

SY19E

SANY



FULLY ELECTRIC

ALL YOU NEED FOR NO EXTRA CHARGE

CONSTRUCTION MACHINES



MINI EXCAVATOR
WITH FULLY-ELECTRIC DRIVE
SY19E

Maximum rated power
15 kW
Bucket capacity
0.04 m³
Operating weight
1 950 kg

SANY

You need an outstanding partner for demanding tasks

Quality comes from experience and from new ideas. That is why we combine these two vital factors at SANY. We are one of the leading manufacturers, having produced more than 500,000 excavators worldwide. This means you can always rely on sophisticated products that have been tried and tested in practice. By way of example, 5 to 7% of our annual revenue is invested in research and development.

Our machines are so powerful and robust that we also offer our exceptional 5-year warranty on most product lines.

500,000

EXCAVATORS PRODUCED
WORLDWIDE

5-7%

REVENUE FOR RESEARCH
AND DEVELOPMENT

5 YEAR

WARRANTY*

* Only available on selected products only.

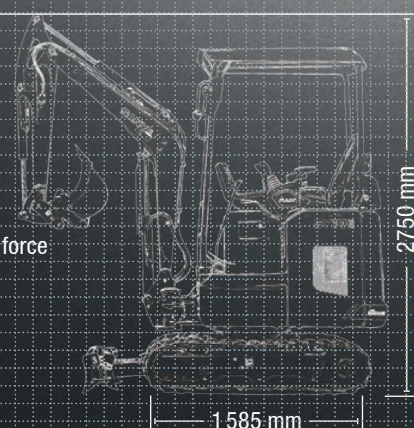
SY19E SPECIFICATIONS

Max. bucket
digging force
15.2 kN (ISO)

Max. arm digging force
9.2 kN (ISO)

Swing speed
10 rpm

Max. travel speed
3.6 km/h



Our highlights – your SANY Plus benefits:

- + Zero emissions
- + Fully flexible automotive charging solution
- + Fast charge option available as standard
- + Long life battery - up to 3,500 charge cycles
- + Quiet operation



PROVEN TECHNOLOGY, NEW ENERGY

The fully electric, 2-tonne SY19E mini excavator with zero emissions and considerably lower noise levels allows for cleaner, more sustainable working. Equipped with a state-of-the-art lithium iron phosphate (cobalt free) battery, efficient load-sensing hydraulic system and with multiple charging options as standard the SY19E guarantees total flexibility on

site and is the perfect solution for indoor work, out of hours tasks and projects in urban and emissions sensitive environments.

With its steel canopy structure, the machine also boasts impressive endurance and a long battery life, reducing total cost of ownership and increasing residual value.



TOP FEATURES

POWER SUPPLY

SUSTAINABLE AND FORWARD-LOOKING

The innovative battery has an impressively high power density, long service life and short charging time. The battery technology also ensures exceptional performance in the toughest of temperatures and environments, with durability and overheating protection that makes it the safest lithium battery on the market today, offering operators and owners an additional point of trust.

Lithium iron phosphate batteries not only have superior operating characteristics compared to lead-acid batteries, they're also far less toxic to produce and recycle. They do not contain any toxic/hazardous chemicals or rare metals, eliminating the biggest environmental impact factor in standard lithium iron batteries and improving recyclability.

QUALITY

Highlighting strengths – The SY19E has been built to last. With its smart battery technology, steel bodywork and automotive standard components it fulfils the highest safety requirements and ensures a high level of reliability.

POWER SUPPLY

New technology – Equipped with a lithium iron phosphate (cobalt free) battery, the SY19E allows for faster, safer and more efficient charging as well as a significantly longer battery life (up to 3,500 full charge cycles) to reduce total cost of ownership.

EASE OF USE

Tailored to everyday working life – With the SY19E operators can look forward to maximum comfort and easy operation with features such as a high-resolution 7" touch display with intuitive menu navigation and an ergonomic and adjustable operators seat.



SAFETY

Visibility is safety – A ROPS/FOPS certified canopy and LED work lights positioned on the roof and boom ensure optimum visibility in all working conditions.

COMPONENTS

More sustainable – Lithium iron phosphate batteries not only have superior operating characteristics compared to lead-acid batteries, they're also far less toxic to produce and recycle.

ECONOMY

Less is more – The fully electric drive with a reduced number of serviceable machine parts, reduces maintenance downtime and servicing costs by up to 80%.



QUALITY

Designed for a long service life

Lithium iron phosphate batteries offer a long battery life (up to 3,500 full charge cycles) which will cover the machine for more than the standard lifetime, this reduces environmental impact compared to other batteries which will need to be changed throughout the machine life. The SY19E can also work for up to 5 hours off a single charge (depending on application and temperature conditions).

ECONOMY

MONEY SAVING

Compared to machines with a combustion engine, pure electric operation reduces direct energy costs by approximately 30 %. Electric construction equipment also requires less maintenance compared to diesel models. With fewer parts and a simplified electronic system, maintenance and servicing costs of the SY19E are reduced by up to 80% therefore resulting in greater long term savings.

ECONOMY

Extremely low operating costs

Compared to a conventional machine with an internal combustion engine, the SY19E scores a significant reduction in total operating costs of 50%!

100%

SY16C

50%

SY19E

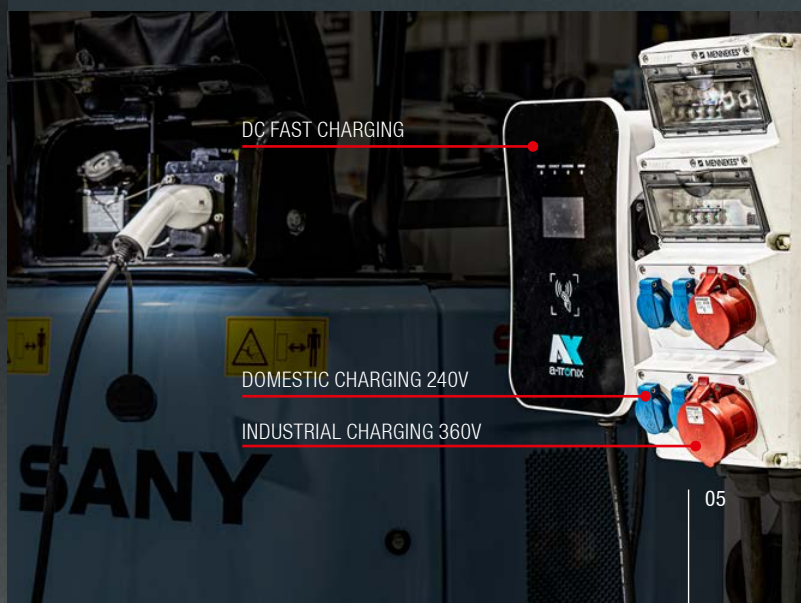
COMPONENTS

Fast charging - anywhere, from any socket!

Featuring a single automotive standard charging socket, the SY19E offers three charging options. A direct current fast charge (1.5 hours), 360v industrial (2.5 hours) and 240v domestic option (9 hours) are all available as standard without the need to purchase any additional equipment. The CCS2 charging socket also means the SY19E can be fast charged at any public charging station i.e petrol stations and hotel car parks.



FAST CHARGING STATION 400V DC



DC FAST CHARGING

DOMESTIC CHARGING 240V

INDUSTRIAL CHARGING 360V

EFFICIENCY, COST-EFFECTIVENESS & EASE OF USE

EASE OF USE

MAXIMUM COMFORT IN A MINI EXCAVATOR

The operator's seat of the SY19E has numerous adjustment options and with its high back rest and adjustable armrests offers significantly more seating comfort than comparable models in this class. The spacious foot-well and pedal layout also means pedal actuation is more comfortable and safe.

Absolute reliability – for complete peace of mind!

SANY has earned a reputation worldwide for reliability, durability and performance but to provide peace of mind and to ensure maximum uptime all SANY excavators are backed by the SANY industry leading 5 year warranty.*

* Terms and conditions apply. Check with your local dealer for more information.



EASE OF USE

Comfortable control centre

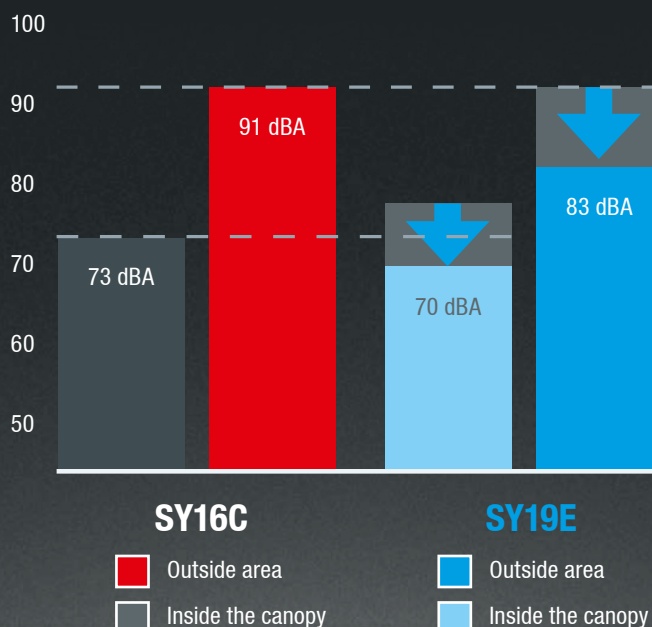
With the SY19E operators can look forward to straightforward and trouble-free working. The high-resolution 7" touch screen, colour display, ensures quick understanding and easy operation, thanks to its intuitive menu navigation. While the keyless push to start/stop engine function with password protection is also simple and quick to use. The proportional auxiliary hydraulic unit, which can be controlled via the joystick, is fitted as standard. It allows particularly sensitive working with attachments that require an auxiliary circuit.



EASE OF USE

Lowering noise pollution

With a noise level of 83 dBA outside the machine, the SY19E clearly demonstrates the advantages of an electric power unit. Noise emissions are noticeably reduced compared to the diesel-powered equivalent machine. Noise levels for the operator inside the excavator are also reduced to just 70 dBA which supports more comfortable working and also allows for improved communication with others on site.

QUIETER OPERATION

SAFETY

COMPREHENSIVE AND RELIABLE

The ROPS/FOPS certified canopy ensures both machine and operator are well protected and offers optimal visibility for increased site safety. It meets the highest safety standard thanks to additional anti-roll bars and a grab handle on the roof structure. Boom and blade cylinders are also protected with an effective cylinder guard against damage under harsh site conditions and an emergency lowering system ensures the equipment can be lowered safely, should there be any loss of power. A travel alarm and green beacon to increase visibility, attract attention and ensure safety are also fitted as standard.



TECHNICAL SPECIFICATIONS

BATTERY

Model	Vmax
Type	Permanent magnet
Continuous operating power	10 kW
Max. rated power	15 kW
Max. torque	72 Nm
Battery type/voltage	LFP (lithium iron phosphate battery)
Rated voltage	268.8 V
Rated capacity	82 Ah
Fully charged battery capacity	22 kWh

HYDRAULIC SYSTEM

Main pumps	Variable displacement axial piston pumps with load-sensing hydraulics
Max. oil flow	60 l/min
Main safety valve	24.5 MPa

PRESSURE LIMITING VALVES

Boom circuit	245 bar
Swing circuit	162 bar
Driving circuit	245 bar
Pre-control circuit	35 bar

SERVICE FILLING QUANTITIES

Traction drive (per side)	0.4 l
Hydraulic oil tank	21 l

RATED POWER

Swing speed	10 rpm
Max. travel speeds	Fast 3.6 km/h, slow 2.6 km/h
Max. traction force	15.6 kN
Gradeability	30°
Bucket capacity	0.04 m³
Ground pressure	0.31 kg/cm²
Bucket digging force, ISO	15.2 kN
Arm digging force, ISO	9.2 kN











UNDERCARRIAGE AND SUPERSTRUCTURE

Boom length	1 810 mm
Arm length	1 130 mm
Rollers	3
Swinging gear	Planetary gearbox driven by an axial piston motor, automatic parking brake is released hydraulically











OPERATING WEIGHT

SY19E	1 950 kg
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LIFTING CAPACITIES BLADE DOWN

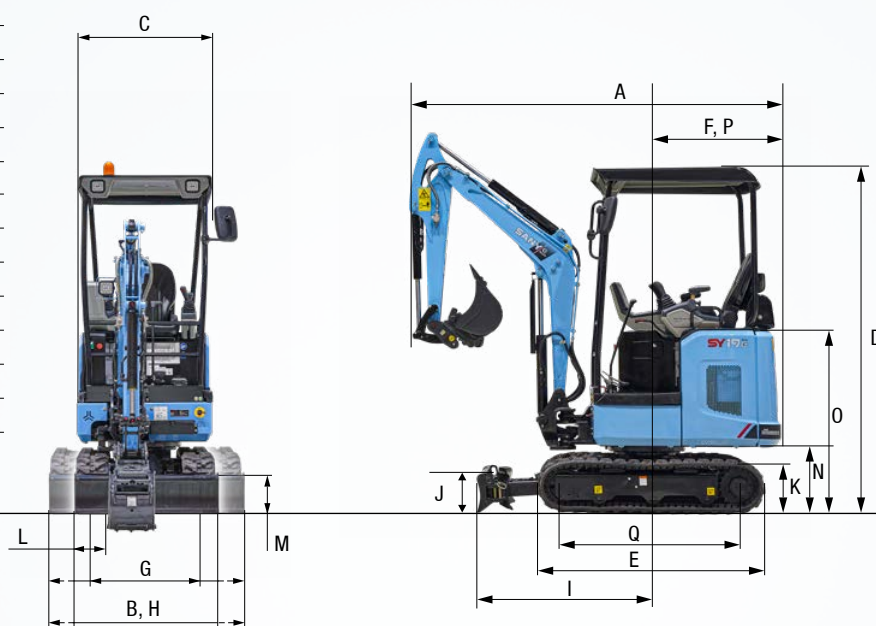
	Radius								Digging reach	
	1.5 m		2.0 m		2.5 m		3.0 m		Maximum	
Load point height										
3.0 m kg									285	285
2.0 m kg					267	253	271	271	278	278
1.0 m kg			483	486	371	370	316	306	288	244
Floor line kg	826	826	631	528	456	383	357	295	304	252
-1.0 m kg	819	819	563	529	407	382			318	318

LIFTING CAPACITIES BLADE UP

	Radius								Digging reach	
	1.5 m		2.0 m		2.5 m		3.0 m		Maximum	
Load point height										
3.0 m kg									285	285
2.0 m kg					253	253	271	271	270	278
1.0 m kg			483	483	370	370	296	306	235	244
Floor line kg	811	826	514	528	371	383	285	295	243	252
-1.0 m kg	819	819	514	529	370	382			316	318

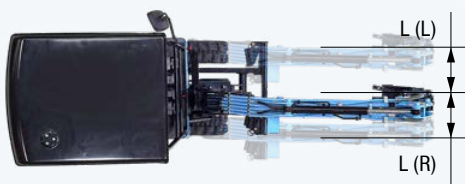
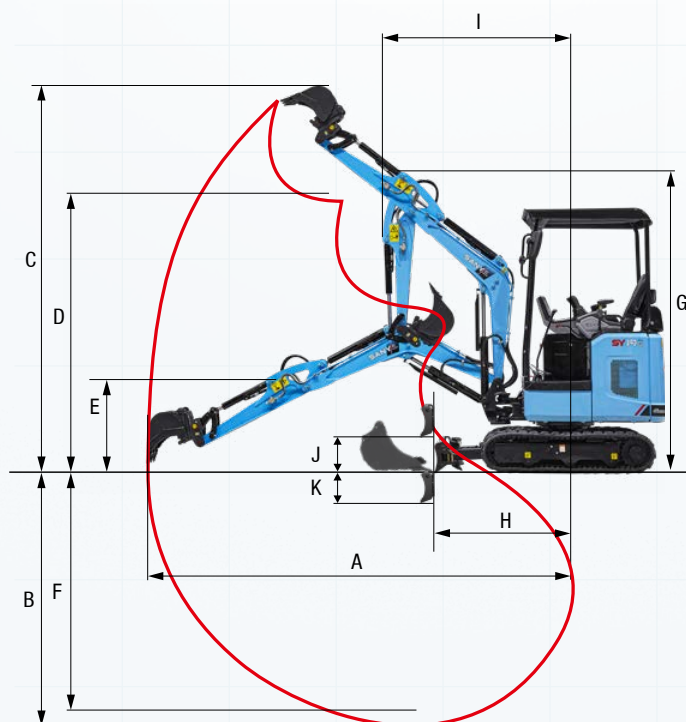
DIMENSIONS

A Overall length	3624 mm
B Total width	980/1350 mm
C Total width of the superstructure	980 mm
D Overall height above canopy	2410 mm
Overall height of the boom	1175 mm
E Undercarriage length	1585 mm
F Length behind	900 mm
G Track gauge	750/1120 mm
H Undercarriage width (blade)	980/1350 mm
I Horizontal clearance to the blade	1190 mm
J Blade height	280 mm
K Track height	375 mm
L Track pad width	230 mm
M Min. ground clearance	180 mm
N Rear weight ground clearance	455 mm
O Bonnet height	1265 mm
P Tail swing radius	920 mm
Q Distance (centre) track sprocket to idler sprocket	1220 mm



WORKING AREA

A Max. digging reach	4000 mm
B Max. digging depth	2360 mm
C Max. digging height	3665 mm
D Max. dumping height	2635 mm
E Min. dumping height	795 mm
F Max. vertical digging depth	2215 mm
G Overall height at min. swing radius	2745 mm
H Arm head separation for max. working equipment retraction	1230 mm
I Swing radius with swing frame (L)	1490 mm
Swing radius with swing frame (R)	1510 mm
Min. swing radius	1705 mm
J Max. ground clearance of blade up	310 mm
K Max. depth of blade down	320 mm
L Swing frame offset (L)	595 mm
Swing frame offset (R)	350 mm
Max. Boom swing angle (L)	73°
Max. Boom swing angle (R)	46°



The small machine that is big on standard equipment

Straight out of the factory, the SY19E mini excavator is comprehensively equipped as standard.



EASE OF USE / CAB

Armrests, adjustable	•
7" touch display	•
Canopy (TOPS-/FOPS certified)	•
Rubber mat	•

WORK EQUIPMENT

Proportional crusher and shearing circuit control on joystick including piping	•
Cylinder guard on the lifting cylinder	•

UNDERCARRIAGE

Rubber track, 230 mm	•
Lashing eyes	•

WORK LIGHTING

LED worklights – on roof front	•
LED worklight – boom	•

MOTOR/MOTOR COMPARTMENT

220 V - 400V charging cable (including adapters)	•
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HYDRAULIC SYSTEM

Swing brake	•
2 travel speeds	•
Piping for auxiliary control circuit 1	•
Hydraulic pilot control of the joysticks	•

SAFETY

Battery isolating switch	•
Driving alarm	•
Beacon	•
Handrails	•
Lockable bonnets	•
Password-protected starting process	•

Parts supply – fast and reliable

SANY genuine parts are designed, tested and manufactured to meet the exact specification and requirements of your SANY excavator. They will fit exactly as needed and will deliver maximum performance. They also ensure optimum safety for the operator on site and reduce unplanned maintenance and downtime. Ultimately, SANY genuine parts are the best choice for your machine and are backed with a 12 month warranty period.



A SERVICE YOU CAN RELY ON

Just as we do with our machines, we also demand high quality and reliability of our service products. This underlines our equipment's performance in terms of their durability and their excellent price-performance ratio. After all, maintenance is crucial

for efficiency, cost-effectiveness and safety. Your SANY dealer is happy to help you with a comprehensive range of services to ensure that your machine continues operating efficiently in the long term.

SANY – flexible, fast and always there for you

Rapid assistance, tailored advice and a reliable supply of original parts – that is what we mean by a premium service. To locate your nearest dealer, visit <https://www.sanyuk.com>.



The added benefits SANY offers you:

- + Experienced dealer network throughout the UK and Ireland
- + Direct sales and support route in Scotland and the south east of England
- + Dedicated SANY team based in the UK to support you and your product
- + UK parts warehouse to ensure SANY machines are fully supported

Seamless, in black and white

Manuals and documents are available for all SANY excavators to assist you during operation, maintenance, servicing and repair of your machine. These documents include operating and maintenance instructions and technical specifications.



HIGHLIGHTS **SY19E**

THE ZERO EMISSIONS ALTERNATIVE

The new, electrically powered SY19E mini excavator increases onsite flexibility to include indoor working, out of hours projects, urban and emissions sensitive areas.



HIGHLIGHTING STRENGTHS

Built to last! With its smart battery technology, 100% steel bodywork and automotive standard components it fulfils the highest safety requirements and ensures a high level of reliability.

POWER SUPPLY

Equipped with a lithium iron phosphate battery, the SY19E allows for faster, safer and more efficient charging as well as a significantly longer battery life to reduce total cost of ownership.

SUPPORT A FULL WORKING DAY

The ergonomic operator's seat with high backrest and adjustable armrests offers comfortable seating and operation of the excavators responsive and precise controls.

VISIBILITY IS SAFETY

The ROPS/FOPS certified operators canopy offers excellent all-round visibility - supported in poor lighting conditions by two LED worklights positioned on the front and boom.

SUSTAINABLE

Lithium iron phosphate batteries not only have superior operating characteristics compared to lead-acid batteries, they're also far less toxic to produce and recycle.

LESS IS MORE

The fully electric drive with a reduced number of serviceable machine parts, reduces maintenance downtime and servicing costs by up to 80%.

TECHNICAL HIGHLIGHTS

Motor	Vmax
Maximum rated power	15 kW
Max. torque	72 Nm
Max. travel speed	3.6 km/h
Swing speed	10 rpm
Main pumps	Variable displacement axial piston pumps with load-sensing hydraulics
Max. oil flow	60 l/min

Not all products are available in all markets. We reserve the right to change specifications and designs without prior notice as part of our continuous improvement process. The illustrations may contain additional options.

SANY

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