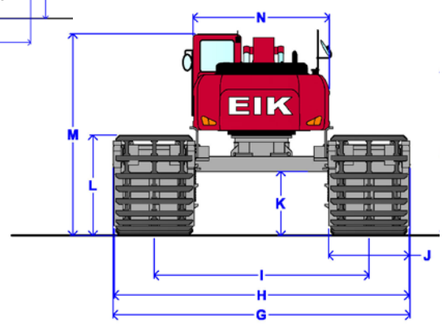
AXLE AND SPROCKET

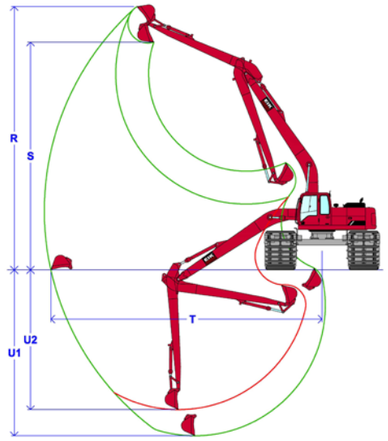
- New sprocket design, lighter and stronger.
- Steel strength increased by 100%.
- Wear resistance property increased by 100%.
- Reduced maintenance cycle and operating cost.

SUPPLEMENTARY PONTOONS

- Supplementary pontoons can be added on each side to boost stability in deeper water operations.
- Spuds attached to supplementary pontoons help to overcome buoyancy effects and enhance operability.





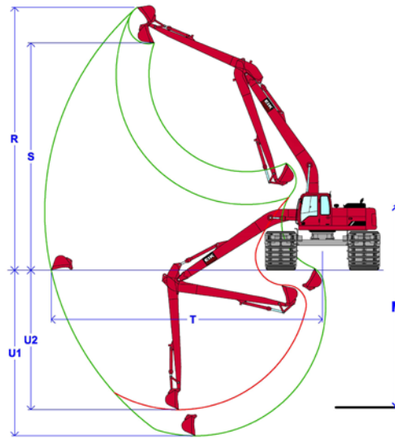


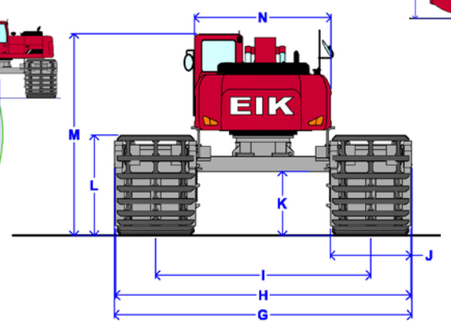
AMPHIBIOUS EXCAVATOR

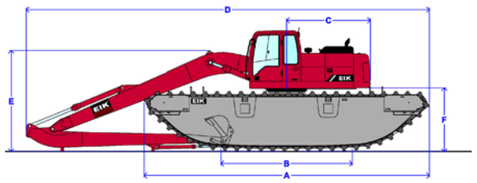
[Metric]

Dim (m)	Description	Amphibious Undercarriage Models									
		AM60-1ER	AM70-1ER	AM80-5ER	AM140-5ER	AM200-6ER	AM250-4ER	AM300-2	AM350-3	AM400-3	AM450-1B
		For 3.5-4.5 ton class excavator	For 5-6 ton class excavator	For 7-8 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 39-43 ton class excavator	For 44-48 ton class excavator
A	Max. Track Length	5.57	6.44	6.93	9.29	9.60	9.60	10.80	11.82	11.75	11.71
B	Track Length On Ground	2.75	2.90	3.20	4.50	4.50	4.50	5.20	5.70	5.70	6.00
C	Rear Upper Structure Length	0.85	1.58	1.75	2.13	2.85	3.00	3.19	3.50	3.50	3.56
D	Overall Length	7.90	7.47	9.25	12.24	13.55	14.41	15.55	16.59	17.20	18.00
E	Height of Boom	2.40	2.28	2.90	2.95	3.47	3.55	4.10	4.12	4.28	4.30
F	Counterweight Clearance	1.52	1.62	1.73	1.84	2.17	2.20	2.35	2.35	2.40	2.40
G	Overall Width, min/max (outwardly extendable)	2.78/3.48	2.82/3.62	3.39/4.19	4.02/5.12	4.50/5.98	5.23/ 6.67	5.94/6.94	5.99/6.99	6.05/7.05	6.43/7.43
H	Undercarriage Width, min/max	2.75/3.45	2.76/3.56	3.36/4.16	3.94/5.04	4.47/5.95	5.20/6.64	5.91/6.91	5.97/6.97	6.00/7.00	6.40/7.40
I	Track Gauge, min/max	1.75/2.45	1.76/2.56	2.06/2.86	2.49/3.59	2.85/4.33	3.28/4.72	3.99/4.99	4.02/5.02	4.05/5.05	4.25/5.25
J	Track Cleat Width	1.00	1.00	1.30	1.45	1.62	1.92	1.92	1.95	1.95	2.15
K	Min. Ground Clearance	1.02	1.00	1.15	1.12	1.29	1.29	1.30	1.13	1.16	1.16
L	Track Height	1.46	1.52	1.66	1.69	2.03	2.03	2.03	2.03	2.20	2.20
M	Overall Cab Height	3.46	3.55	3.65	3.77	4.08	4.12	4.27	4.30	4.30	4.36
N	Upper Structure Overall Width	1.50	1.95	2.26	2.45	2.54	2.85	2.96	2.99	3.09	3.53
R	Max. Cutting Height	6.50	7.10	7.95	11.40	12.40	13.70	14.60	15.30	15.20	16.30
S	Max. Loading Height	5.20	5.75	6.30	9.30	10.50	11.40	12.10	12.80	12.70	13.80
T	Recommended Outreach	7.00	7.00	8.00	12.00	14.00	15.00	16.00	17.00	18.00	20.00
U1	Max. Digging Depth from Front	3.70	3.50	3.80	7.30	8.90	9.40	9.90	11.00	12.50	13.90
U2	Max. Digging Depth from Side	3.50	3.50	3.40	6.50	7.20	7.20	8.50	9.60	10.40	11.30
	Bucket Capacity (m^3)	0.11	0.13	0.26	0.35	0.50	0.65	0.80	0.90	1.10	1.10

* The above specifications are for reference only, actual working range may vary from machine models.
** For the benefit of continuous product improvement, specifications are subjected to change without prior notice.







AMPHIBIOUS EXCAVATOR

[Imperial]

Dim (ft & in)	Description	Amphibious Undercarriage Models									
		AM60-1ER	AM70-1ER	AM80-5ER	AM140-5ER	AM200-6ER	AM250-4ER	AM300-2	AM350-3	AM400-3	AM450-1B
		For 7,700-9,900 lbs excavator	For 11, 000-13,200 lbs excavator	For 15,400-17,600 lbs excavator	For 26,400-30,800 lbs excavator	For 44,000-50,600 lbs excavator	For 52,800-59,400 lbs excavator	For 61,600 -66,000 lbs excavator	For 72,600-83,600 lbs excavator	For 85,800-94,600 lbs excavator	For 96,800 -105,600 lbs excavator
A	Max. Track Length	18’ 3”	21’ 2”	22’ 9”	30’ 6”	31’ 6”	31’ 6”	35’ 5”	38’ 9”	38’ 7”	38’ 5”
B	Track Length On Ground	9’	9’ 6”	10’ 6”	14’ 9”	14’ 9”	14’ 9”	17’ 1”	18’ 8”	18’ 8”	19’ 8”
C	Rear Upper Structure Length	2’ 9”	5’ 2”	5’ 9”	7’	9’ 4”	9’ 10”	10’ 6”	11’ 6”	11’ 6”	11’ 8”
D	Overall Length	25’ 11”	24’ 6”	30’ 4”	40’ 2”	44’ 5”	47’ 3”	51’	54’ 5”	56’ 5”	59’
E	Height of Boom	7’ 10”	7’ 6”	9’ 6”	9’ 8”	11’ 5”	11’ 8”	13’ 5”	13’ 6”	14’ 1”	14’ 1”
F	Counterweight Clearance	5’	5’ 4”	5’ 8”	6’	7’ 1”	7’ 3”	7’ 9”	7’ 9”	7’ 10”	7’ 10”
G	Overall Width, min/max (outwardly extendable)	9’ 1”/ 11’ 5”	9’ 3”/ 11’ 11”	11’ 1”/ 13’ 9”	13’ 2”/ 16’ 10”	14’ 9”/ 19’ 7”	17’ 2”/ 21’ 11”	19’ 6”/ 22’ 9”	19’ 8”/ 22’ 11”	19’ 10”/ 23’ 2”	21’ 1”/ 24’ 5”
H	Undercarriage Width, min/max	9’ / 11’ 4”	9’ 1”/ 11’ 8”	11’ / 13’ 8”	12’ 11”/ 16’ 6”	14’ 8”/ 19’ 6”	17’ 1”/ 21’ 9”	19’ 5”/ 22’ 8”	19’ 7”/ 22’ 10”	19’ 8”/ 23’	21’ / 24’ 3”
I	Track Gauge, min/max	5’ 9” / 8’	5’ 9” / 8’ 5”	6’ 9” / 9’ 5”	8’ 2” / 11’ 9”	9’ 4” / 14’ 2”	10’ 9” / 15’ 6”	13’ 1” / 16’ 4”	13’ 2”/ 16’ 7”	13’ 3” / 16’ 7”	13’ 11” / 17’ 3”
J	Track Cleat Width	3’ 3”	3’ 3”	4’ 3”	4’ 9”	5’ 4”	6’ 4”	6’ 4”	6’ 5”	6’ 5”	7’ 1”
K	Min. Ground Clearance	3’ 4”	3’ 3”	3’ 9”	3’ 8”	4’ 3”	4’ 3”	4’ 3”	3’ 8”	3’ 10”	3’ 10”
L	Track Height	4’ 9”	5’	5’ 5”	5’ 7”	6’ 8”	6’ 8”	6’ 8”	6’ 8”	7’ 3”	7’ 3”
M	Overall Cab Height	11’ 4”	11’ 8”	12’	12’ 4”	13’ 5”	13’ 6”	14’	14’ 1”	14’ 1”	14’ 4”
N	Upper Structure Overall Width	4’ 11”	6’ 5”	7’ 5”	8’	8’ 4”	9’ 4”	9’ 9”	9’ 10”	10’ 2”	11’ 7”
R	Max. Cutting Height	21’ 4”	23’ 4”	26’ 1”	37’ 5”	40’ 8”	44’ 11”	47’ 11”	50’ 2”	49’ 10”	53’ 8”
S	Max. Loading Height	17’	18’ 10”	20’ 8”	30’ 6”	34’ 5”	37’ 5”	39’ 8”	42’	41’ 8”	45’ 3”
T	Recommended Outreach	23’	23’	26’ 3”	39’ 4”	45’ 11”	49’ 3”	52’ 6”	55’ 9”	59’ 1”	65’ 7”
U1	Max. Digging Depth from Front	12’ 2”	11’ 6”	12’ 6”	23’ 11”	29’ 2”	30’ 10”	32’ 6”	36’ 1”	41’	45’ 7”
U2	Max. Digging Depth from Side	11’ 6”	11’ 6”	11’ 2”	21’ 4”	23’ 7”	23’ 7”	27’ 11”	31’ 6”	34’ 1”	37’ 1”
	Bucket Capacity (yd^3)	0.14	0.17	0.34	0.46	0.65	0.85	1.05	1.18	1.31	1.31

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EIK PROVIDE SOLUTIONS FOR YOUR BUSINESS



Mining

Basic planning for mining operations includes where, when, and what methods are to be used to excavate the natural deposit. This includes the use of reliable heavy machinery with robust attachments under the harshest environments.



Winterland

Winter is associated with snow and freezing temperatures. During this time, road maintenance constantly changes, and winter road maintenance becomes most important. The services involve a large number of operations. For contractors, it is of utmost importance to choose high-quality and dependable attachments to maintain roadworks during wintertime. With a quality track chain and track shoe, EIK AM series can work well during winter conditions.



Wetlands

EIK Marsh Buggy naturally excels in swampy and “difficult” conditions as it glides through with ease to help maintain its natural habitat.



Reservoir

EIK Amphibious Excavator/Marsh Buggy helps maintain the serenity and purity of the world’s precious resources.

River Shore

Pollution in our rivers from industrial sewage and agricultural runoff is harmful to nature, wildlife, and humans. EIK products can help the community clean up and make rivers a safer and healthier environment.

River

The river, being the main source of life, has to be maintained with constant cleaning and dredging with Amphibious and robotically welded Super Long Front for its natural continuous flow.

Coastal Protection

Coastal protection provides defense against flooding and erosion caused by waves, tides, winds, currents, and littoral drift. The construction of breakwaters helps to protect nature. The construction work can now be done easily by heavy equipment and attachments like Excavators, Long Reach, Grapples, and Buckets, which use the same techniques applied to road embankments and earthwork fortifications.



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