

CONSTRUCTION EQUIPMENT

SUNWARD
INNOVATION LEADS TO VALUE

MINI EXCAVATOR **SWE 18UF**

Engine Power: **13.4 kW**

Machine Weight: **1 880 kg**



OUR STANDARD FEATURES

Presenting the SWE 18UF

I take great pride in introducing the SWE 18UF zero-tail mini excavator – specifically designed and certified for European market requirements. This 1.8t mini-excavator can do it all, either in professional hands or by occasional users.

A product of our company's innovative DNA, this top-of-the-line mini-excavator offers excellent performance, comfortable and safe operation, and convenient maintenance. The machine's modern styling visualizes its durability and efficacy and indicates how easy the machine is to transport, operate and maintain. The SWE 18UF creates value for our customers and improves the quality of life.

In just 20 years, Sunward has grown to become one of the world's top 50 construction machinery manufacturers and top 20 excavator companies. Today, our products are exported to more than 100 countries worldwide.

Thank you for sharing our pride!

Professor He

Professor He

Main features

RELIABLE, POWERFUL AND DURABLE

We never compromise on reliability. And the 1.8t zero-tail SWE 18UF is no exception – we know it will be used by professional companies as well as rented to occasional users. So, just like our other machines, all key components come from the world's top premium brands. From the Yanmar Stage V engine to the Japanese and Italian hydraulic system, all is set for reliability, durability, and enhanced performance. Sunward's unique hydraulic system enhances this machine's performance by providing one of the more powerful bucket break-outs on the market with unrivaled stability for its class.

VERSATILE AND OPTIMIZED

Because a 1.8t machine is essentially a multiple job site machine, it must be fit for all jobs and users' needs. Typically, our SWE 18UF is ideal for rental, utilities, foundation work, landscaping, and indoor demolition and construction projects. Thus, the SWE 18UF has 3 separate functional lines, which means that Sunward provides the highest flexibility on the market as standard, to accommodate any working requirement and tool.

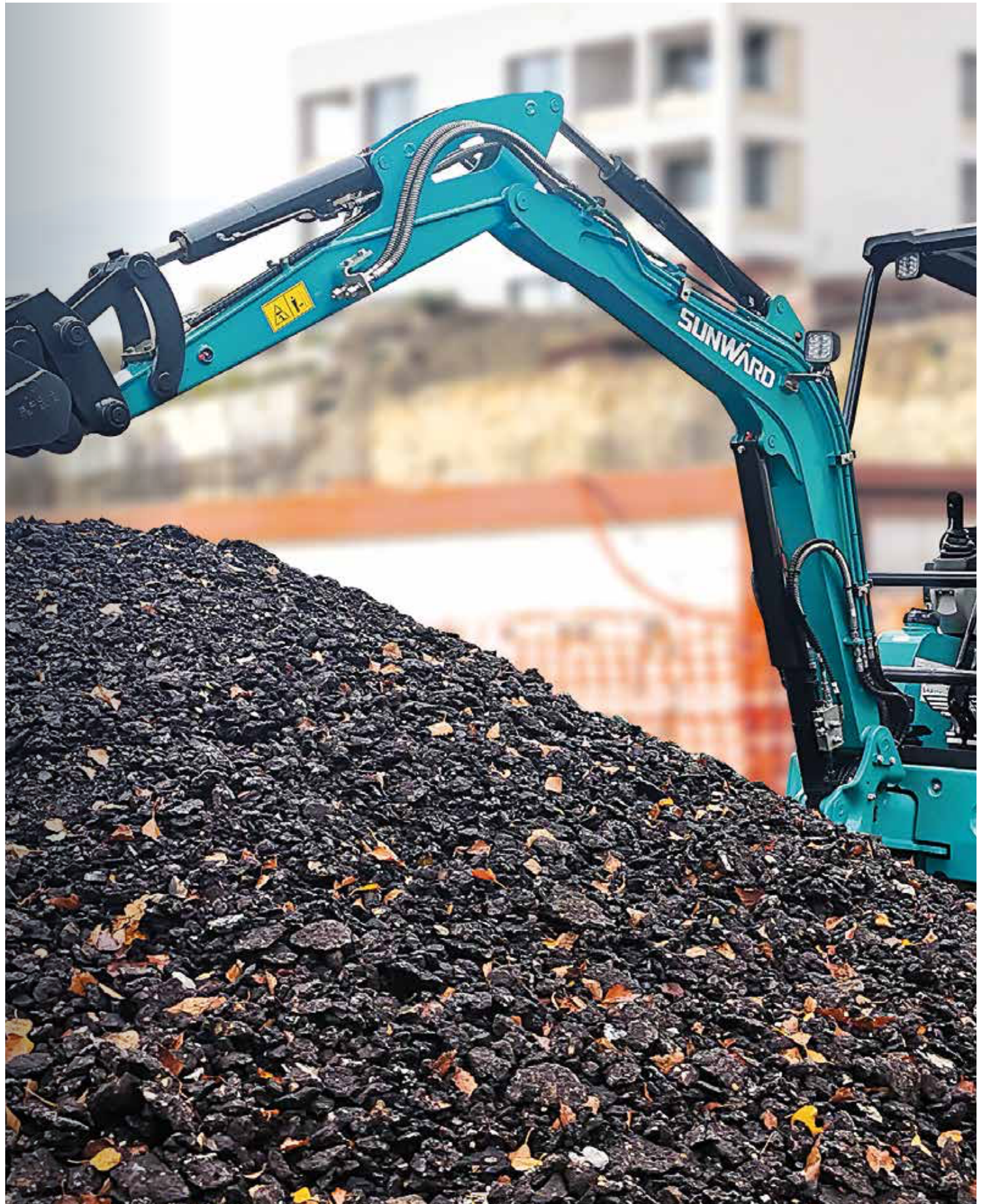
SAFE AND COMFORTABLE

Because we know that safety and comfort should go hand-in-hand, the SWE 18UF keeps you safe and provides every comfort in all working conditions. The fully EU-certified cab features FOPS and TOPS, from the reinforced undercarriage to the boom and arm reinforced frames. And thanks to the full visibility provided by 3 perfectly positioned LED lights as a standard feature, you stay safe, all day long.

EASY TO MAINTAIN AND SERVICE

All Sunward machines are designed, prototyped, and then disassembled – in the spirit of reverse engineering – simply to test how easy they are to be serviced and maintained. And they are! From ground-level access to service components, to the availability of parts – maintaining the SWE 18UF zero-tail is easy and simple. So, it's no surprise that an operator only needs to try out our machines to be thoroughly convinced!

ARE OPTIONS FOR OTHERS

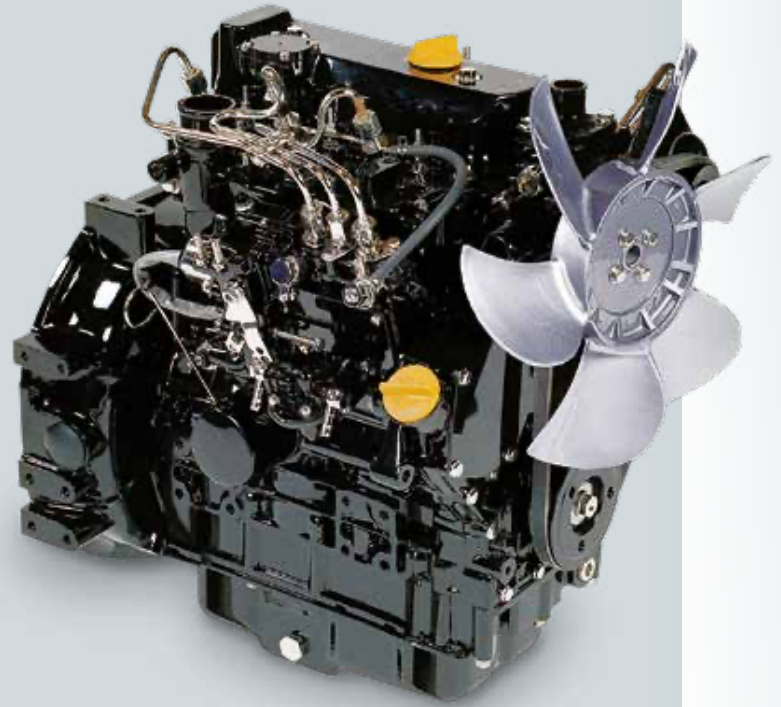


Reliable, Powerful and Durable

All key components are carefully selected

The powerful Yanmar 3 TNV 80F engine complies with the European Union's latest Stage V emission requirements and the EPA's Tier 4 final emission requirements. Plus, for reliable and sustainable operations, this engine features low fuel consumption and low noise and vibration levels.

Because the hydraulics are often regarded as the heart of the machine, Sunward sources exclusively from the highest references in the market. For the SWE 18UF, we selected Japanese and Italian premium brands NACHI and Casappa to be our main suppliers for the hydraulic pump and travelling and swing motor. NACHI and Casappa pumps and components for construction machinery are efficient, reliable, and space-saving. So, it's no coincidence that Sunward selected them to contribute to the SWE 18UF's reliability.



Premium brand critical components

YANMAR

Stage V engine



HYDRO-CONTROL

Mechanical cartridge valves and joystick



NACHI/CASAPPA

Main pump



Traveling motor



Swing motor





Powerful lifting & digging forces and long reach capacity

The SWE 18UF has exceptional digging forces of over 22.7 kN (bucket) and over 9.83 kN (arm), which easily rival the 2-ton excavator competitors on the market. And when it comes to its long-reach digging capacity, the SWE 18UF's boom cylinder design provides a reach that's over 4 meters (4 120 mm) long.



Boom and Dozer cylinders' protection plates

An excavator's boom cylinders are particularly at risk of damage caused by flying stones when working in the field. We've taken special care to protect the boom and dozer cylinders with covering plates, so that the operator can focus fully on his job and not worry about the machine's components. And as the durability of the machine has been enhanced, when you rent your machine you know it will come back in good shape – ready for many more hours on the job.

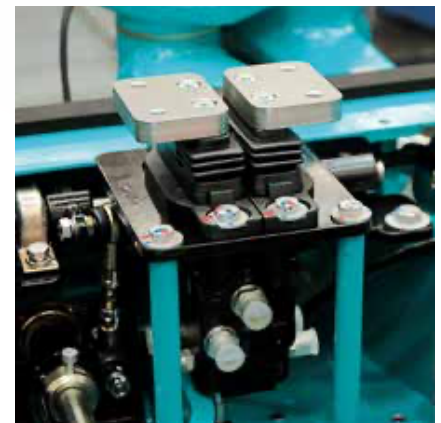
SMOOTH OPERATIONS THANKS TO

Safety valves

Safety valves prevent uncontrolled cylinder movements, especially during the load lifting work. And because reliability and performance are part of the package, the SWE 18UF is equipped with safety valves as a standard feature.

Pilot traveling control

All our 1.8t mini-excavators provide pilot traveling control as a standard feature – to continually enhance precise and controlled operations.



Auto gear shifting during traveling

The SWE 18UF features an auto gear shifting system that enables automatic travel shift from high to low depending on traction effort and terrain. This provides smoother operations when dozing and turning. To increase traction and get over an obstacle on a bumpy road, the SWE 18UF auto gear shift traveling system automatically downshifts when the load increases to enhance travel torque on slopes and in difficult conditions and shifts back up to secure a faster travel speed after the load decreases. This automatic gear shifting frees the operator from having to frequently flip the 2-speed switch.

Versatile and Optimized

Engineering and design produce optimal, versatile machines

In the spirit of Sunward's motto – 'Innovation Leads to Value' – all engineering and design are focused on generating optimal value for the machine buyer or owner. Thus, our machines are used in a large variety of working conditions and applications – exactly what a 1.8t mini-excavator is expected to do. And the zero-tail swing radius makes it ideal for urban areas, where space is limited.



Full auxiliary lines as standard

The SWE 18UF zero-tail can adapt to any job site, thanks to the complete auxiliary settings built in as standard – providing pressure control and flow for all types of attachments.

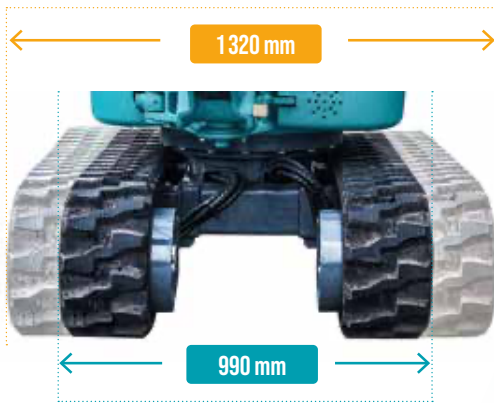
This results in no less than 3 separate auxiliary lines as standard (the market provides 1 to 2 lines as standard), which are distributed as follows:

- 1 line at the front end of the arm (AUX1), which is used primarily for the hydraulic quick-hitch
- 1 line for greater flow to fulfill the requirements of a flow-demanding attachment, such as a breaker (AUX2)
- 1 line with lesser flow as an extra line for attachments that are equipped with 2 actuators (AUX3)

A true zero-tail machine

All kinds of jobs can be manned with the true zero-tail SWE 18UF. The machine hugs the wall to provide a precise and optimized job.





Flexible and stable

The SWE 18UF's extendable undercarriage – the track width can be extended from 990 mm to 1320 mm – provides sturdy stability, ensuring safe and comfortable operation in all kinds of job applications. The adjustable crawler track is ideal in confined areas or when greater stability is required.

**STANDARD
UNDERCARRIAGE**
990 mm

**EXTENDED
UNDERCARRIAGE**
1320 mm



Compact for easy transport all over the job sites

A 1.8t mini-excavator's versatility starts with how well it is designed for transportation. The SWE 18UF does more than simply align with the EU's transportation regulations – truly compact (990 mm width) and lightweight (1880 kg), it allows easy, safe and secure transport. With automatic slew lock and 4 easily accessed tie-down points on the lower frame, the machine can be safely transported on a small trailer with up to 3 buckets and a hydraulic breaker, while maintaining a total transport weight close to 2 t.



Safe and Comfortable

On top of their EU certification, all Sunward machines on the European market are designed to meet European customer needs. And that includes no compromise between comfort and safety.



Safe & Comfy Cab

FOPS and TOPS cab tops are standard and among the first features to ensure a safe and comfortable job in all application environments. These features have been enhanced by a 4-pole canopy design to increase comfort and visibility, with no compromise on safety.

The large entrance to the roomy cab welcomes operators of all sizes from everywhere in Europe. The well-organized cab is clearly designed to keep operators comfortable and productive. From the suspension seat and heating, to the adjustable arm rest and the radio with USB ports, the cab's features promote efficiency. The simple layout of the controls adds to the great ease of operation. Finally, the safety pack – including fire extinguisher, and safety belt – contributes to overall peace of mind.



Simple interface

Slim poles
for full visibility and thus safe work



Suspension seat

Simple operation

All-around visibility on bright and grey days

This 1.8t mini-excavator is equipped as standard with 3 LED lights – 2 on the front of the cab and 1 on the left side of the boom – to keep working conditions safe in all kinds of weather, 24 hours a day. These energy-efficient LED lights have a longer lifetime than any halogen alternatives.

Extra rear visibility and safety as standard



Color monitoring screen

The easy-to-read multi-functional monitoring screen features centralized functions and simple interface for easy operation. In addition to making all key information readily accessible – machine status, engine rpm and temperature, fuel level, machine hours, oil indicators and charging indications – it also integrates the functions of dual traveling speed switching, switch control of work lights, and partial fault display.



Easy to Maintain and Service

All service points are centralized and easy to access

Even a zero-tail-swing machine deserves easily accessible maintenance space – and this is exactly what the SWE 18UF offers you.

01 AIR FILTER



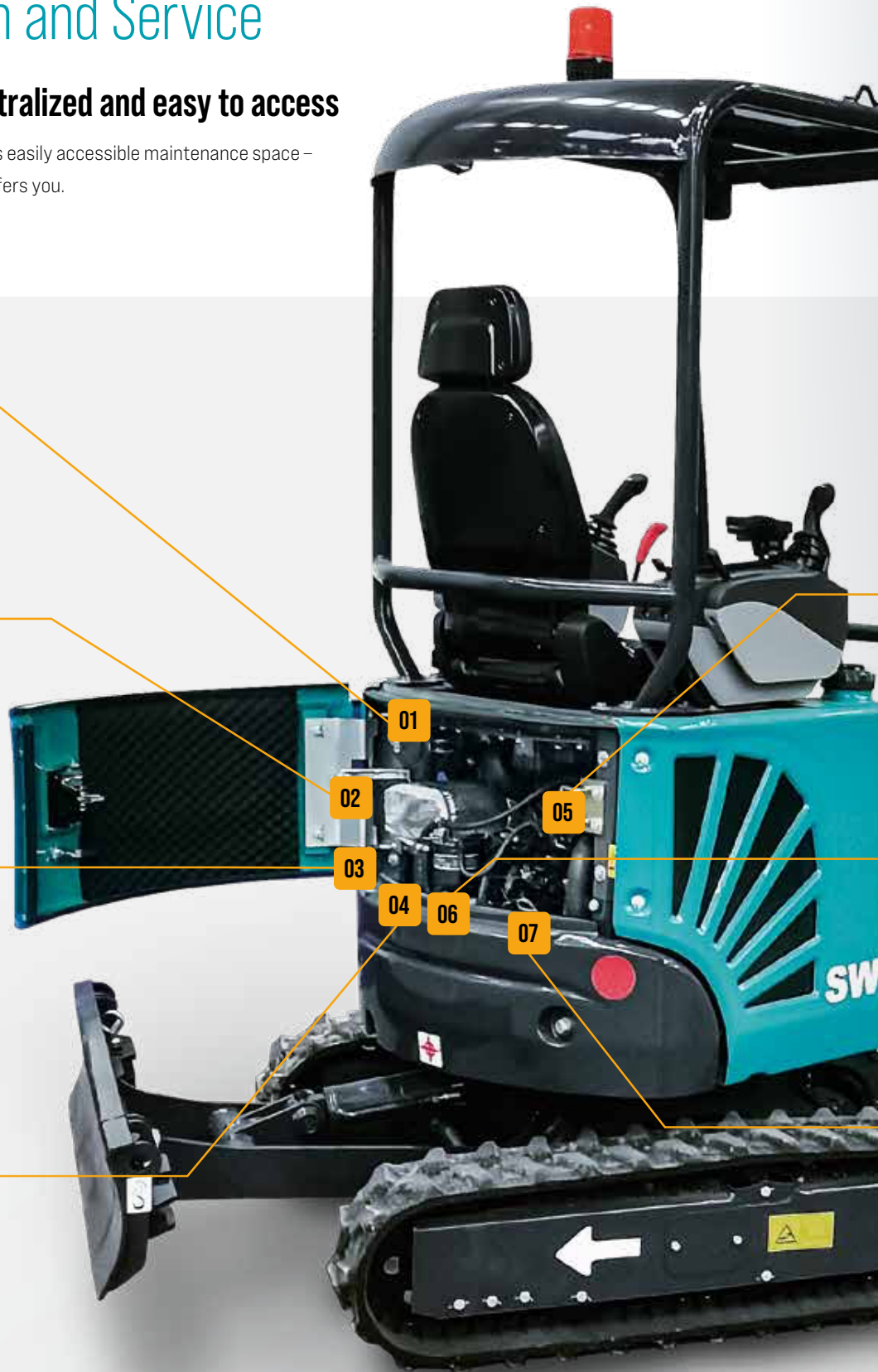
02 EXPANSION TANK



03 INTERFACE FOR PRESSURE MEASUREMENT



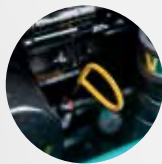
04 PRIMARY FUEL FILTER



Did you know?

Operators and maintenance teams can enjoy a machine that has been designed, prototyped and then disassembled – in the spirit of **reverse engineering** – to facilitate all service and maintenance operations.

SUNWARD

05 ELECTRIC FUEL SUCTION PUMP**06** FINE FUEL FILTER**07** OIL LEVEL

UP TO
3 YEARS
OF WARRANTY

STANDARD FOR ALL
SUNWARD PRODUCTS

Best Value for Money from A to Z

The SWE 18UF's expert design includes a well-thought-out selection of components that streamline operation and maintenance. Our design choices result in a machine that provides so many standard features, premium-brand key components, and capabilities... at a good price. And furthermore, Sunward's own genuine spare parts are economical as well – and all of this best value for money is crowned by a 3-year standard warranty.

Direct Support within Europe

Sunward's European headquarters are strategically located in Tessenderlo, Belgium, in the heart of Europe: 45 minutes from Brussels International Airport and 60 minutes from the port of Antwerp.



Readily available machines & parts

From its Tessenderlo headquarters, Sunward Europe can ensure rapid delivery of machines and spare parts everywhere in Europe. Machines can be delivered within a few weeks from local dealers, and Sunward machine operators benefit from quick and easy access to the large Dealers' Parts Warehouse (DPW) distribution center in Beringen. Sunward Europe guarantees an availability rate of 95% for its spare parts.

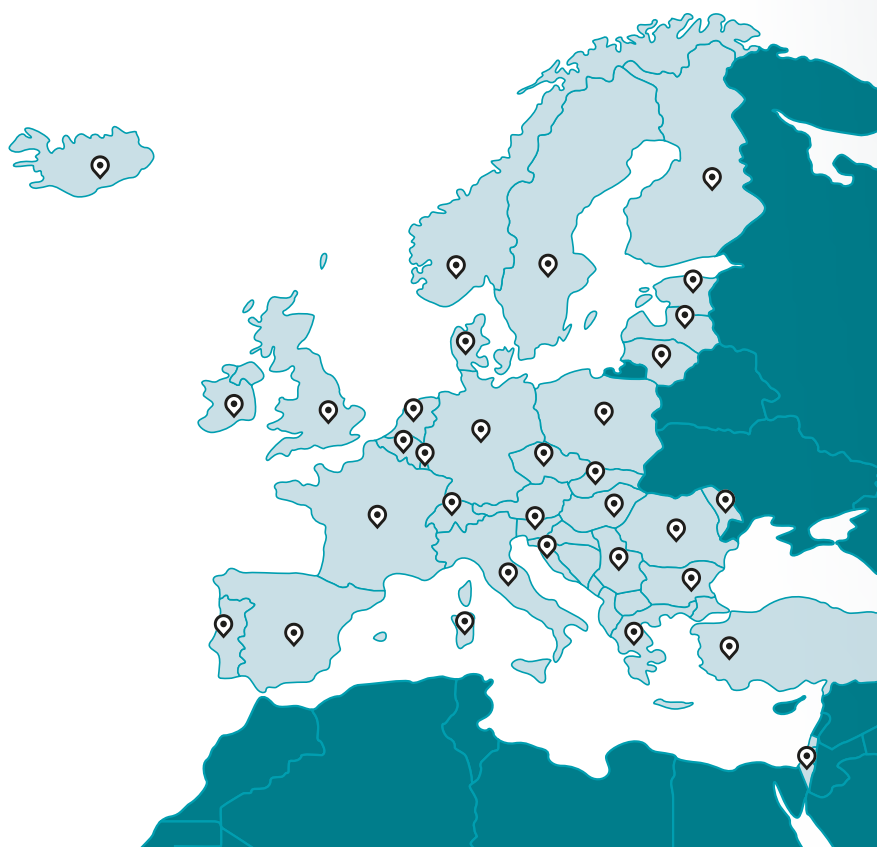


**PARTS CAN BE DELIVERED
WITHIN 24 HOURS**



Dealers all over Europe, UK and Middle East

Dealers are at the heart of Sunward's passion for continuous improvement. Our dealers' knowledge is a real asset – and because they serve local market needs, their feedback enhances our engineering and design innovations. Sunward's innovations create value – for machine operators and, ultimately, for our dealers.



EQUIPMENT

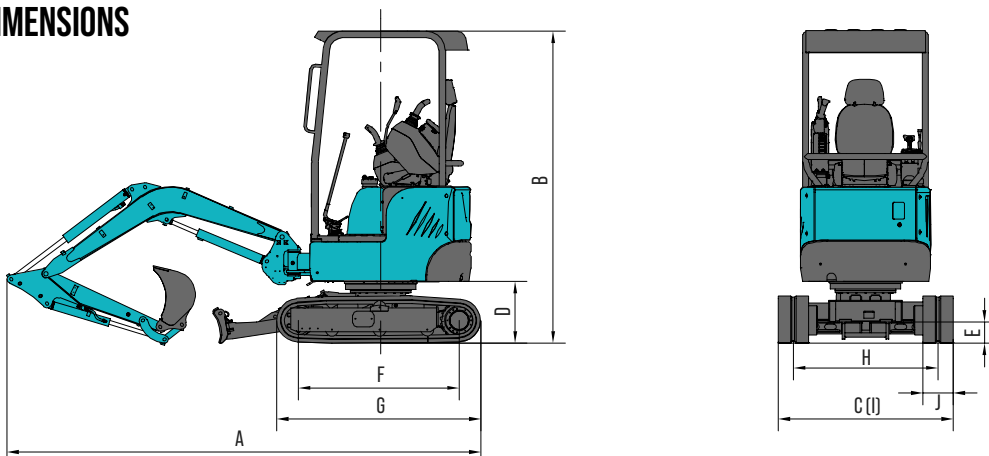
The standard and optional equipment varies from country to country. For more information, please contact us.

		STANDARD EQUIPMENT	OPTIONAL EQUIPMENT
CAB	Digital monitor	•	
	Seat with shock absorber	•	
	Safety belt	•	
	Engine safety start system	•	
	FOPS/TOPS canopy	•	
	Travel alarm	•	
	Keypad anti-theft system		•
	Right proportional joystick		•
	Dual proportional Joystick		•
FRONT WORKING DEVICES	260 mm bucket		•
	380 mm bucket		•
	1 000 mm bucket		•
	1 800 mm boom	•	
	1 150 mm arm	•	
	Extendable blade with foldable extensions	•	
	Boom cylinder protection plate	•	
	Kit safety valve (Protections + Arm safety valve + Ring on bucket link)		•
	Boom safety valve	•	
	Kit safety valve Blade		•
TRACKS	230 mm rubber track	•	
	Expandable undercarriage (990 mm to 1 320 mm)	•	
ENGINE	Oil filter	•	
	Fuel filter	•	
	Fuel-water separator	•	
	Air filter	•	
	Radiator	•	
	Alternator	•	
	Battery cut-off switch	•	
	Coolant Expansion tank	•	
	Electronic fuel pump	•	
	Muffler	•	
HYDRAULIC SYSTEM	Hydraulic pilot control	•	
	Parking-upon-swing brake	•	
	Parking-upon-traveling brake	•	
	Dual-speed traveling system	•	
	Auto-shift travel system	•	
	1st Auxiliary hydraulic breaker circuit line to arm end (2 pipes)	•	
	2nd Auxiliary hydraulic circuit line to arm end (2 pipes)	•	
3rd hydraulic quick hitch line to arm end (2 pipes)	•		
LIGHTS	1 Boom LED working light	•	
	2 Front canopy LED working lights	•	
OTHERS	Smart fleet system		•

TECHNICAL PARAMETERS

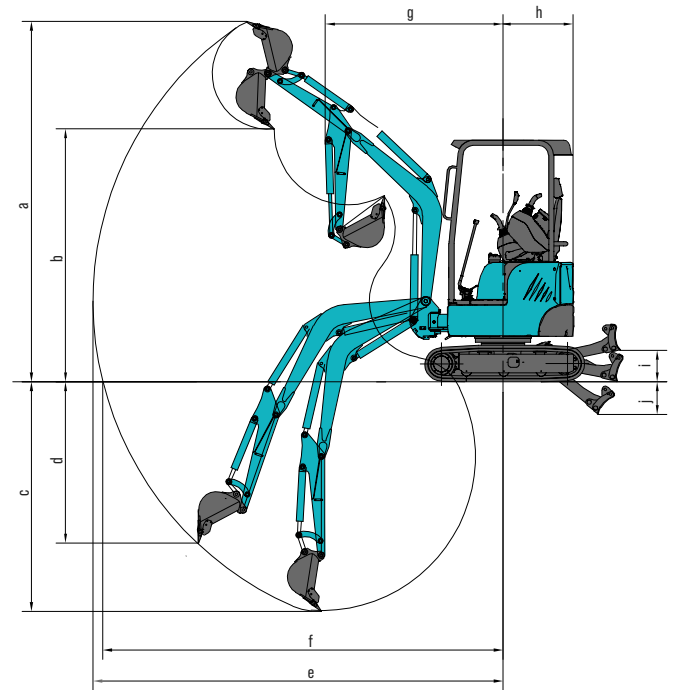
TYPE OF CAB		Canopy
BUCKET CAPACITY		0.04 m ³
BUCKET WIDTH, STD.		380 mm
MACHINE WEIGHT		1880 kg
DIMENSIONS	Overall dimension (L × W × H)	3 582 × 990 × 2 350 mm
	A Total length	3 582 mm
	B Total height	2 350 mm
	C Total with	990/1320 mm
	D Ground clearance of counter weight	462 mm
	E Minimum ground clearance	160 mm
	F Track length on the ground	1 210 mm
	G Track length	1 538 mm
	H Track gauge	760/1 090 mm
	I Undercarriage width	990/1320 mm
	J Track shoe width	230 mm
	Boom length	1 800 mm
	Arm length	1 150 mm
	ENGINE	Brand
Model		3TNV80-SSU
Type		Inline, 3 cylinders, water cooled, mechanical pump
Emission rating		EU Stage V
Displacement		1.267 L
Output		13.4/2 200 kW/rpm
TRACK	Max torque	67.4/1600 N*m/rpm
	Type	Rubber track
UNDERCARRIAGE	Rubber shoe width	230 mm
	Track length	1 538 mm
	Traveling speed (High/Low)	3.5/2.0 km/h
SWING SPEED	Gradeability	30 deg
		10 rpm
GROUND PRESSURE		30.3 kpa
HYDRAULIC PUMPS	Hydraulic pump type	2 variable piston pumps + 1 gear pump
	Max displacement of hydraulic pump	2*21 + 13 L/min
	Hydraulic pressure of hydraulic pump	24.5 Mpa
	Pilot pump	Gear pump
	Max displacement of pilot pump	6 L/min
SWING MOTOR	Hydraulic pressure of pilot pump	3.2 Mpa
		Piston motor
TRAVEL MOTOR		2-speed piston motor
FUEL TANK CAPACITY		24.6 L
HYDRAULIC OIL TANK CAPACITY		18.6 L

DIMENSIONS



WORKING RANGE

WORK RANGE & BREAKOUT FORCE	a	Max. cutting height	3 525 mm
	b	Max loading height	2 500 mm
	c	Max digging depth	2 410 mm
	d	Max vertical digging depth	1 675 mm
	e	Max digging reach	4 120 mm
	f	Max reach on ground	4 030 mm
	g	Front swing radius	1 745 mm
	h	Tail swing radius	680 mm
	i	Max dozer lifting height	216 mm
	j	Max dozer cutting depth	270 mm
		Max digging force (Bucket)	22.7 kN
		Max digging force (Arm)	9.83 kN
	Boom swing angle (Left/Right)	71/49 °	



LIFTING CAPACITY

Lift Point Height (m)	Lift Point radius (MAX)		Lift Point radius (3.0 m)		Lift Point radius (2.0 m)	
	Over-front (kg)	Over-side (kg)	Over-front (kg)	Over-side (kg)	Over-front (kg)	Over-side (kg)
2.5	243.60*	252.30*	243.60*	252.30*	-	-
2.0	261.00*	252.30*	234.90*	247.95*	-	-
1.0	269.70*	191.25	304.50*	300.15*	469.80*	482.85*
0	308.85*	195.00	374.10*	225.00	617.70*	378.75
-1.0	330.60*	225.00	330.60*	225.00	352.5*	352.50*

Notes:

1. Load with * is limited by hydraulic capacity and based on ISO 10567. Rated loads do not exceed 87% of hydraulic capacity.
2. Load without * is limited by tipping load and based on ISO 10567. Rated loads do not exceed 75% of tipping capacity.
3. The excavator bucket, hook, sling and other lifting accessories are not included in this table.

