



E88.1

The green all-rounder

**POWERED
BY LIMACH**

We are Limach!

Limach began developing electric excavators back in 2017. While the market was cautiously exploring the possibilities of electric excavators, we were driven by a desire to do things better.

Better for everyone. At Limach, we believe in sustainable technology, which we implement smartly and creatively in existing concepts. From the very beginning, Limach has chosen to work with the quality of Volvo machines. A first-class product, powered by the ambition and creativity of Limach. It's no coincidence that our slogan is: **Powered by Limach!**

At Limach, we think carefully about our concepts. Unburdened by existing standards, our engineers develop the best and most accessible solutions. For example, starting with machines from 6 tons operating weight, Limach introduced a battery swap system, and all mini-excavators can be ordered with various battery packs, fully tailored to your needs.





 **LIMACH**[®]

FULL ELECTRIC

E18.3

acks

Member of the Volvo Group



Since 2022, Volvo Construction Equipment has held a majority stake in Limach. This collaboration between the two manufacturers brings a new focus on efficiency and sustainability. The base machine is produced by Volvo without diesel components and delivered as a semi-finished product to Limach's factory, where it is completed as a fully electric machine. This eliminates wasted time and materials. A jointly developed concept is now available to you: Volvo quality, Powered by Limach!



Battery pack

Equipped with two interchangeable battery packs, each with 90 kWh, the E88.1 offers a total capacity of 180 kWh, enough for up to 8 hours of continuous operation. The smart drop-off system allows the operator to easily swap battery packs, ensuring the machine remains operational at all times. Despite their power and capacity, each battery pack weighs less than 1,000 kg, making transport easy.





Safety & quality

Of course, great attention is paid to the safety of our electric machines. One of the advantages of Limach machines is that we work with a low-voltage system, ensuring safety for both you and us!

Limach always strives for the highest quality, ensuring your machine has minimal downtime. That's why we use only standardized components and adhere to all relevant guidelines. During periodic maintenance, we check all vital mechanical and electrical aspects of your machine.

The E88.1 in detail

The Limach E88.1 is a powerhouse in our range of excavators, delivering impressive performance. This machine is designed with the future in mind and is prepared for sustainable hydrogen technology, ensuring long-lasting and environmentally friendly use.



Features and benefits

CO2-Neutral operation

Charge using sustainable energy sources and operate fully CO2-neutral on-site.

Low operating costs

Thanks to the electric motor and efficient battery packs, you save on maintenance and operating costs.

Advanced hydraulic system

Perfectly tuned to the electric motor for fast, smooth, and efficient performance.

Comfortable cabin

The ROPS-certified cabin offers excellent all-round visibility and ergonomic comfort for the operator.

Powerful climate control

With seven air vents for rapid heating or cooling, the system increases comfort and productivity.

Easy battery swap

Thanks to the integrated swap system, the operator can easily replace an empty battery with a full one, without the need for extra equipment or costs.

Work and charge simultaneously

Keep working while the following battery pack is charging. No need for fast charging with high-power connections.

Low transport weight

Choose where you want to charge the battery thanks to the low weight of the battery packs, making transport flexible and easy.

Flexible charging options

Charge via a grid connection, charging container, or public charging point, depending on your work environment.

No more CO2 emissions

Clean, quiet, and versatile. Fully emission-free, higher efficiency from the electric motor, and low noise levels. Suitable for indoor demolition & renovation, urban areas with environmental zones, night-time emergencies, and more. With Limach, the possibilities are endless.

Hydraulic system

Volvo's proven hydraulic system, combined with Limach's electrical engineering, ensures efficiency and working comfort.

Ergonomic operator environment

The ergonomic, spacious, and safe cabin offers excellent visibility, intuitive controls, and comfort.



low maintenance costs

changing oil, filters, and other maintenance tasks related to the diesel engine are no longer required.

Charging everywhere

Thanks to the flexibility of the battery packs, you can work with one battery while the other charges. The battery packs can also be charged at any car charging station.



Undercarriage

The durable and strong x-shaped undercarriage provides superior stability and extends the machine's lifespan

Service

The Limach service network consists of specialists with years of experience in earth-moving equipment. Your local dealer or distributor has the knowledge to maintain and repair your machine when necessary. The Limach team supports your local service partner with specialist knowledge, if needed, directly on the machine. This way, you are guaranteed the right service on-site.



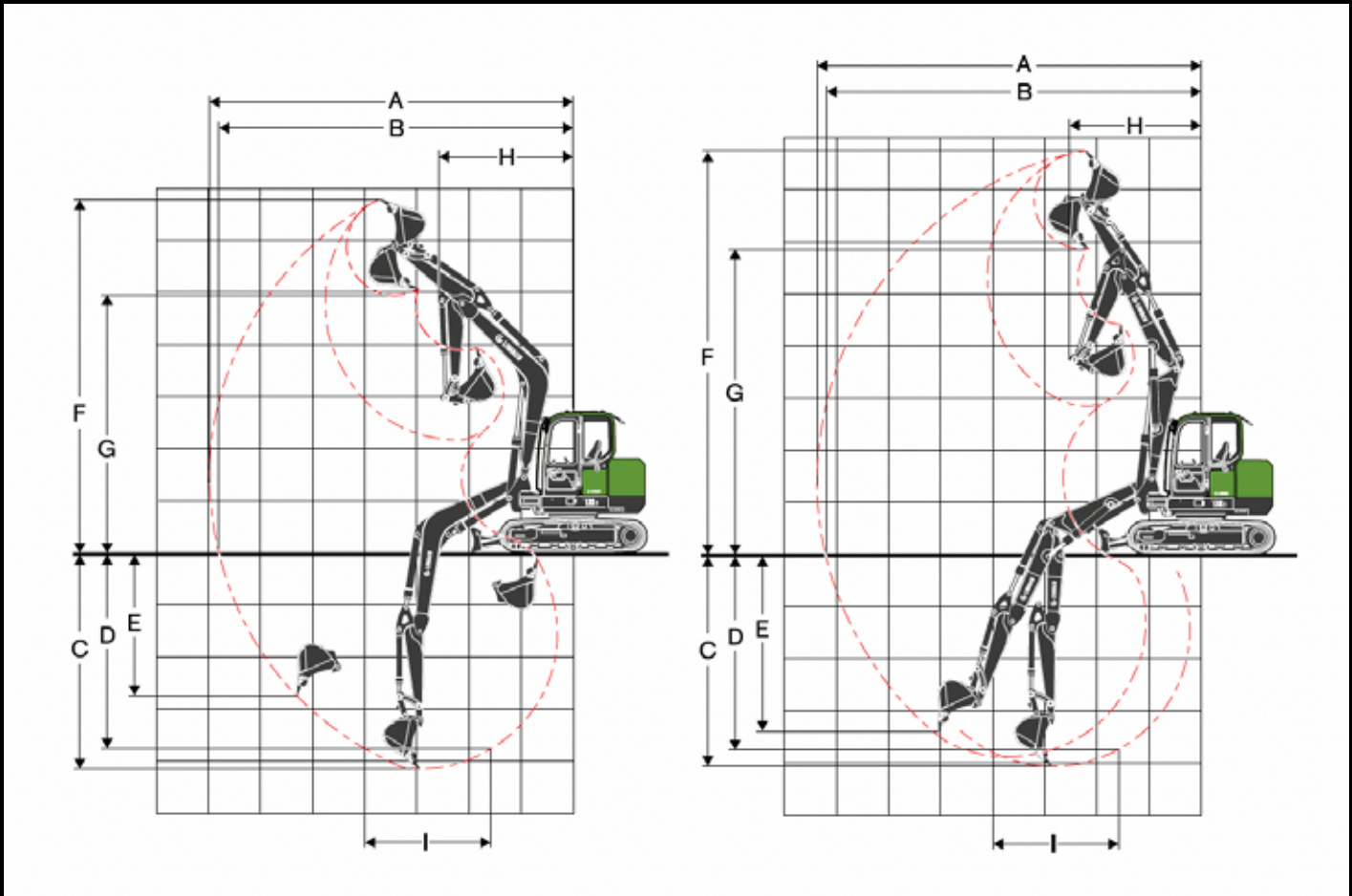


Connect & support

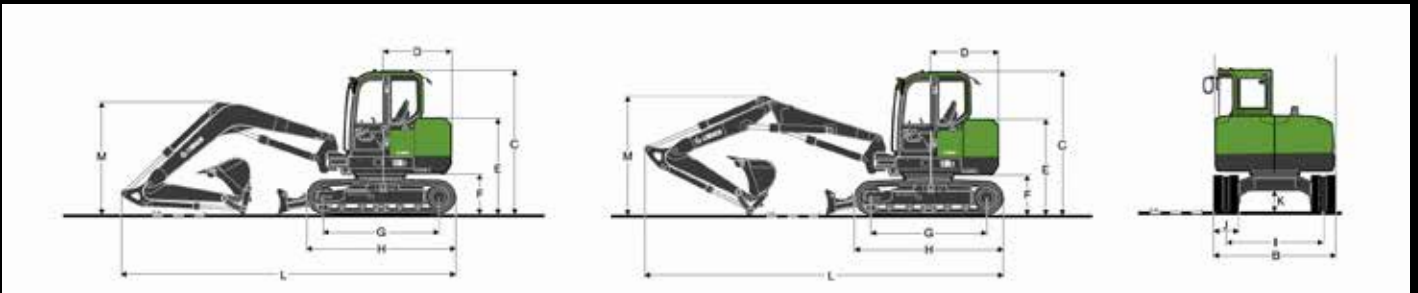
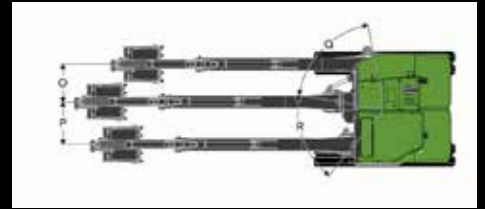
Limach is always connected to your machine. Even though the electric excavator has far fewer moving parts, you want to be sure of your machine's uptime. With Limach Connect & Support, your machine is monitored by Limach specialists. If there is an issue with your machine that could lead to a breakdown, Limach proactively contacts you to discuss the problem and determine the necessary actions to prevent unexpected downtime.

Specifications

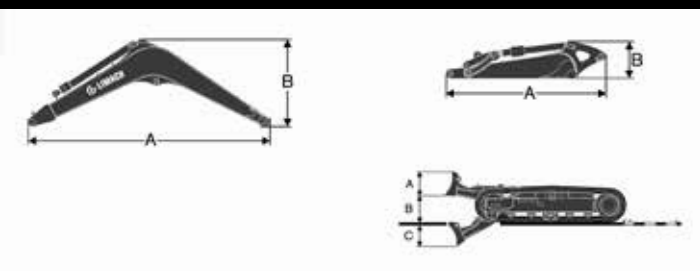
Dimensions E88.1



Working range			3.55 (mono)		3.85 (2 pcs)	
Boom		m				
Dipper arm		m	1.7	2.1	1.7	2.1
A	Maximum digging range	mm	6.970	7.350	7.380	7.790
B	Maximum digging range on ground	mm	6.800	7.180	7.220	7.640
C	Maximum digging depth	mm	4.130	4.530	4.090	4.480
D	Maximum digging depth (l=2440mm level)	mm	3.750	4.200	3.790	4.220
E	Maximum digging depth vertical wall	mm	2.820	3.200	3.430	3.870
F	Maximum cutting height	mm	6.790	7.050	7.720	8.240
G	Maximum dumping height	mm	4.960	5.220	5.840	6.380
H	Minimum swing radius, front	mm	2.560	2.640	2.530	2.700



Size			3.55 (mono)		3.85 (2 pcs)	
Boom		m				
Dipper arm		m	1.7	2.1	1.7	2.1
B	Total width	mm	2.300	2.300	2.300	2.300
C	Total height to cabin	mm	2.715	2.715	2.715	2.715
D	Turn radius, back	mm	1.487	1.487	1.487	1.487
E	Total height of hood	mm	1.180	1.180	1.180	1.180
F	Ground clearance to upper structure	mm	760	760	760	760
G	Wheelbase	mm	2.200	2.200	2.200	2.200
H	Length of chassis	mm	2.830	2.830	2.830	2.830
I	Track width	mm	1.850	1.850	1.850	1.850
J	Track pad width	mm	450	450	450	450
K	Minimum ground clearance	mm	405	405	405	405
L	Total length	mm	6.370	6.420	6.810	6.860
M	Total boom height	mm	2.115	2.230	2.247	2.455
O	Maximum offset boom	mm	760	760	756	756
P	Maximum offset boom	mm	860	860	863	863
Q	Maximum swing angle boom	gr	70	70	70	70
R	Maximum swing angle boom	gr	60	60	60	60



Dozer blade

A	Height	mm	470
	Width	mm	2.300
B	Lift height	mm	518
C	Digging depth	mm	433

Boom and Dipper arm

Boom including cylinder, hoses, and pin		m	Boom		Dipper arm	
Dipper arm including cylinder, coupling, and pin		m	3.55 (mono)	3.85 (2pcs)	3.55 (mono)	3.85 (2pcs)
A	Length	mm	3.690	4.030	2.283	2.684
B	Height	mm	1.244	983	518	562
	Width	mm	335	340	305	305
	Weight	kg	530	774	280	340

Electrical system		
Battery type		Lithium-ion
Battery voltage	V	104
Battery capacity	kWh	180
Auxiliary battery voltage	V	12
Indicative runtime	hours	up to 8

Charging time		
With 400V AC	hours	up to 9

Electrical motor		
Motor type		Permanent magnet
Motor power (peak)	kW	64
Motor power (continuous)	kW	45
Operating mode max./standard	r/min	2000
Operating mode max./boost	r/min	n/a

Swing system		
Max. slew speed	r/min	8,2
Max. slew torque	kNm	22,9

Travel system		
Max. drawbar pull	kN	65
Max. travel speed low	km/h	2,9
Max. travel speed high	km/h	5,3

Digging performances					
Boom	m	3.55 (mono)		3.85 (2pcs)	
Arm	m	1.7	2.1	1.7	2.1
Breakout force bucket (ISO)	kN	57.2	56.8	57.2	56.8
Tearout force arm (ISO)	kN	39.8	34.4	39.8	34.4
Rotation angle bucket	°	190		190	

Hydraulic system		
Max. flow (main pump)	l/min	2x68+54
Max. flow (gear pump)	l/min	13
Max. flow for 2nd accessoires circuit (option)	l/min	24,6
Max. operating pressure	Mpa	29,4

Service refill		
Hydraulic system, total	l	140
Hydraulic tank	l	84

Undercarriage		
Bottom rollers		2x5
Top rollers		2x1
Track shoes		2x39

Weight and ground pressure

	Shoe width	Operating weight	Ground pressure	Shoe width	Operating weight	Ground pressure
	mm	kg	kPa	mm	kg	kPa
	Mono boom 3.55m, arm 1.7m			Mono boom 3.55m, arm 2.1m		
Steel track	450	9788	44,4	450	9868	44,8
	600	9938	33,8	600	10018	34,1
Rubber track	450	9588	43,5	450	9668	43,9
Rubber pad	450	9808	44,5	450	9888	44,9
	2pcs boom 3.85m, arm 1.7m			2pcs boom 3.85m, arm 2.1m		
Steel track	450	10158	46,1	450	10238	46,6
	600	10308	35,1	600	10388	35,4
Rubber track	450	9958	45,2	450	10038	45,6
Rubber pad	450	10178	46,2	450	10258	46,6





Curious about this and other machines in our range?
Visit our website or contact us!

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